R-1193

原本

最　終　報　告　書

1，2，4，5-ベンゼンテトラカルボン酸無水物：ラットを用いた経口投与による反復投与毒性･生殖発生毒性併合試験

試験番号：R-1193

試験期間：2016年10月4日-2017年3月30日

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1. GLP 陳述書

試験番号　：　R-1193

試験表題　：　1，2，4，5-ベンゼンテトラカルボン酸無水物：ラットを用いた経口投与による反復投与毒性・生殖発生毒性併合試験

本試験は以下に示す基準を遵守して実施したものであります。

- 「新規化学物質等に係る試験を実施する試験施設に関する基準」（平成 23 年 3 月 31 日：薬食発 0331 第 8 号、平成 23･03･29 製局第 6 号、環保企発第 110331010 号）

[redacted]

試験責任者
株式会社ボゾリサーチセンター　御殿場研究所

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3.　試験実施概要

3.1　試験番号

R-1193

3.2　試験表題

1，2，4，5-ベンゼンテトラカルボン酸無水物：ラットを用いた経口投与による反復投与毒性･生殖発生毒性併合試験

3.3　試験目的

本試験は、動物に被験物質を一定期間反復投与したときに現れる被験物質の一般毒性及び生殖発生毒性を明らかにすることを目的とした。

3.4　試験委託者

厚生労働省　医薬・生活衛生局　医薬品審査管理課　化学物質安全対策室
〒100-8916　東京都千代田区霞が関 1-2-2

3.5　試験受託者

株式会社ボゾリサーチセンター
〒151-0065　東京都渋谷区大山町 36-7

3.6　試験実施施設

株式会社ボゾリサーチセンター　御殿場研究所
〒412-0039　静岡県御殿場市かまど 1284

3.7　被験物質

製造者	:	[redacted]
名称	:	1，2，4，5-ベンゼンテトラカルボン酸無水物
英語名称	:	1,2,4,5-Benzenetetracarboxylic anhydride
CAS 番号	:	89-32-7
官報公示整理番号	:	化審法；(3)-1287、安衛法；公表化学物質
入手日	:	2016 年 10 月 6 日

3.8　試験日程

試験開始日	:	2016 年 10 月　4 日
動物入荷日	:	2016 年 10 月　5 日
実験開始日（投与開始日）	:	2016 年 10 月 26 日

交配開始日　　：　2016 年 11 月　9 日
分娩開始日　　：　2016 年 12 月　1 日
母動物剖検開始日　：　2016 年 12 月　6 日
投与終了剖検日　　：　2016 年 12 月　7 日　（雄及び非交配群）
回復開始日　　：　2016 年 12 月　7 日
回復終了剖検日　　：　2016 年 12 月 21 日
動物試験終了日　　：　2016 年 12 月 21 日
実験終了日（病理組織学検査終了日）
　　：　2017 年　2 月 10 日
試験終了日　　：　2017 年　3 月 30 日

3.9　試験責任者

株式会社ボゾリサーチセンター　御殿場研究所　研究部

[redacted]

3.10　試験担当者

試験主担当者　　：
被験物質保存責任者：
臨床検査責任者　　：
化学分析責任者　　：
病理検査責任者　　：

[redacted]

3.11　試験成績の信頼性に影響を及ぼしたと思われる環境要因

本試験に関し､試験成績の信頼性に影響を及ぼしたと思われる環境要因はなかった。

3.12　予見することができなかった試験の信頼性に影響を及ぼす疑いのある事態及び試験計画書に従わなかったこと

本試験に関し、試験の信頼性に影響を及ぼす疑いのある事態及び試験計画書に従わなかったことはなかった。

3.13　資料保存

株式会社ボゾリサーチセンターの保存方法に従い、試験計画書原本（試験計画書変更書を含む）、記録文書、生データ、報告書類（最終報告書は原本）及び標本（被験物質保存サンプルを含む）は、株式会社ボゾリサーチセンター御殿場研究所の資料保存施設に最終報告書提出後 10 年間保存する。期間終了後の保存は、厚生労働省　医薬・生活衛生局　医薬品審査管理課　化学物質安全対策室と株式会社ボゾリサーチセンター間で協議し、その処置を決定する。ただし、長期保存に耐えられない生体試料（尿、血漿、血清）及び腟垢標本は、試験終了までに廃棄した。また、死亡児及び生

後 4 日生存児は出生率及び生後 4 日生存率に被験物質投与の影響が認められなかったため、試験終了までに廃棄した。

3.14　試験責任者の記名・押印

[redacted]

4. 要約

1，2，4，5-ベンゼンテトラカルボン酸無水物をコーン油で懸濁し、100、300 及び 1000 mg/kg の投与量で Sprague-Dawley 系 SPF ラット（交配群として雌雄各 12 匹/群、雌には非交配群として対照群及び 1000 mg/kg 投与群に各 10 匹を追加）の雄には交配前 14 日間に加え交配期間を通して剖検前日まで（42 日間）、雌には交配前 14 日間に加え交配期間及び妊娠期間を通して授乳 4 日まで（41~46 日間）、非交配群雌には 42 日間強制経口投与し、反復投与毒性及び生殖発生毒性を検討した。更に、0 及び 1000 mg/kg 投与群の一部の動物（交配群雄 5 匹と非交配群雌 5 匹）については、雄及び非交配群雌ともに 42 日間投与した後 14 日間の回復期間を設け、毒性変化の可逆性を検討した。なお、対照群には媒体であるコーン油を投与した。

4.1 反復投与毒性

いずれの投与群においても死亡動物はみられなかった。

1000 mg/kg 群の雄で投与 8 日以降体重の低値傾向又は低値、摂餌量の高値、尿中ナトリウム及びカリウムの 1 日排泄量に低値、無機リンの低値、同群の交配群雌でフィブリノゲンの高値、非交配群雌で自発運動量の低値傾向又は低値が認められた。また、1000 mg/kg 群の交配群雌で無機リンの低値と ALT の高値が認められた。更に、100 mg/kg 以上の雌雄で境界縁扁平上皮の過形成及び腺胃粘膜下織の細胞浸潤が観察された。

14 日間の回復期間により上記変化は消失あるいは減弱し、回復性が認められた。

4.2 生殖発生毒性

1000 mg/kg 群において、黄体数がわずかに少なく、着床痕数が少なく、着床前死亡率が多く、出産児数及び出生児数に低値が認められた。雄親動物及び児動物のいずれの検査においても、被験物質投与による影響は認められなかった。

これらの結果から、本被験物質の反復投与毒性に対する雌雄の無影響量は 100 mg/kg 未満、無毒性量は 300 mg/kg と判断した。生殖発生毒性に対する無影響量及び無毒性量は雄親動物及び児動物のいずれも 1000 mg/kg、母動物で 300 mg/kg と判断した。

5. 緒言

厚生労働省　医薬・生活衛生局　医薬品審査管理課　化学物質安全対策室の委託により、1，2，4，5-ベンゼンテトラカルボン酸無水物のラットを用いた経口投与による反復投与毒性･生殖発生毒性併合試験を実施したので、その成績を報告する。

なお、本試験は以下の基準を遵守し、ガイドライン等に準拠して、株式会社ボゾリサーチセンターで実施した。

5.1 GLP

- 「新規化学物質等に係る試験を実施する試験施設に関する基準」
  （平成 23 年 3 月 31 日：薬食発 0331 第 8 号、平成 23･03･29 製局第 6 号、環保企発第 110331010 号）

5.2 毒性試験ガイドライン

- 「新規化学物質等に係る試験の方法について」
  （平成 23 年 3 月 31 日：薬食発 0331 第 7 号、平成 23･03･29 製局第 5 号、環保企発第 110331009 号）
- 「新規化学物質の判定及び監視化学物質への該当性の判定等に係る試験方法及び判定基準」
  （平成 23 年 4 月 22 日:厚生労働省医薬食品局審査管理課化学物質安全対策室、経済産業省製造産業局化学物質管理課化学物質安全室、環境省総合環境政策局環境保健部企画課化学物質審査室）

5.3 動物の福祉

- 「動物の愛護及び管理に関する法律」
  （昭和 48 年 10 月 1 日法律第 105 号）
- 「実験動物の飼養及び保管並びに苦痛の軽減に関する基準」
  （平成 18 年 4 月 28 日環境省告示第 88 号）
- 「動物実験の適正な実施に向けたガイドライン」
  （日本学術会議 平成 18 年 6 月 1 日）
- 「厚生労働省の所管する実施機関における動物実験等の実施に関する基本指針の一部改正について」
  （平成 27 年 2 月 20 日科発 0220 第 1 号）

本試験は試験実施施設の動物実験委員会の承認（承認番号：G160339）を受けて実施した。

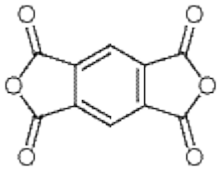
6. 試験材料及び方法

6.1 被験物質及び媒体

6.1.1 被験物質

1，2，4，5-ベンゼンテトラカルボン酸無水物は[redacted]から以下の情報とともに購入した。また、投与開始前に赤外吸収スペクトルの測定により特性が確認されている（Attached Data 1）。

名称 : 1，2，4，5-ベンゼンテトラカルボン酸無水物
英語名称 : 1,2,4,5-Benzenetetracarboxylic anhydride
製造者 : [redacted]
別名* : Pyromellitic dianhydride
CAS 番号 : 89-32-7
官報公示整理番号 : 化審法；(3)-1287、安衛法；公表化学物質
分子式 : $C_{10}H_2O_6$
構造式又は示性式 :



分子量 : 218.12
ロット番号 : RZ6TO
純度（メタノリシス法）
: 99.9%
形状* : 結晶~粉末
色* : 白色~ほとんど白色
臭い* : 酢酸臭
融点* : 286°C
沸点/沸騰範囲* : 400°C
pH、引火点、燃焼又は爆発範囲及び比重*
: 情報なし
溶解度* : アセトン、ジメチルホルムアミド（DMF）、テトラヒドロフラン（THF）、ジメチルスルホキシド（DMSO）に可溶、ベンゾニトリルに難溶、エーテル、ベンゼン、クロロホルム、ヘキサンに不溶
オクタノール/水分配係数*
: 2.14
保存条件* : 密栓して冷暗所（実測値：4.0~7.0°C）、開封後は窒素ガス充てん

安定性　：　投与期間終了後に株式会社ボゾリサーチセンター　御殿場研究所で残余被験物質の赤外吸収スペクトルを確認した結果、試験開始前に確認した参照スペクトルとほぼ同様であり安定性に問題はなかった（Attached Data 2）。

保存場所　：　御殿場研究所　被験物質保存室及び第 2 研究棟被験物質調製室

取扱い上の注意*　：　①粉塵やエアゾールが発生する場合には、局所排気を用いる。
②保護手袋、保護眼鏡、保護面及び保護衣を着用する。
③粉塵が飛散しないように注意する。
④取扱い後は手や顔などをよく洗う。

保存試料：　被験物質約 5 g を保存試料として御殿場研究所の資料保存施設に保存した。

残余被験物質の処置：　動物試験及び分析終了後の残余被験物質は全て廃棄処理した。

*：製造元の東京化成工業株式会社発行の製品安全データシートに基づく

6.1.2　媒体

名称　：　コーン油注

メーカー　：　和光純薬工業株式会社

規格　：　生化学用

ロット番号（有効期限）
：　LKJ3182（2021 年 10 月 10 日）

保存方法　：　室温

保存場所　：　御殿場研究所第 2 研究棟 4 階被験物質調製室

注：媒体は、本試験に先立って実施した「1，2，4，5-ベンゼンテトラカルボン酸無水物の赤外吸収スペクトル測定法による特性試験及び安定性試験並びに HPLC 法による被験液（媒体：コーン油）中濃度測定法バリデーション及び安定性・均一性試験」（株式会社ボゾリサーチセンター、試験番号：A-2841）[1]において、コーン油中での被験物質の安定性に良好な結果が得られていることから、コーン油を選択した。

6.2　投与液の調製及び保存方法

6.2.1　対照群投与液の採取

対照群投与液として、被験液調製当日の被験物質を取り扱う前に必要量のコーン油を 1 日使用分ずつ褐色ガラス瓶に分注した。

6.2.2　被験液の調製

濃度ごとに必要量の被験物質を秤取し、媒体を加えて懸濁した後、所定量（20、60

及び 200 mg/mL 液）とした。

下表に各投与液の 100 mL を調製する場合の被験物質秤取量を示した。

試験群 (投与量：mg/kg/day)	濃　度 (mg/mL)	被験物質秤取量 (g)	調製量 (mL)	投与容量 (mL/kg/day)
対照群（コーン油）(0)	0	0	100	5.0
低用量群　(100)	20	2	100	5.0
中用量群　(300)	60	6	100	5.0
高用量群　(1000)	200	20	100	5.0

調製は 7 日に 1 回以上の頻度で最大 7 日分を一括して行った。残液はポリ瓶に回収又はペーパータオル等に吸着させて焼却処分した。

6.2.3　投与液の保存方法及び使用期限

対照群投与液及び被験液は褐色ガラス瓶に入れ、冷所（冷蔵庫内、許容値：1~10°C、実測値：3~5°C）に保存し、安定性の確認された範囲内で投与に使用した。

6.2.4　被験液の安定性

本被験物質の 2 及び 200 mg/mL 濃度の被験液（媒体：コーン油）は、褐色ガラス瓶に入れ冷所（冷蔵庫内、許容値：1~10°C）で 8 日間保存後、更に室温下（許容値：1~30°C）で 24 時間保存（冷所 8 日間＋室温 24 時間）したときに安定であることが試験施設で確認されている（試験番号：A-2841、Attached Data 3）[1]。

6.2.5　被験液の濃度及び均一性確認

初回投与及び投与 6 週の投与に使用した各濃度の被験液（上層、中層、下層から各 10 mL 採取）について、株式会社ボゾリサーチセンター御殿場研究所で HPLC により濃度及び均一性を行った。なお、初回投与に使用した被験液については、投与開始前に確認を行った。その結果、各濃度液における表示値に対する被験物質の割合は 107.0~110.0%、変動係数（CV）は 0.5~2.3%以下であり（Attached Data 4、5）、いずれも許容範囲内（濃度：表示値に対する割合；100.0±10.0%、均一性：CV が 10%以下）であったことから、被験液の調製に問題はないと判断した。なお、HPLC を用いた被験液中濃度測定法バリデーションは株式会社ボゾリサーチセンター御殿場研究所（試験番号：A-2841）[1]で実施された。分析法の概略を以下に示した。

1)　測定対象物質

1，2，4，5-ベンゼンテトラカルボン酸無水物

2)　標準物質

被験物質から一部分取したものを標準物質として使用した。

名称	:	1，2，4，5-ベンゼンテトラカルボン酸無水物
ロット番号	:	RZ6TO
保存条件	:	冷暗所（実測値：3~8°C）、密栓、開封後は窒素ガス充てん
保存場所	:	御殿場研究所　被験物質保存室及び分析研究部標準物質保存場所

3)　濃度測定用試料の調製

(1)　20 mg/mL 被験液

a) 20 mg/mL 測定試料をスターラーで撹拌しながら 1mL を各 n=1 でスクリューキャップ付ガラス製試験管に採取した。
b) ジメチルスルホキシドの 10 mL を添加した。
c) 振とう｛約 300 min-1（実測値：302 又は 305 min-1）、15 分間｝した。
d) 遠心分離（2500 rpm、20°C、5 分間）した。
e) 上層（コーン油）をピペットで採取し、廃棄した。
f) 下層（ジメチルスルホキシド）の 1 mL を正確に採取し、ジメチルスルホキシドで正確に 10 mL とした（MS-20、希釈係数：100）。

(2)　60 mg/mL 被験液

a) 60 mg/mL 測定試料をスターラーで撹拌しながら 1mL を各 n=1 でスクリューキャップ付ガラス製試験管に採取した。
b) ジメチルスルホキシドの 10 mL を添加した。
c) 振とう｛約 300 min-1（実測値：302 又は 305 min-1）、15 分間｝した。
d) 遠心分離（2500 rpm、20°C、5 分間）した。
e) 上層（コーン油）をピペットで採取し、廃棄した。
f) 下層（ジメチルスルホキシド）の 1 mL を正確に採取し、ジメチルスルホキシドで正確に 30 mL とした（MS-60、希釈係数：300）。

(3)　200 mg/mL 被験液

a) 200 mg/mL 測定試料をスターラーで撹拌しながら 1mL を各 n=1 でスクリューキャップ付ガラス製試験管に採取した。
b) ジメチルスルホキシドの 10 mL を添加した。
c) 振とう｛約 300 min-1（実測値：302 又は 305 min-1）、15 分間｝した。
d) 遠心分離（2500 rpm、20°C、5 分間）した。
e) 上層（コーン油）をピペットで採取し、廃棄した。
f) 下層（ジメチルスルホキシド）の 1 mL を正確に採取し、ジメチルスルホキシドで正確に 100 mL とした（MS-200、希釈係数：1000）。

4) HPLC システム

機器名及び型式		メーカー
HPLC	2690 セパレーションモジュール	Waters Corporation
検出器	2487 デュアル λUV/VIS 検出器	
データ処理装置	ミレニアム ^{32} クロマトグラフィーマネジャー	

5) HPLC 測定条件

カラム : Inertsil ODS-3（5 µm、4.6 mm I.D.×150 mm、ジーエルサイエンス株式会社）

カラム恒温槽設定温度 : 40°C

移動相 : メタノール／0.1 vol%リン酸溶液（6：4）

流量 : 1 mL/min

検出 : UV（測定波長 254 nm）

注入量 : 5 µL

オートサンプラー設定温度 : 4°C

分析時間 : 5 分間

ニードル洗浄液 : メタノール

6.3 試験動物種及び系統の選択理由

毒性試験法ガイドラインによりげっ歯類を用いた試験が必要とされていることからラットを選択した。また、この試験に使用された系統のラットは一般毒性試験、生殖発生毒性試験に広く用いられ、かつ、その特性がよく知られており、背景資料が豊富であることから選択した。

6.4 試験動物

Sprague-Dawley 系 SPF ラット〔Crl:CD(SD)、日本チャールス・リバー株式会社、厚木飼育センター〕の雄 62 匹及び雌 83 匹をそれぞれ 7 週齢で入手[注 1)]し、入荷日を馴化 1 日と起算して、3 日間の検疫期間を含む 21 日間の馴化飼育を行った。その間、一般状態の観察（1 回/日）、体重測定（馴化 1、3、10、17 及び 21 日の 5 回、各測定日間の体重増加量算出）、詳細な一般状態の観察（1 回、群分け 5 日前）を実施した。更に、雄は馴化終了日に陰嚢内の精巣の触診及び陰茎亀頭の観察を行い、雌は腟垢を検疫期間終了後群分け日まで採取して性周期（検疫期間終了後 14 日間）を調べた。その結果、外傷が雌 1 例（耳標番号：71）に、性周期の異常が 3 例（耳標番号：75、89、114）みられた。これらの異常例を除き、健康と思われる雄 62 匹中 48 匹及び雌 79 匹中 68 匹を選択し、10 週齢で投与を開始した。投与開始時の体重の変動範囲は雄で 383~430 g（平均体重：407 g）、雌で 197~252 g（平均体重：222 g）であり、雌雄ともにそれぞれ平均体重の±20%以内であった。

なお、動物は検疫・馴化期間中の体重推移（入荷日~群分け時）により選別後、群分け当日（投与開始の前日）の体重に基づいて、非交配群も含め各群の平均体重ができるだけ均等となるよう各群に割付けた。個体の割付けはコンピュータを用いたブロック配置法及び無作為抽出法の組み合わせ（ブロック配置法で必要な群を構成し、試験群及び群内の個体番号を無作為に割当てた）により行った[注 2)]。

供試個体の選択条件を満たして余剰となった雌は、交配予備動物（無処置動物）として継続飼育したが、使用しなかったため、交配終了後に試験から除外した。その他の雌雄残余動物は群分け翌日に試験から除外した。なお、試験から除外された動物は、動物管部門に移管した。

注 1)：試験計画書に従い、動物発注数は雄 60 匹及び雌 80 匹であったが、実際には雄 62 匹及び雌 83 匹が納入された。

注 2)：投与開始日の体重測定の結果、各群の平均体重に少し差があったため、以下の動物を入れ替え、群平均値をできるだけ均等にした。動物の入れ替え；1107 と 3112 を交換、1112 と 3109 を交換、2106 と 4110 を交換、2112 と 4101 を交換、5109 と 6106 を交換

6.5　飼育条件

動物は温度 23±3°C（実測値：22~25°C）、相対湿度 50±20%（実測値：45~54%）、換気回数 10~15 回/h、照明 12 時間/日（07:00~19:00）の動物飼育室（飼育室番号：903 号室）に収容した。動物は床敷（ALPHA-dri、Shepherd Specialty Papers Inc.、ロット番号：05116、07116）を入れたプラスチックケージ（W440×D275×H180 mm：株式会社羽生精密）に、検疫・馴化期間中は同性 2~3 匹ずつ、群構成以降は仕切り板を入れて 2 区分とし、それぞれの区画で個別収容した。交配期間中の雄はプラスチックケージで個別に収容し、交配は雄のケージに雌を移動させて行った。交尾成立雌（妊娠 17 日以降）は床敷を入れたプラスチック製エコンケージ（W340×D400×H185 mm：日本クレア株式会社）に 1 腹単位で収容した。

また、エンリッチメントとして、動物試験期間中毎週 1 回、7979C.CS certified/irradiated Diamond Twists (Envigo RMS, Inc.、ロット番号：7979C-011216P、7979C-051716P、7979C-082316P)を与えた。更に、群分け後の雌雄のケージには 4 週間に 1 回程度の交換頻度で Chew Toy（ステンレス棒）を設置した。

動物には CRF-1 固形（放射線滅菌、オリエンタル酵母工業株式会社、ロット番号：160607、160705、160804）をステンレス製給餌器により、御殿場市営水道水を自動給水装置（プラスチックケージでの飼育時）又は給水瓶（プラスチック製エコンケージでの飼育時）によりそれぞれ自由に摂取させた。

混入物質の分析は、使用した飼料のロットをユーロフィン・フードアンドプロダクト・テスティング株式会社で、使用した床敷のロットを N·P Analytical Laboratories で行ったデータを入手した。飲料水は水道法に準拠した施設全体の水質の分析を定期的（年 4 回）に芝浦セムテック株式会社に依頼して得られたデータを入手した。また、使用した Diamond Twists のロットは、汚染物質に関する分析書を入手した。これらのデータにより飼料、床敷及び飲料水並びにエンリッチメント中の混入物質が試験成

績に影響を与える可能性のないことを確認し、分析報告書の写しを保存した。

6.6　動物の識別

動物は入荷時に耳標を装着し、個体識別した。群分け後は試験群、性及び群内の個体番号が区別できるよう、4 桁の数字を割り当てた（表 1-1、1-2 の群構成表参照）。各飼育ケージには投与量（群）ごとに色分けしたケージラベルをつけ、試験番号、投与経路、投与量、性、動物番号、耳標番号、剖検予定日（雄及び非交配群の雌）、交尾成立日（交配群の雌雄）及び分娩日（交配群の雌）を明記した。

また、ケージラベルの裏には試験番号、性及び耳標番号のみを表示し、詳細な一般状態の観察、機能検査あるいは握力測定時にはケージラベルを裏返して観察者への投与量の情報を制限した。

6.7　投与経路、投与期間及び投与回数並びに回復期間とそれらの選択理由

投与経路は毒性試験法ガイドラインに準じ、経口投与を選択した。投与期間（投与日数）は交配群の雌雄で交配前 14 日、更に、雄で交配開始後 28 日（計 42 日間）、雌で交配期間及び妊娠期間を通して授乳 4 日まで（計 41~46 日間）、非交配群の雌で 42 日とした。投与回数は反復投与試験で一般的に行われている 1 日 1 回とした。

回復動物の回復期間（回復日数）は 42 日の投与期間が終了した後、被験物質投与に起因した変化の可逆性、持続性並びに遅発性毒性等について観察するため、14 日間を設けた。

6.8　投与方法

投与方法は、げっ歯類の経口投与に際して一般的な強制経口投与とした。投与容量は 5.0 mL/kg 体重とし、フレキシブル胃ゾンデを用いて投与液を 08:30~12:13 の間に投与した。ただし、投与時に分娩中であった動物は分娩終了を待って、13:42~14:39 の間に投与した。対照群には媒体のみを同様に投与した。個体ごとの投与液量は直近の体重を基準に算出した。

6.9　投与量及び群構成

投与量は 100、300 及び 1000 mg/kg/day の 3 用量とし、これに対照群を加え、計 4 群構成とした。1 群当たりの動物数は、交配を行う交配群の各群で雌雄各 12 匹、交配しない非交配群の対照群及び高用量群で雌各 10 匹とした。なお、対照群及び高用量群における雄の 5 匹と非交配群の雌の 5 匹は、最終投与終了日以降回復動物とした。群構成を表 1-1.及び 1-2.に示した。

表 1-1.群構成（雄）

試験群	投与量 (mg/kg)	被験液濃度 (mg/mL)	投与容量 (mL/kg)	交配群			
				投与終了時剖検群		回復終了時剖検群	
				動物数	動物番号	動物数	動物番号
対照群	0	0	5.0	7	1001-1007	5	1008-1012
低用量群	100	20	5.0	12	2001-2012		
中用量群	300	60	5.0	12	3001-3012		
高用量群	1000	200	5.0	7	4001-4007	5	4008-4012

表 1-2.群構成（雌）

試験群	投与量 (mg/kg)	被験液濃度 (mg/mL)	投与容量 (mL/kg)	交配群		非交配群			
				投与終了時剖検群		投与終了時剖検群		回復終了時剖検群	
				動物数	動物番号	動物数	動物番号	動物数	動物番号
対照群	0	0	5.0	12	1101-1112	5	5101-5105	5	5106-5110
低用量群	100	20	5.0	12	2101-2112				
中用量群	300	60	5.0	12	3101-3112				
高用量群	1000	200	5.0	12	4101-4112	5	6101-6105	5	6106-6110

6.10　投与量の設定根拠

本試験の投与量は、先に実施した「1，2，4，5-ベンゼンテトラカルボン酸無水物：ラットを用いた 14 日間反復経口投与毒性試験（投与量設定試験）、株式会社ボゾリサーチセンター、試験番号：N-R060、投与量：250、500 及び 1000 mg/kg/day」[2]の結果（Attached Data 6）を参考に設定した。すなわち、500 mg/kg 以上の雌で総たんぱく質の低値と 1000 mg/kg の雌で脾臓重量の高値が認められたが、一般状態、体重、摂餌量、血液学検査及び剖検所見に被験物質投与の影響は認められなかった。したがって、本試験では毒性試験法ガイドラインに示されている限度試験の最高投与量である 1000 mg/kg を高用量とし、以下公比約 3 で除して 300 及び 100 mg/kg をそれぞれ中及び低用量に設定した。

6.11　観察及び検査の方法

試験日の起算は下記の通りとした。

投与開始日	：投与 1 日
投与 1 日から 7 日	：投与 1 週
回復開始日（投与 42 日の翌日）	：回復 1 日
回復 1 日から 7 日	：回復 1 週
交尾成立日	：妊娠 0 日
分娩終了日（出産日）	：授乳 0 日
出生日	：生後 0 日

6.11.1　一般状態の観察

全個体について、投与期間中は毎日 3 回（投与前、投与直後及び投与 1~3 時間後、ただし、詳細な一般状態の観察実施日は投与前と投与直後の 2 回/日）、回復期間中は毎日 2 回（午前・午後）、剖検日は 1 回（午前）、それぞれ生死、身体の外観、姿勢、行動及び排泄物（尿、糞）などの一般状態における異常の有無を観察した。なお、投与 2 日以降の動物のハンドリングを伴った定期的な観察は、詳細な一般状態の観察と兼ねて行った。

6.11.2　詳細な一般状態の観察、機能検査、握力及び自発運動量の測定

詳細な一般状態の観察は全個体について行った。

雄及び非交配群雌は投与期間中及び回復期間中毎週 1 回、交配群雌は交配前投与期間中毎週 1 回、交配期間中、妊娠期間中及び授乳期間中は指定された日（交尾動物は妊娠 1、7、14 及び 20 日、分娩動物は授乳 4 日）にそれぞれ観察した。

機能検査、握力測定及び自発運動量測定は、各群の 5 匹（雄の群内番号 8~12 番、交配群雌の各群の分娩順で動物番号が若い順[注)]、非交配群の群内番号 6~10 番）について行った。投与期間中は交配群雌で授乳 4 日（投与 41~43 日）に、その他は投与期間終了週（投与 6 週、投与 37 日）に、回復期間中は対照群及び高用量群の雌雄で回復期間終了週（回復 2 週、回復 9 日）に行った。

上記の観察、検査及び測定は、動物をランダムに配置し、観察者に対して投与量などの情報を制限（ブラインド化）した状態で行った。ただし、自発運動量測定に関しては、ブラインド化を行わなかった。なお、詳細な一般状態の観察及び機能検査の観察・検査結果について、実数データ以外はスコア化した評点法を用いて記録した。

注)：交配群雌の検査対象動物を以下に示した。

試験群	動物番号
対 照 群	1104、1105、1107、1109、1111
低用量群	2104、2105、2106、2109、2110
中用量群	3101、3102、3104、3105、3109
高用量群	4102、4103、4104、4105、4111

1)　詳細な一般状態の観察

ケージ内観察は姿勢、痙攣、異常行動を、手に持っての観察はケージからの取り出し易さ、被毛・皮膚の状態、眼・鼻の分泌物、眼球突出、眼瞼閉鎖状態、可視粘膜、自律神経機能（流涙、流涎、立毛、瞳孔径、異常呼吸）、ハンドリングに対する反応、ハンドリング時の発声を、オープンフィールド内観察は覚醒状態、痙攣、異常行動、常同行動、歩行、姿勢、身繕い、立ち上がり回数、排泄物（排糞数、排尿）を調べた。

2)　機能検査

検査は聴覚反応、接近反応、接触反応、痛覚反応、瞳孔反射、空中正向反射、着地開脚幅とした。

3)　握力測定

機能検査に引き続き、CPU ゲージ MODEL-RX-5（アイコーエンジニアリング株式会社）を用いて前肢及び後肢の握力を測定した。

4)　自発運動量の測定

握力測定に引き続き、実験動物用自発運動センサーNS-AS01（株式会社ニューロサイエンス）を用いて自発運動量を測定した。測定時間は 1 時間とし、10 分間隔及び 0~60 分の測定値を集計した。

6.11.3　体重測定

雄及び非交配群雌は投与 1、8、15、22、29、36、42 日及び剖検日に、回復動物は更に回復 1、8、14 日及び剖検日に、交配群雌は投与 1、8 及び 15 日、妊娠 0、7、14 及び 20 日、授乳 0 及び 4 日並びに剖検日に体重を測定した（07:12~10:03 の間（投与期間中は投与前））。

なお、午後に分娩が終了した母動物の授乳 0 日の体重は 13:39~16:52 の間に、剖検日は前日から約 16 時間絶食させた後、07:37~08:39 の間に体重を測定した。

6.11.4　摂餌量測定

雄及び非交配群雌は投与 2、8、15、30、36 及び 42 日に、回復動物は更に回復 2、8 及び 14 日に、交配群雌は投与 2、8 及び 15 日、妊娠 1、7、14 及び 20 日並びに授乳 2 及び 4 日に残餌量を測定し、前日の給餌量との差から 1 匹当たりの 1 日摂餌量を算出した。給餌量及び残餌量の測定は測定日の 07:13~11:09 の間（投与期間中は投与前）に行った。

6.11.5　腟垢検査

交配群雌は投与開始日から交尾成立まで毎日（午前）腟垢を採取した。交配前投与期間中の標本は、多数の角化上皮細胞から成る腟垢像を発情の指標とし、発情回数及び発情期から次の発情期までの日数（性周期）、観察雌数に対する性周期異常を示した雌数の割合を調べた。交配期間中は腟垢内の精子の有無を調べるのに加え、腟垢像を発情前期(P)、発情期(E)、発情後期(M)及び発情休止期(D)に分類したが、データは参考とした。

なお、P→E→M→D（→P）の順序で周期的変化を示し、4 又は 5 日の周期を繰り返す個体を正常、それ以外を性周期異常とした。

非交配群雌は、交配群の交配成績から交尾までに要した日数あるいは交尾率に被験物質投与の影響が認められなかったことから、腟垢検査は実施しなかった。

6.11.6　交配方法

交配前投与期間終了後、交配群の同投与群内の雌雄を 1:1 で終夜同居させ、翌朝、腟栓形成あるいは腟垢中に精子を確認したものを交尾成立とみなした。交配開始日を

0 日と起算して交尾までに要した日数を求めた。同一雌雄による同居期間は最長 5 日間であった。

6.11.7　分娩及び哺育観察

1)　母動物の観察

交尾成立雌動物は、妊娠 21 日から妊娠 23 日の午前まで 1 日 2 回（午前・午後、妊娠 23 日は午前に 1 回）、分娩の有無並びにその終了を確認するとともに分娩状態（胎盤の処理及び出産児の状態）を観察した。交尾成立から分娩終了までを妊娠期間とし、妊娠期間を 0.5 日単位で求めた。なお、分娩終了の確認は 17:00 までとした。

分娩が終了した母動物は授乳 4 日まで出生児を哺育させ、児集め、営巣及び授乳を指標として哺育状態を観察し、授乳 5 日に病理学検査に供した。

2)　出生児の観察

生後 0 日に出生児数を数え（死産児はいなかった）、出産児数とした。出産児は口腔内を含む外表異常注）の有無を肉眼的に観察して性別を確認した。出生児は体重を個体別に測定した後、母動物に哺育させた。

生後 4 日まで毎日 1 回、死亡児の有無を確認した。死亡児は外表異常の有無を肉眼で観察した後、ブアン液で固定して保存した。生後 4 日に全生存児の性別を確認し、個体別に体重を測定した。外表異常の有無を肉眼的に観察した後、イソフルラン深麻酔下でブアン液に浸漬し、固定して保存した。

注）：頭部の陥没や裂、顔面の鼻吻や上下顎、口唇のゆがみや裂、眼瞼や耳介の大きさ、形状、左右のバランス、胸胴部のゆがみや大きさ、内部臓器の突出、尾部の長さ、形状、数、欠損、四肢部の長さ、形状、指の数、欠損及び左右のバランスに注意して観察し、正常と異なる場合を異常とした。

6.11.8　尿検査

投与期間終了週（投与 6 週、投与 38~39 日）及び回復期間終了週（回復 2 週、回復 10~11 日）に検査を行った。

投与期間中は検査当日の投与後に各群の 5 匹（雄の群内番号 8~12 番、非交配群雌の群内番号 6~10 番）について、回復期間中は回復動物の全個体について、それぞれ採尿器をセットしたケージに収容し、絶食・自由摂水下で 4 時間尿を、次いで自由摂食・自由摂水下でその後の 20 時間尿を採取した。検査項目を表 2.に示した。採取した最初の 4 時間尿について pH 以下沈渣までの検査と尿量を、その後に得られた 20 時間尿について浸透圧、電解質（ナトリウム、カリウム及び塩素）及び尿量の測定を行った。尿量は 4 時間の尿量と 20 時間の尿量を合計して 1 日量を算出した。電解質は 20 時間尿について濃度を測定し、測定濃度と 24 時間の尿量から 1 日当たりの排泄量を算出した。なお、以下の再測定を行った。

尿検査における再測定

動物番号	項目	理由	採用値
3010、4009、4010、4011、6107、6108、6109	ナトリウム	測定下限以下	原尿による再測定値

回復 2 週検査では、動物番号 4010 及び 5107 に潜血陽性が認められたため、強制排尿で採取した尿を用いて、潜血を測定した。その結果、潜血は認められなかった。本データは参考値とした。なお、20 時間尿の採尿中であったため、強制排尿で得られた尿量は 20 時間尿の尿量に追加した。

表 2.尿検査の項目、測定法及び使用機器など

検査項目	測定方法
pH	ﾏﾙﾃｨｽﾃｨｯｸｽ試験紙 a)
たん白質	ﾏﾙﾃｨｽﾃｨｯｸｽ試験紙 a)
ケトン体	ﾏﾙﾃｨｽﾃｨｯｸｽ試験紙 a)
グルコース	ﾏﾙﾃｨｽﾃｨｯｸｽ試験紙 a)
潜血	ﾏﾙﾃｨｽﾃｨｯｸｽ試験紙 a)
ビリルビン	ﾏﾙﾃｨｽﾃｨｯｸｽ試験紙 a)
ウロビリノーゲン	ﾏﾙﾃｨｽﾃｨｯｸｽ試験紙 a)
色調	肉眼観察
沈渣	鏡検法
尿量（4 時間量）	目盛付スピッツ管を用いた容量測定（単位：mL）
浸透圧	氷点降下法 b)（単位：mOsm/kg）
ナトリウム	イオン選択電極法 c)（単位：mmol/24h）
カリウム	イオン選択電極法 c)（単位：mmol/24h）
塩素	イオン選択電極法 c)（単位：mmol/24h）
尿量（20 時間量）	メスシリンダーあるいは目盛付スピッツ管を用いた容量測定（単位：mL）

使用測定機器
a)：尿自動分析装置　クリニテック 500（Siemens Healthcare Diagnostics Inc., Illinois, USA）
b)：自動浸透圧測定装置 オズモステーション OM-6060（アークレイ株式会社）
c)：臨床化学自動分析装置　TBA-120FR 形（東芝メディカルシステムズ株式会社）

6.11.9　血液学検査

全個体について、剖検前日（最終投与日あるいは回復 14 日）から一夜（16~19 時間）絶食させた。そのうちの各群雌雄各 5 匹（動物番号が若い順、ただし、交配群雌は分娩順の 5 匹注）について、イソフルラン麻酔下に開腹し、腹大動脈から EDTA-2K 加採血瓶（SB-41：シスメックス株式会社）に血液（約 1 mL）を採取した。得られた血液は、以下の表 3.-1)に記載した項目及び方法により検査した。また、3.8%クエン酸ナトリウム溶液加試験管（血液 9 容に対し 1 容の割合）に採取した血液（0.9 mL）を遠心分離（3,000 rpm、約 1,600×g、10 分間）し、得られた血漿について表 3.-2)に記載の項目及び方法により検査した。なお、採血した全個体について、May-Grünwald-Giemsa 染色法による血液塗抹標本を作製したが、鏡検しなかった。以下の再測定を行った。

血液学検査における再測定

動物番号	項目	理由	採用値
1109、2105	APTT	エラー表示	再測定値
4009	白血球系	エラー表示	再測定値、全項目：ADVIA120

注)：交配群雌の検査対象動物を以下に示した。

試験群	動物番号
対 照 群	1104、1105、1107、1109、1111
低用量群	2104、2105、2106、2109、2110
中用量群	3101、3102、3104、3105、3109
高用量群	4102、4103、4104、4105、4111

表 3.血液学検査の項目、測定法及び使用機器など

1）EDTA-2K 加血液についての検査		
検査項目	測定方法	単位
赤血球数(RBC)	2 角度レーザーフローサイトメトリー法 a)	10^4/μL
ヘモグロビン量(HGB)	シアンメトヘモグロビン変法 a)	g/dL
ヘマトクリット値(HCT)	赤血球数及び平均赤血球容積から算出 a)	%
平均赤血球容積(MCV)	2 角度レーザーフローサイトメトリー法 a)	fL
平均赤血球血色素量(MCH)	赤血球数及びヘモグロビン量から算出 a)	pg
平均赤血球血色素濃度(MCHC)	ヘモグロビン量及びヘマトクリット値から算出 a)	g/dL
網赤血球率(RETIC)	RNA 染色によるレーザーフローサイトメトリー法 a)	%
血小板数(PLT)	2 角度レーザーフローサイトメトリー法 a)	10^4/μL
白血球数(WBC)	2 角度レーザーフローサイトメトリー法 a)	10^2/μL
白血球百分率注)	ペルオキシダーゼ染色によるフローサイトメトリー法 +2 角度レーザーフローサイトメトリー法 a)	%
白血球各細胞の絶対数注)	ペルオキシダーゼ染色によるフローサイトメトリー法 +2 角度レーザーフローサイトメトリー法 a)	10^2/μL
2）クエン酸ナトリウム加血液から分離した血漿についての検査		
検査項目	測定方法	単位
プロトロンビン時間(PT)	クロット法 b)	s
活性化部分トロンボプラスチン時間(APTT)	クロット法 b)	s
フィブリノーゲン量(FIB)	トロンボプラスチン法 b)	mg/dL
使用測定機器 a)：総合血液学検査装置　アドヴィア 120（Siemens Healthcare Diagnostics Inc., Illinois, USA） b)：血液凝固自動測定装置　ACL Elite Pro（Instrumentation Laboratory, MA, USA）		
注）：好中球(NEUT)、好酸球(EOS)、好塩基球(BASO)、リンパ球(LYMP)、単球(MONO)及び大型非染色球(LUC)		

6.11.10　血液化学検査

血液学検査用試料と同時に採取した血液（約 6 mL）を凝固促進剤入り試験管（ベノジェクト II-オートセップ:テルモ株式会社）に採り、遠心分離（3,000 rpm、約 1,600×g、10 分間）し、得られた血清について表 4.-1)に記載の項目及び方法により検査した。また、ヘパリン加試験管（血液 1 mL 当たり約 20 単位のヘパリン）に採取した血液（約 2 mL）を遠心分離（3,000 rpm、約 1,600×g、10 分間）して得られた血漿について表 4.-2)に記載の項目及び方法により検査した。血清の一部は血中ホルモン測定に備え、約 0.5 mL×3 本をサンプルチューブに分注し、−80°C の冷凍庫（許容範囲：−70°C 以下）に保存した。

表 4.血液化学検査の項目、測定法及び使用機器など

1）分離した血清についての検査		
検査項目	測定方法	単位
ALP	Bessey-Lowry 法 [a)]	IU/L
総胆汁酸（T-BA）	3α-ヒドロキシステロイドデヒドロゲナーゼ [a)]	μmol/L
総コレステロール(T-CHO)	CEH-COD-POD 法 [a)]	mg/dL
トリグリセライド(TG)	LPL-GK-GPO-POD 法 [a)]	mg/dL
リン脂質(PL)	PLD-ChOD-POD 法 [a)]	mg/dL
総ビリルビン(T-BIL)	ビリルビンオキシダーゼ法 [a)]	mg/dL
グルコース(GLU)	グルコースデヒドロゲナーゼ法 [a)]	mg/dL
尿素窒素(BUN)	Urease-LEDH 法 [a)]	mg/dL
クレアチニン(CRNN)	Creatininase-creatinase-sarcosine oxidase-POD 法 [a)]	mg/dL
ナトリウム(Na)	イオン選択電極法 [a)]	mmol/L
カリウム(K)	イオン選択電極法 [a)]	mmol/L
塩素(Cl)	イオン選択電極法 [a)]	mmol/L
カルシウム(Ca)	OCPC 法 [a)]	mg/dL
無機リン(P)	PNP-XOD-POD[a)]	mg/dL
総たん白質(TP)	Biuret 法 [a)]	g/dL
アルブミン(ALB)	BCG 法 [a)]	g/dL
A/G 比	総たん白質及びアルブミンから算出	
2）ヘパリン加血液から分離した血漿についての検査		
検査項目	測定方法	単位
AST	UV-rate 法 [a)]	IU/L
ALT	UV-rate 法 [a)]	IU/L
LDH	UV-rate 法 [a)]	IU/L
γ-GTP	L-γ-グルタミル-3-カルボキシ-4-ニトロアニリド法 [a)]	IU/L
使用測定機器 a)：臨床化学自動分析装置　TBA-120FR 形（東芝メディカルシステムズ株式会社）		

6.11.11　血中ホルモン測定

他の観察及び検査結果から下垂体-甲状腺系への影響が認められなかったため、血中ホルモン（T_3、T_4 及び TSH）測定は行わなかった。

6.11.12　病理学検査

1)　剖検及び器官重量測定

雄、交配群雌及び非交配群雌の投与終了時剖検群の動物は最終投与翌日に、雄及び非交配群雌の回復動物は回復期間終了日に、採血した動物は採血後に、その他の動物はイソフルラン麻酔下で、腹大動脈切断により放血致死させ、それぞれ体外表並びに頭部、胸部及び腹部の器官/組織の肉眼観察を行った。なお、母動物は剖検時に黄体数及び着床痕数を数えた。

全個体について、以下に示す器官の重量を測定した。それらの器官重量（絶対重量）と剖検時の体重から体重 100 g 当たりの相対重量を算出した。なお、*印をつけた両側性の器官については左右別々に測定し、その合計値で評価した。

脳、下垂体、甲状腺*（上皮小体を含む）、副腎*、胸腺、脾臓、心臓、肝臓、

腎臓*、精巣*、精巣上体*、前立腺、精嚢（凝固腺を含む）、卵巣*、子宮

2) 病理組織学検査

全個体について､以下に示す検査対象器官/組織をリン酸緩衝 10%ホルマリン液で固定し、保存した。ただし、眼球、視神経は 3%グルタルアルデヒド・2.5%ホルマリン液で固定後、精巣及び精巣上体はブアン液で固定した後、リン酸緩衝 10%ホルマリン液に置換し保存した。次いで、計画剖検時に採血した各群雌雄各 5 匹（動物番号が若い順、ただし、交配群雌は分娩順の 5 匹）は、パラフィン包埋した後、切片とし（下線を施した器官・組織は固定・保存のみとした）、ヘマトキシリン・エオジン（H・E）染色標本を作製した。鏡検は、先ず投与期間終了時剖検群及び回復終了時剖検群の対照群及び高用量群の採血を行った動物の全検査対象器官/組織について行った。更に、被験物質投与の影響が疑われた精巣上体、胃及び精巣については低及び中用量群の組織検査対象動物の病理組織学検査を実施した。

大脳、小脳（橋を含む）、坐骨神経*[1]、脊髄（胸部）、眼球*[1]、視神経*[1]、ハーダー腺*[4]、下垂体、甲状腺*[2]、上皮小体*[2]、副腎*[3]、胸腺、脾臓、顎下リンパ節、腸間膜リンパ節、心臓、胸大動脈*[4]、気管、肺（気管支を含む）、舌*[4]、喉頭*[4]、食道*[4]、胃、十二指腸、空腸、回腸（パイエル板を含む）、盲腸、結腸、直腸、顎下腺*[1]、舌下腺*[1]、肝臓、膵臓、腎臓*[1]、膀胱、精巣*[3]、卵巣*[3]、精巣上体*[3]、子宮（角部及び頸部）*[3]、前立腺、腟、精嚢（凝固腺を含む）*[3]、皮膚（鼠径部）*[1]、乳腺（鼠径部）*[1]、胸骨（骨髄を含む）*[4]、大腿骨（骨髄を含む）*[1]、大腿部骨格筋*[1]、肉眼的異常部位

*1： 両側を摘出し、片側を標本作製・鏡検した。
*2： 甲状腺及び上皮小体は両側の標本作製を試み、両器官とも片側（左側を優先し、左側で標本にならない場合は右側）について鏡検した。なお、上皮小体は各群 80%以上の動物で鏡検が可能であったため、標本の再作製は行わなかった。
*3： 両側を摘出し、両側を標本作製・鏡検した。
*4： 保存のみ（ハーダー腺は両側保存）。

6.12 データ採取に使用するコンピュータシステム

- MiTOX-BOZO システム（Version 9.3.1.1、三井造船システム技研株式会社）
- Pathos5 システム（Version 5, Pathology Operating Systems Ltd.）

6.13　統計解析

6.13.1　パラメータの算出

以下の式により性周期異常率、交尾率、授精率、受胎率及び出産率、生後 0 及び 4 日の性比を群ごとに、妊娠期間、着床前死亡率、着床率、分娩率、外表異常率、出生率、生後 4 日生存率を母動物（腹）ごとに算出した。なお、出生児の体重については母動物ごと雌雄別に平均値を求めた。

性周期異常率(%) =（性周期異常を示した個体数/観察雌個体数）×100

交尾率(%) =（交尾動物数/同居動物数）×100

授精率(%) =（雌を妊娠させた雄の数/交尾した雄の数）×100

受胎率(%) =（妊娠した雌の数/交尾した雌の数）×100

出産率(%) =（出生児出産雌数/妊娠雌数）×100

妊娠期間(日) = 妊娠 0 日から分娩した日までの日数

着床前死亡率(%) =〔（黄体数−着床痕数）/黄体数〕×100

着床率(%) =（着床痕数/黄体数）×100

分娩率(%) =（出産児数/着床痕数）×100

外表異常率(%) =（外表異常児数/出産児数）×100

出生率(%) =（出生児数/出産児数）×100

生後 4 日生存率(%) =（生後 4 日の生存児数/出生児数）×100

生後 0 日（死産児含む）の性比(%) =（雄出産児数/出産児数）×100

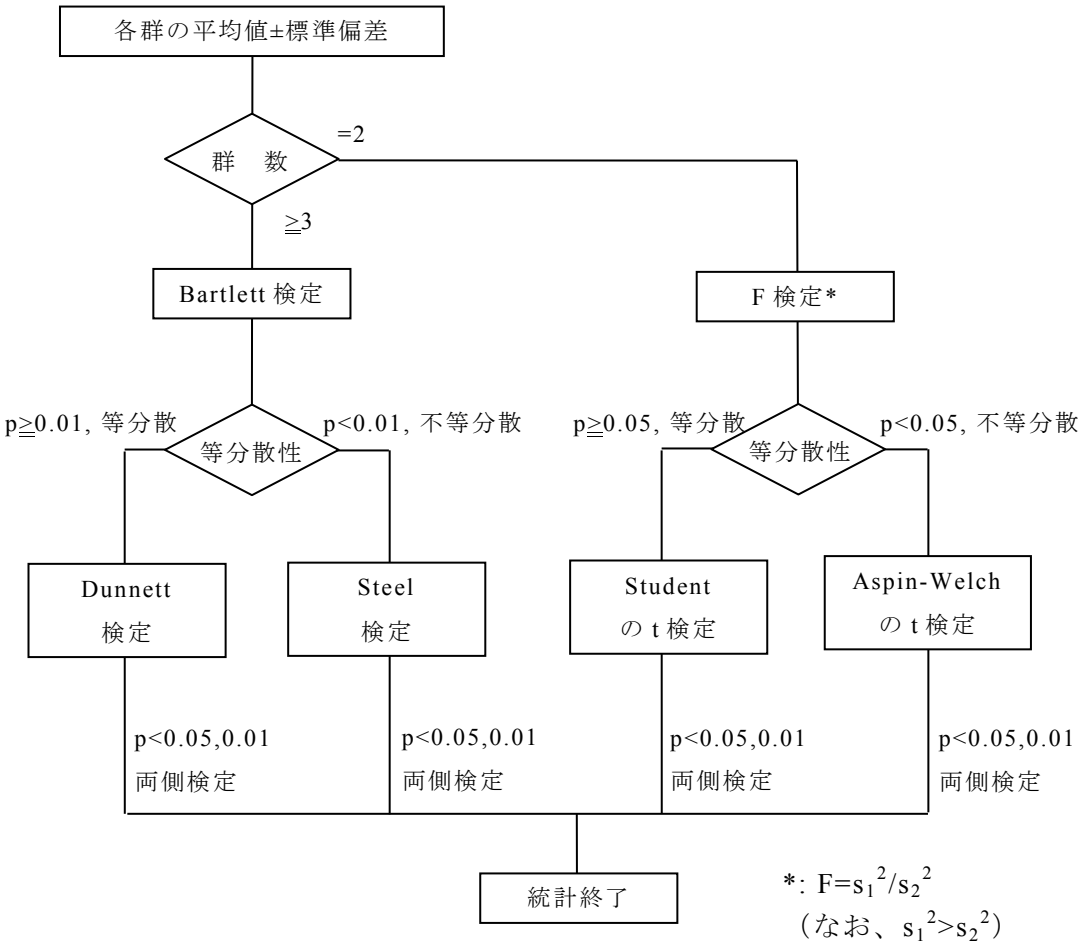
生後 0 日（出生児）の性比(%) =（雄出生児数/出生児数）×100

生後 4 日の性比(%) =（生後 4 日の雄生存児数/生後 4 日の生存児数）×100

6.13.2 検定

対照群と各用量群との差について以下の手法により統計学的有意性の検定を行った。解析には SAS Release 9.1.3（SAS Institute Inc.）を使用した。

体重、体重増加量（雄及び非交配群雌：投与 1~42 日及び回復 1~14 日、交配群雌：投与 1~15 日、妊娠 0~20 日及び授乳 0~4 日、出生児：生後 0~4 日）、摂餌量（総摂餌量含む）、発情期像発現回数、性周期（発情周期）、交尾までに要した日数、妊娠期間、黄体数、着床痕数、生存児数、オープンフィールド内観察（排糞数、立ち上がり回数）、機能検査（着地開脚幅）、握力及び自発運動量、尿検査の定量的項目、血液学検査、血液化学検査及び器官重量（含、剖検時体重）は、群ごとに平均値及び標準偏差を求め、次に示す模式図の方法に従って検定した[3] [4] [5]。



着床前死亡率、着床率、分娩率、外表異常率、出生率及び生後 4 日生存率並びに空中正向反射スコアについては、母動物ごとに率を求めた後、群ごとに平均値及び標準偏差を求め、Wilcoxon の順位和検定（有意水準 0.05 及び 0.01、両側）を行った[6]。

性周期異常率、交尾率、授精率、受胎率及び出産率、性比（生後 0 及び 4 日）並びに聴覚反応、接近反応、接触反応、痛覚反応及び瞳孔反射の各反応・反射スコアは、

各群の性周期異常を示した個体数、交尾動物数、雌を妊娠させた雄動物数、妊娠雌動物数、出生児出産雌動物数、雌雄児数、正常反応・反射のみられた動物数より算出し、Fisher の直接確率計算法により検定（有意水準 0.05 及び 0.01、両側）を行った[7]。

7. 試験結果

7.1 一般状態（Table1-1~1-11、Appendix 1-1~1-34）

投与期間及び回復期間ともに、いずれの動物にも死亡あるいは被験物質投与による異常はみられなかった。

なお、自然発生による頸部皮下の腫瘤が 300 mg/kg 群の雄 1 例（動物番号 3012）に投与 35 日以降（剖検時腫瘤の大きさ 35×20×15 mm）みられた。

7.2 詳細な一般状態の観察、機能検査、握力測定及び自発運動量の測定（Fig. 1~5、Table 2-1~2-171、Appendix 2-1~2-344）

7.2.1 ホームケージ内観察（Table 2-1~2-23、Appendix 2-1~2-72）

投与期間及び回復期間ともに、いずれの動物にも異常はみられなかった。

7.2.2 手に持っての観察（Table 2-24~2-82、Appendix 2-73~2-144）

投与期間及び回復期間ともに、いずれの動物にも異常はみられなかった。

7.2.3 オープンフィールド内観察（Table 2-83~2-151、Appendix 2-145~2-288）

1) 投与期間

いずれの動物にも妊娠中及び授乳中を含め、被験物質投与に関連すると考えられる異常はみられず、立ち上がり回数及び排糞の個数も対照群と各被験物質投与群との間に有意差は認められなかった。

2) 回復期間

いずれの動物にも被験物質投与に関連すると考えられる異常はみられず、立ち上がり回数及び排糞の個数も対照群と 1000 mg/kg 群との間に有意差は認められなかった。

7.2.4 機能検査（Table 2-152~2-161、Appendix 2-289~2-316）

1) 投与期間終了週検査

いずれの動物にも聴覚反応、接近反応、接触反応、痛覚反応、瞳孔反射及び空中正向反射に異常はみられず、着地開脚幅は対照群と各被験物質投与群との間に有意差は認められなかった。

2) 回復期間終了週検査

いずれの動物にも聴覚反応、接近反応、接触反応、痛覚反応、瞳孔反射及び空中正向反射に異常はみられず、着地開脚幅には対照群と 1000 mg/kg 群との間に有意差は認められなかった。

7.2.5　握力（Table 2-162~2-166、Appendix 2-317~2-330）

投与期間終了週及び回復期間終了週ともに、対照群と各被験物質投与群との間に有意差は認められなかった。

7.2.6　自発運動量（Fig. 1~5、Table 2-167~2-171、Appendix 2-331~2-344）

1)　投与期間終了週測定

非交配群雌の 1000 mg/kg 群で各時間における測定値に低値傾向がみられ、30-40 分の間の運動量及び 0-60 分の間の総運動量に有意差が認められた。雄及び交配群雌に同様の変化はみられなかった。

2)　回復期間終了週測定

雄及び非交配群雌では、対照群と 1000 mg/kg 群との間に有意差は認められなかった。

7.3　体重（Fig. 6~12、Table 3-1~3-7、Appendix 3-1~3-22）

1)　投与期間

雄では、1000 mg/kg 群で投与 8 日以降低値傾向がみられ、投与 22、36 及び 42 日に有意な低値が認められ、投与期間中の増加量も有意に低かった。

交配群雌では、対照群と各被験物質投与群との間に有意差は認められなかった。

非交配群雌では、1000 mg/kg 群と対照群との間に有意差は認められなかった。

2)　回復期間

雄では、1000 mg/kg 群で対照群を上回る体重増加がみられ、回復期間中の増加量も有意に高かった。非交配群雌では、1000 mg/kg 群と対照群との間に有意差は認められなかった。

7.4　摂餌量（Fig. 13~19、Table 4-1~4-7、Appendix 4-1~4-22）

1)　投与期間

雄では、1000 mg/kg 群で投与 8 日及び 36 日にそれぞれ有意な高値が認められた。なお、100 mg/kg 群で投与 42 日に、300 mg/kg 群で投与 8 日と総摂餌量にそれぞれ有意な高値が認められたが、一時的であり、用量との関連がないことから偶発的変化と判断した。

交配群雌及び非交配群雌では、対照群と各被験物質投与群との間に有意差は認められなかった。

2)　回復期間

雄の 1000 mg/kg 群で回復 2 及び 8 日並びに総摂餌量にそれぞれ有意な高値が認められた。非交配群雌では 1000 mg/kg 群と対照群との間に有意差は認められなかった。

7.5　尿検査（Table 5-1~5-24、Appendix 5-1~5-30）

1)　投与期間終了週検査

定性項目については、被験物質投与の影響は認められなかった。

定量項目については、雄の 1000 mg/kg 群でナトリウム及びカリウムの 1 日排泄量に有意な低値が認められた。交配群雌及び非交配群雌では、いずれの検査項目においても、対照群と各被験物質投与群との間に有意差は認められなかった。

2)　回復期間終了週検査

定性項目については、被験物質投与の影響は認められなかった。

定量項目については、いずれの検査項目においても 1000 mg/kg 群と対照群との間に有意差は認められなかった。

7.6　血液学検査（Table 6-1~6-7、Appendix 6-1~6-14）

1)　投与期間終了時検査

雄では、100 mg/kg 群で好酸球数と比率に有意な高値が認められたが、軽微な変化であり、用量との関連はなく、偶発的変化と判断した。その他の検査項目では、対照群と各被験物質投与群との間に有意差は認められなかった。

交配群雌では、1000 mg/kg 群でフィブリノゲン量の有意な高値が認められた。

その他、300 mg/kg 群で平均赤血球血色素濃度に有意な低値が認められたが、軽微であり、用量との関連がないことから偶発的変化と判断した。

非交配群雌では、いずれの検査項目においても 1000 mg/kg 群と対照群との間に有意差は認められなかった。

2)　回復期間終了時検査

雄では、1000 mg/kg 群でリンパ球数と比率に有意な低値が認められた。

雌では、いずれの検査項目においても 1000 mg/kg 群と対照群との間に有意差は認められなかった。

7.7　血液化学検査（Table 7-1~7-7、Appendix 7-1~7-14）

1)　投与期間終了時検査

雄では、1000 mg/kg 群で無機リンの有意な低値が認められた。

交配群雌では、1000 mg/kg 群で無機リンの有意な低値が認められた。また、300 及び 1000 mg/kg 群で塩素の有意な高値、1000 mg/kg 群で ALT の有意な高値が認められた。

その他、100 mg/kg 群で ALP 活性の有意な低値が認められたが、用量との関連はなく、偶発的変化と判断した。

非交配群雌では、1000 mg/kg 群で尿素窒素の有意な低値が認められたが、低値であり、毒性学的意義はない。

2)　回復期間終了時検査

いずれの検査項目においても 1000 mg/kg 群と対照群との間に有意差は認められな

かった。

7.8　器官重量（Table 8-1~8-7、Appendix 8-1~8-30）

1)　投与期間終了時検査

交配群雌雄及び非交配群雌では、いずれの器官においても各被験物質投与群と対照群との間に有意差は認められなかった。

2)　回復期間終了時検査

交配群雄では、いずれの器官においても 1000 mg/kg 群と対照群との間に有意差は認められなかった。

非交配群雌では、1000 mg/kg 群の脾臓の絶対及び相対重量に有意な低値が認められた。同群の投与期間終了時及び雄に同変化は認められず、組織学的に異常がないことから、偶発的変化と判断した。

7.9　剖検所見（Table 9-1~9-5、Appendix 9-1~9-116）

投与期間終了時検査及び回復期間終了時検査において、諸臓器に肉眼的変化がみられたが、その病理学的性状又は発現状況から被験物質投与に関連しない偶発的変化と考えられた。

7.10　病理組織学検査（Table 10-1~10-15、Appendix 9-1~9-116）

1)　投与期間終了時検査

胃に被験物質投与による変化がみられた。

境界縁扁平上皮の過形成及び腺胃粘膜下織の細胞浸潤が 100 mg/kg 以上の投与群の雌雄で観察された。所見の程度及び出現頻度に用量との関連性は認められなかった。

群	交配群雄				交配群雌				非交配群雌	
投与量 (mg/kg)	0	100	300	1000	0	100	300	1000	0	1000
動物数	5	5	5	5	5	5	5	5	5	5
境界縁扁平上皮過形成	0	5	5	4	0	3	4	3	0	3
軽微	0	2	1	1	0	2	4	3	0	2
軽度	0	3	4	3	0	1	0	0	0	1
腺胃粘膜下織細胞浸潤	0	5	5	3	0	2	3	2	0	3
軽微	0	2	2	1	0	1	3	2	0	3
軽度	0	3	3	2	0	1	0	0	0	0

その他、諸臓器に組織学的変化がみられたが、その病理学的性状又は発現状況から被験物質投与に関連しない偶発的変化と考えられた。

2)　回復期間終了時検査

境界縁扁平上皮の過形成及び腺胃粘膜下織の細胞浸潤が 1000 mg/kg 投与群の雌雄で残存してみられた。雄は所見の程度が減弱、雌は出現頻度が低下し、回復傾向が認

められた。

群	交配群雄		非交配群雌	
投与量 (mg/kg)	0	1000	0	1000
動物数	5	5	5	5
境界縁扁平上皮過形成	0	5	0	1
軽微	0	4	0	0
軽度	0	1	0	1
腺胃粘膜下織細胞浸潤	0	4	0	1
軽微	0	4	0	0
軽度	0	0	0	1

その他、諸臓器に組織学的変化がみられたが、その病理学的性状又は発現状況から被験物質投与に関連しない偶発的変化と考えられた。

7.11　性周期（Table 11、Appendix 10-1~10-8）

平均性周期、発情像発現回数、性周期（発情周期）及び性周期異常動物数（率）では、対照群と各被験物質投与群との間に有意差は認められなかった。

なお、性周期（発情周期）が 4 日から 6 日に伸びた動物（性周期異常）が 100 mg/kg 群で 1 例みられたが、発現状況に用量との関連がないことから、偶発的変化と判断した。

7.12　交配成績（Table 12-1 及び 12-2、Appendix 11-1~11-8）

全例が交配 5 日までに交尾し、雌全例が受胎した。したがって、交尾までに要した日数、交尾率、授精率及び受胎率には対照群と各被験物質投与群との間に有意差は認められなかった。

7.13　分娩成績（Table 13、14-1、Appendix 12-1~12-4、13-1~13-4）並びに分娩及び哺育状態（Table1-5 及び 1-6、Appendix 1-17~1-24）

1000 mg/kg 群では、黄体数がわずかに少なく、着床痕数が有意に低く、着床前死亡率がわずかに多く、出産児数及び出生児数に有意な低値が認められた。しかし、着床率に有意差は認められなかった。なお、300 mg/kg 群で雌の出生児数が有意に少なく、生後 0 日の性比（出産児あるいは出生児）に有意な高値が認められたが、用量との関連はなかった。

なお、妊娠期間、出産率、分娩率、出生率、死産児数及び生後 0 日の性比（出産児あるいは出生児）並びに外表異常率には被験物質投与によると考えられる変化は認められなかった。

妊娠動物の分娩状態では、全例が妊娠 21 から 23 日に分娩し、胎盤及び羊膜の処理は正常に行われた。哺育状態ではいずれの母動物にも児集め、営巣及び授乳行動に異常はみられなかった。

7.14　出生児の生存性及び性比（Table 15、Appendix 14-1~14-4）

生後 4 日の生存率には対照群と各被験物質投与群との間に有意差は認められなかった。生後 4 日の性比は 300 mg/kg 群で生後 0 日の性比の有意な高値が引き続き認められた。

7.15　出生児の体重（Table 16-1 及び 16-2、Appendix 15-1~15-8）

生後 0 及び 4 日の雌雄体重並びに生後 0~4 日の間の体重増加量には対照群と各被験物質投与群との間に有意差は認められなかった。

7.16　死亡児の肉眼観察所見（Table 17、Appendix 16-1~16-4）

いずれの死亡児にも肉眼的異常はみられなかった。

7.17　出生児の生後 4 日肉眼観察所見（Table 14-2、Appendix 13-5~13-8）

いずれの出生児にも肉眼的異常はみられなかった。

8. 考察

1，2，4，5-ベンゼンテトラカルボン酸無水物の 0（対照群：コーン油）、100、300 及び 1000 mg/kg を Sprague-Dawley 系 SPF ラットの雄には交配前 14 日間に加え交配期間を通して剖検前日まで（42 日間）、雌には交配前 14 日間に加え交配期間及び妊娠期間を通して授乳 4 日まで(41~46 日間)、非交配群雌には 42 日間強制経口投与し、反復投与毒性及び生殖発生毒性を検討した。更に、0 及び 1000 mg/kg 群の一部の動物については、雌雄ともに 42 日間投与した後 14 日間の回復期間を設け、毒性変化の可逆性を検討した。

8.1 反復投与毒性

体重及び摂餌量では、1000 mg/kg 群の雄で投与期間中に体重増加の抑制が認められた。しかし、摂餌量は高値を示し、投与期間終了週に尿中ナトリウム及びカリウムの 1 日排泄量の低値、投与期間終了時に血中無機リンの低値（1000 mg/kg 群の交配群雌を含む）が認められた。しかし、血中ナトリウム、カリウム及びカルシウム、並びに上皮小体、甲状腺及び尿細管の組織学検査に異常はなく、消化管（特に小腸）に栄養吸収不良を来す障害がないことから、原因は明らかでないが栄養分の吸収不良の可能性が推測される。投与中止により摂餌量の高値は引き続きみられたものの対照群を上回る体重増加が認められ、回復期間終了週の尿中ナトリウム及びカリウムの 1 日排泄量、回復期間終了時の血中無機リンに異常がないことから、速やかに回復する変化であった。なお、摂餌量の高値は栄養不足を補う生体の適用変化であり、毒性学的意義はない。自発運動量の測定では、1000 mg/kg 群の非交配群雌で各時間における測定値に低値傾向がみられ、30-40 分の運動量及び 0-60 分の総運動量に低値が認められた。

血液学検査では、1000 mg/kg 群の交配群雌でフィブリノゲンの高値（対照群 271 mg/dL に対し、342 mg/dL）が認められた。プロトロンビン時間及び活性化部分トロンボプラスチン時間に異常はなく、炎症所見がないこと、雄及び非交配群雌に同変化が認められないこと、さらには当施設の背景データ（平均値±2SD：306±64 mg/dL、2011 年 4 月~2014 年 4 月、14 試験）と大差ないものの、用量と関連して高値を示していることから、被験物質投与の影響を完全に否定できなかった。回復期間終了時には本変化は認められなかった。他に、1000 mg/kg 群の雄の回復期間終了時検査でリンパ球数と比率に低値（数は対照群 63.8 10^2/μL に対し 42.8 10^2/μL、比率は対照群 78.6 % に対し 69.4 %）が認められた。しかし、好中球に変動がないこと、投与期間終了時に同変化は認められないこと、当施設の背景データ（リンパ球数の平均値±2SD：59.4±22.8、リンパ球比率の平均値±2SD：75.3±6.4、2011 年 4 月~2014 年 4 月、14 試験）内であることから、偶発的変化と判断した。

血液化学検査では、前述の無機リンの低値の他に、300 及び 1000 mg/kg 群の交配群雌で塩素の高値（対照群 103 mmol/L に対し 300 及び 1000 mg/kg 投与群で各 106 mmol/L）、ALT の高値（対照群 46 IU/L に対し 73 IU/L）が認められた。塩素の高値

は、ナトリウムに異常がないことから酸・塩基平衡の異常が疑われるものの、詳細な一般状態の観察における呼吸数及び腎臓の組織学検査に異常がないこと、雄及び非交配群雌に同変化は認められないこと、当施設の背景データ（平均値±2SD：106.1±2.6 mmol/L、2011 年 4 月~2014 年 4 月、14 試験）と同等値あることから、偶発的変化と考えられる。ALT の高値は、肝臓、腎臓及び骨格筋の組織学検査に異常がなく、血液疾患がないこと、かつ高値の 1 例（動物番号 4102、109 IU/L）を除く平均値は 64.3 IU/L であり、当施設の背景データ（平均値±2SD：51.4±10.6 IU/L、2011 年 4 月~2014 年 4 月、14 試験）と大差ないことから、毒性学的意義は少ない。本変化も回復期間終了時には認められなかった。

病理組織学検査では、100 mg/kg 以上の雌雄で境界縁扁平上皮の過形成及び腺胃粘膜下織の細胞浸潤が観察された。所見の程度及び出現頻度に用量との関連性は認められなかった。本所見は刺激性物質をラットに経口投与した際にしばしば認められ[7]、本被験物質の SDS の有害性情報にウサギを用いた Draize test で重度の刺激性がある[7]ことから、本被験物質の刺激性により惹起されたと考えられる。回復期間終了時には所見の程度が軽減もしくは出現頻度が低下し、回復傾向が認められた。なお、前胃はヒトにないことから、本変化はげっ歯類に特異的変化である。

その他の種々の検査においては、被験物質投与による影響は認められなかった。

8.2　生殖発生毒性

1000 mg/kg 群において、黄体数がわずかに少なく、着床痕数が少なく、着床前死亡率が多く、出産児数及び出生児数に低値が認められた。

	黄体数	着床痕数	着床前死亡率	着床率	出産児数	出生児数
対照群	15.6	15.5	0.5	99.5	14.5	14.5
1000 mg/kg 群	14.1	13.6*	4.4	95.6	12.3*	12.3*
背景データ	15.9±1.6	14.9±1.8	-	93.1±7.8	13.7±1.6	13.6±1.6

背景データ Mean±2SD：2011 年 4 月~2014 年 4 月、14 試験

出生児では、いずれの検査項目にも被験物質投与による影響は認められないことから、児の子宮内発生、発育及び分化並びに生存性などへの影響はないと判断した。

これらの結果から、本試験条件下における反復投与毒性として、雄の 1000 mg/kg で体重増加抑制、摂餌量の高値、尿中ナトリウム及びカリウムの 1 日排泄量の低値、血中無機リンの低値、交配群雌の 1000 mg/kg 群で無機リンの低値、ALT の高値、更に、非交配群雌の 1000 mg/kg 群で自発運動量の低値傾向又は低値、雄、交配群雌及び非交配群雌の 100 mg/kg 以上で境界縁扁平上皮の過形成及び腺胃粘膜下織の細胞浸潤が認められた。また、生殖発生毒性では 1000 mg/kg 群で黄体数がわずかに少なく、着床痕数が少なく、着床前死亡率が多く、出産児数及び出生児数に低値が認められた。

したがって、本被験物質の反復投与毒性に対する雌雄の無影響量は 100 mg/kg 未満、無毒性量は 300 mg/kg と判断した。生殖発生毒性に対する無影響量及び無毒性量は雄親動物及び児動物のいずれも 1000 mg/kg、母動物で 300 mg/kg と判断した。

9. 文献

[1] [redacted]：1，2，4，5-ベンゼンテトラカルボン酸無水物の赤外吸収スペクトル測定法による特性試験及び安定性試験並びに HPLC 法による被験液（媒体：コーン油）中濃度測定法バリデーション及び安定性・均一性試験（株式会社ボゾリサーチセンター 御殿場研究所、試験番号：A-2841、2016 年）

[2] [redacted]：1，2，4，5-ベンゼンテトラカルボン酸無水物：ラットを用いた 14 日間反復経口投与毒性試験（投与量設定試験）（株式会社ボゾリサーチセンター、試験番号：N-R060、2016 年）

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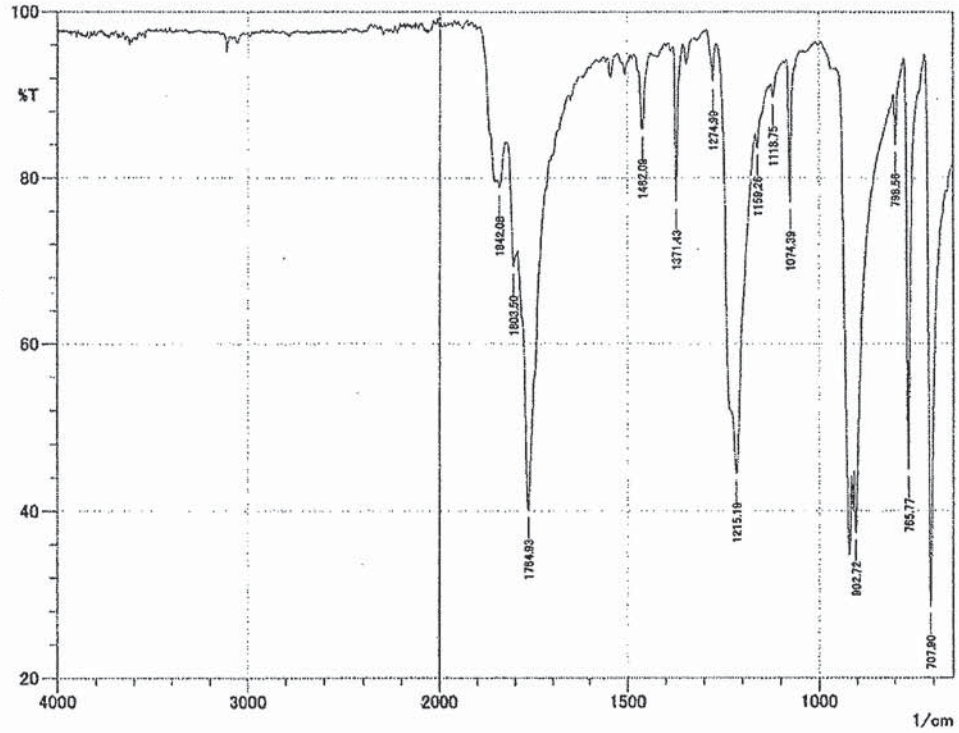
試験成績書
（1，2，4，5-ベンゼンテトラカルボン酸無水物の特性）

試験番号　：　R-1193
ステージ　：　投与期間前
測定日　：　2016 年 10 月 18 日
被験物質　：　1，2，4，5-ベンゼンテトラカルボン酸無水物
（ロット番号：RZ6TO）
測定項目　：　赤外吸収スペクトル（ATR 法）

結果　：　特性のスペクトルを以下に示す。



基準　：　「新規化学物質等に係る試験を実施する試験施設に関する基準」（平成 23 年 3 月 31 日：薬食発 0331 第 8 号、平成 23･03･29 製局第 6 号、環保企発第 110331010 号）

[redacted]　2016年 10 月 27 日

[redacted]
化学分析責任者
株式会社ボゾリサーチセンター　御殿場研究所

試験成績書
（1，2，4，5-ベンゼンテトラカルボン酸無水物の安定性）

ステージ	:	投与期間後
測定日	:	2016 年 12 月 26 日 2016 年 10 月 18 日（特性のスペクトル）
被験物質	:	1，2，4，5-ベンゼンテトラカルボン酸無水物 （ロット番号：RZ6TO）
測定項目	:	赤外吸収スペクトル（ATR 法）
評価基準	:	安定性のスペクトルを特性のスペクトルと比較するとき、同一波長のところに同様の強度の吸収を認める。ただし、安定性試験において 2300 cm^{-1} 付近に吸収が観られた場合、この吸収は二酸化炭素の影響であるため評価対象としない。
結果	:	安定性のスペクトルを特性のスペクトルと比較したとき、同一波長のところに同様の強度の吸収を認めた。赤外吸収スペクトルは次のページに示す。
判定	:	適
基準	:	「新規化学物質等に係る試験を実施する試験施設に関する基準」（平成 23 年 3 月 31 日：薬食発 0331 第 8 号、平成 23・03・29 製局第 6 号、環保企発第 110331010 号）

[redacted] 2017 年 1 月 5 日

化学分析責任者
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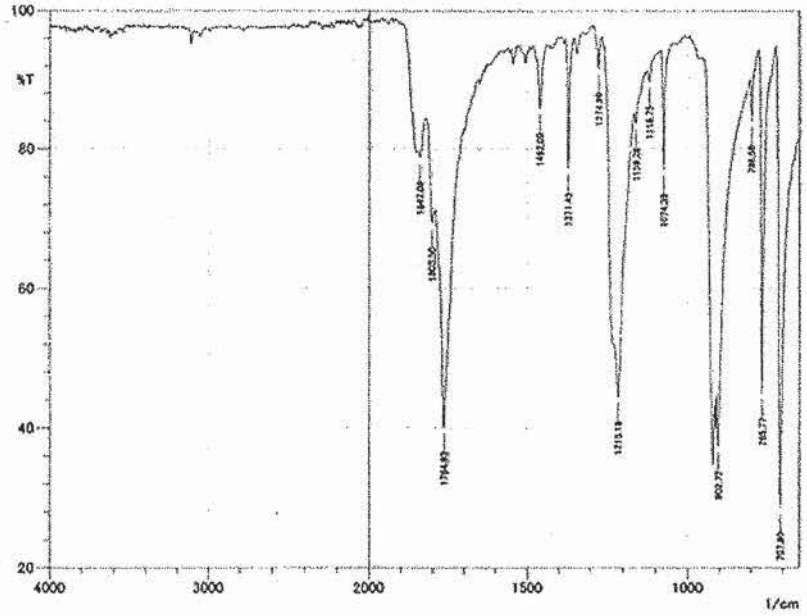
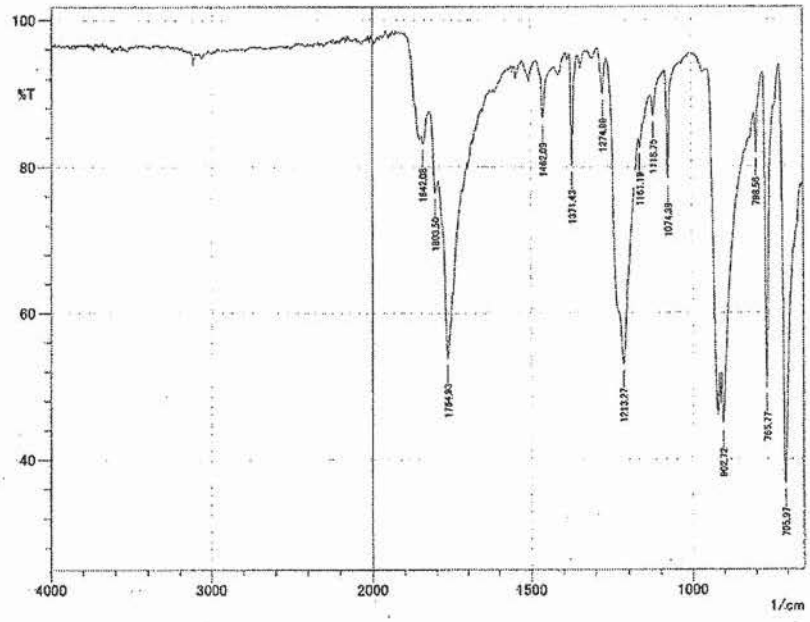
試験成績書
（1，2，4，5-ベンゼンテトラカルボン酸無水物の安定性）

結果：

（特性スペクトル）



（安定性のスペクトル）



試験番号：A-2841 (1/2)

試験成績書
（被験液中 1,2,4,5-ベンゼンテトラカルボン酸無水物の安定性及び均一性）

被験物質	:	1,2,4,5-ベンゼンテトラカルボン酸無水物 （ロット番号：QFC5K）
媒体	:	コーン油
形態	:	懸濁液
測定対象物質	:	1,2,4,5-ベンゼンテトラカルボン酸無水物
保存条件	:	褐色ガラス瓶にて、冷所（冷蔵庫内、許容値：1~10°C）及び室温・非遮光保存
保存期間	:	冷所で 8 日間保存後、室温で 24 時間保存
評価基準		
安定性	:	残存率｛調製日の測定濃度の平均値（100）に対する保存後の測定濃度の平均値の割合｝が 100.0 ± 10.0% 以内。
均一性	:	変動係数が 10.0%以下。
結果 :		次ページに記載
判定	:	適
基準	:	「新規化学物質等に係る試験を実施する試験施設に関する基準」（平成 23 年 3 月 31 日：薬食発 0331 第 8 号、平成 23·03·29 製局第 6 号、環保企発第 110331010 号）

[redacted] 2016 年 10 月 27 日

[redacted]

試験責任者
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試験番号：A-2841 (2/2)

試験成績書
（被験液中 1,2,4,5-ベンゼンテトラカルボン酸無水物の安定性及び均一性）

結果：

調製濃度 (mg/mL)	採取層		測定濃度 (mg/mL) 調製日	測定濃度 (mg/mL) 保存後
2.00	上層		1.99	1.92
	中層		1.99	1.95
	下層		1.95	1.94
		平均値	1.98	1.94
		標準偏差	0.03	0.01
		残存率（%）	(100)	98.0
		変動係数（%）	1.5	0.5
200	上層		207	207
	中層		207	210
	下層		207	208
		平均値	207	208
		標準偏差	0	2
		残存率（%）	(100)	100.5
		変動係数（%）	0.0	1.0

分析結果

試験番号　：　R-1193
測定項目　：　濃度・均一性

ステージ　：　初回投与
測定開始日　：　2016 年 10 月 21 日

測定試料
　被験物質　：　1，2，4，5-ベンゼンテトラカルボン酸無水物
　（ロット番号；RZ6TO）
　形態（媒体）　：　懸濁液（コーン油）
　調製日　：　2016 年 10 月 21 日

測定対象物質　：　1，2，4，5-ベンゼンテトラカルボン酸無水物

評価基準
　濃度　：　表示値に対する割合；100.0±10.0%
　均一性　：　変動係数（CV）10.0%以下

結果　：

表示値 (mg/mL)	採取層	測定濃度 (mg/mL)	平均値±標準偏差	表示値に対する割合 (%)	CV (%)
20	上層	21.9	22.0±0.3	110.0	1.4
	中層	21.9			
	下層	22.3			
60	上層	66.1	65.2±0.8	108.7	1.2
	中層	64.7			
	下層	64.8			
200	上層	213	215±2	107.5	0.9
	中層	214			
	下層	216			

判定　：　適

分析結果

試験番号　：　R-1193
測定項目　：　濃度・均一性

ステージ　：　投与6週
測定開始日　：　2016年11月28日

測定試料
　被験物質　：　1，2，4，5-ベンゼンテトラカルボン酸無水物
　　（ロット番号；RZ6TO）
　形態（媒体）　：　懸濁液（コーン油）
　調製日　：　2016年11月28日

測定対象物質　：　1，2，4，5-ベンゼンテトラカルボン酸無水物

評価基準
　濃度　：　表示値に対する割合；100.0±10.0%
　均一性　：　変動係数（CV）10.0%以下

結果　：

表示値 (mg/mL)	採取層	測定濃度 (mg/mL)	平均値±標準偏差	表示値に対する割合 (%)	CV (%)
20	上層	21.4	21.6±0.3	108.0	1.4
	中層	21.5			
	下層	22.0			
60	上層	64.1	64.2±0.3	107.0	0.5
	中層	64.5			
	下層	63.8			
200	上層	220	215±5	107.5	2.3
	中層	214			
	下層	210			

判定　：　適

1，2，4，5-ベンゼンテトラカルボン酸無水物：ラットを用いた14日間反復経口投与毒性試験（投与量設定試験）における所見

試験番号：N-R060

被験物質		媒体 a)	1，2，4，5-ベンゼンテトラカルボン酸無水物		
投与量(mg/kg)		0	250	500	1000
投与容量 (mL/kg)		5	5	5	5
使用動物数 (♂/♀)		5/5	5/5	5/5	5/5
死亡動物数 (♂/♀)		0/0	0/0	0/0	0/0
死亡発現時期		–	–	–	–
一般状態	生存	–	–	–	–
	死亡				
体重			–	–	–
体重増加量			–	–	–
摂餌量			–	–	投与10及び14日：↑(♂)
血液学検査			HGB：↓(♀)	MCH及びMCHC:↓(♂) PLT：↑(♂)	HGB：↓(♀)
血液化学検査			ALT：↑(♀)	総たん白質：↓↓(♀)	総たん白質：↓↓(♀)
器官重量	絶対		–	–	心臓：↓(♂)、脾臓：↑(♀)
	相対		–	肝臓：↑(♂)	脾臓：↑↑(♀)
剖検	生存	–	–	–	–
	死亡				

a)　：コーン油
–　：著変なし
ND　：データなし又は判別不明あるいは検定不能
/　：雄/雌
↑又は↓；$p<0.05$，↑↑又は↓↓；$p<0.01$，(対照群との間に有意差あり

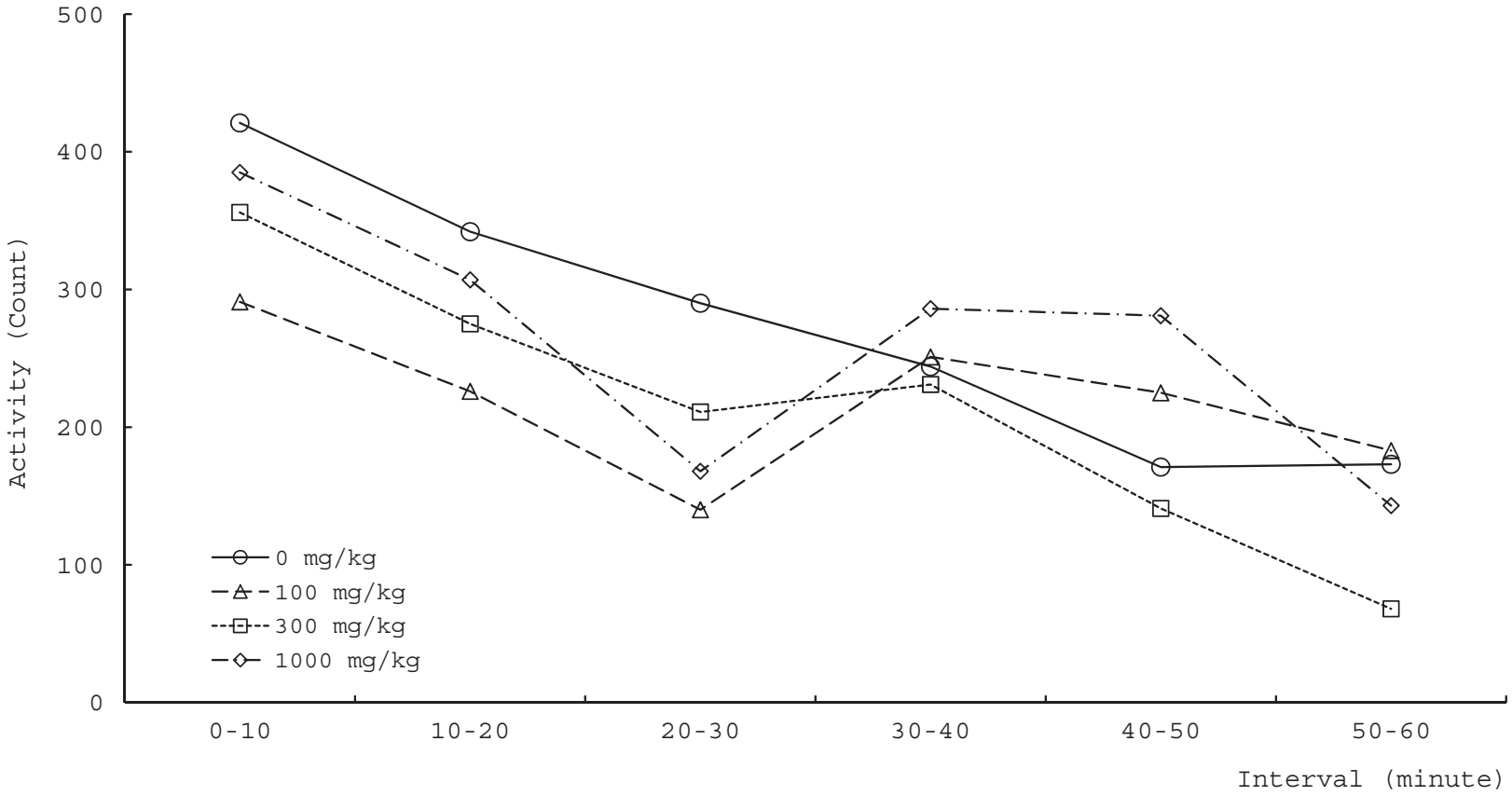

Fig.1 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Motor activity of male rats (Week 6 of administration)

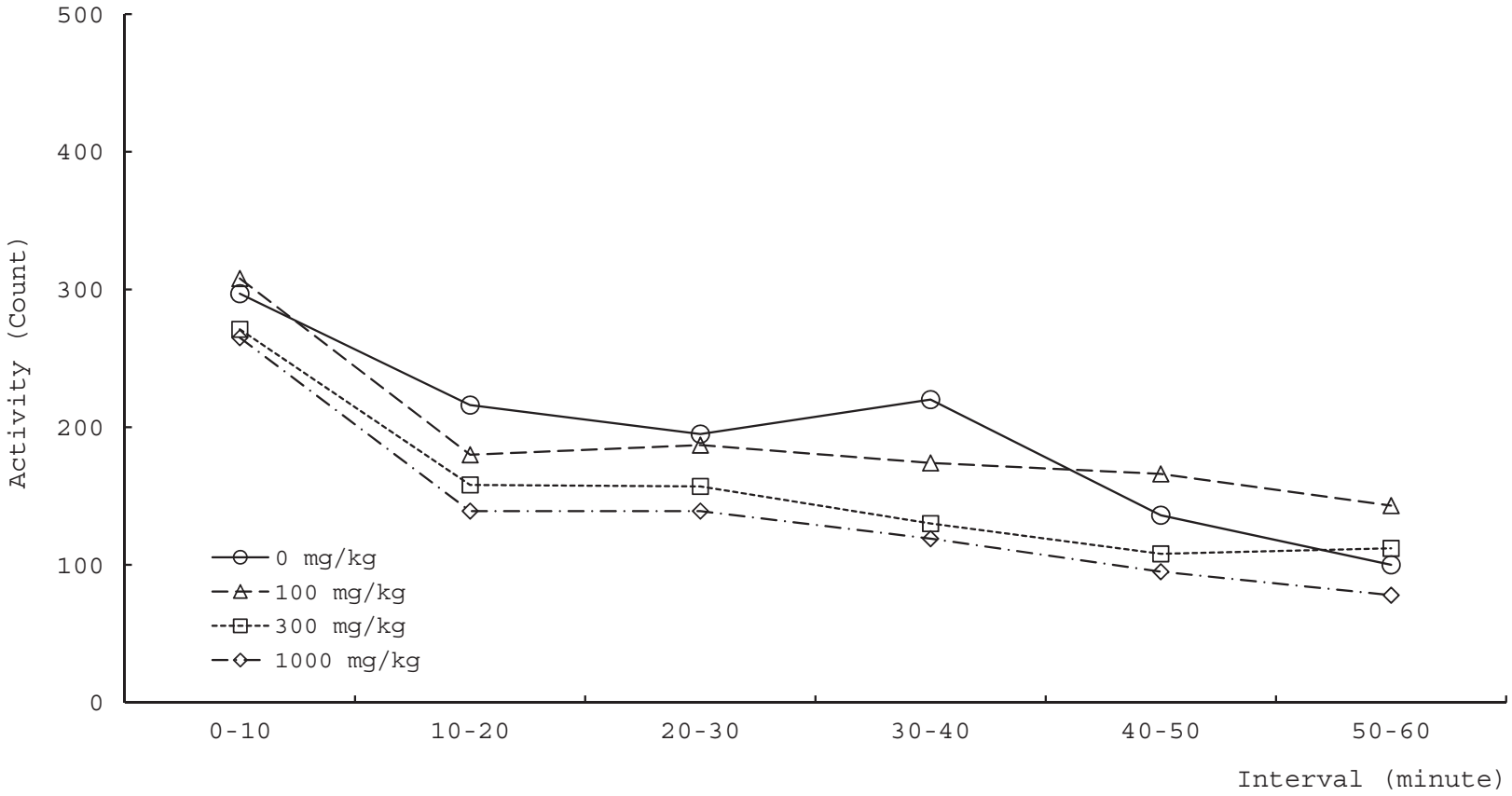

Fig.2 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Motor activity of female rats (Lactation day 4)

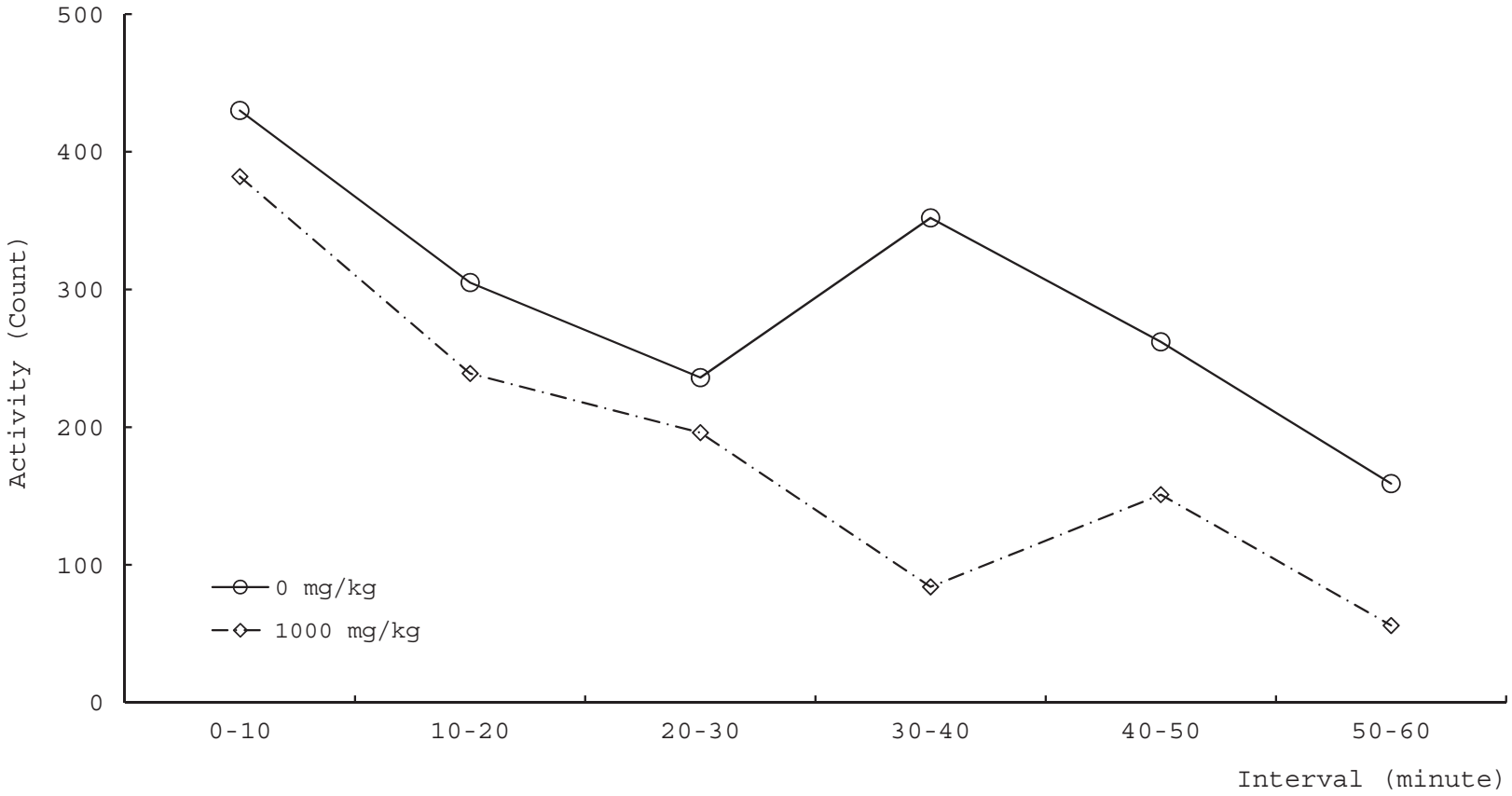

Fig.3 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Motor activity of female rats (Week 6 of administration)

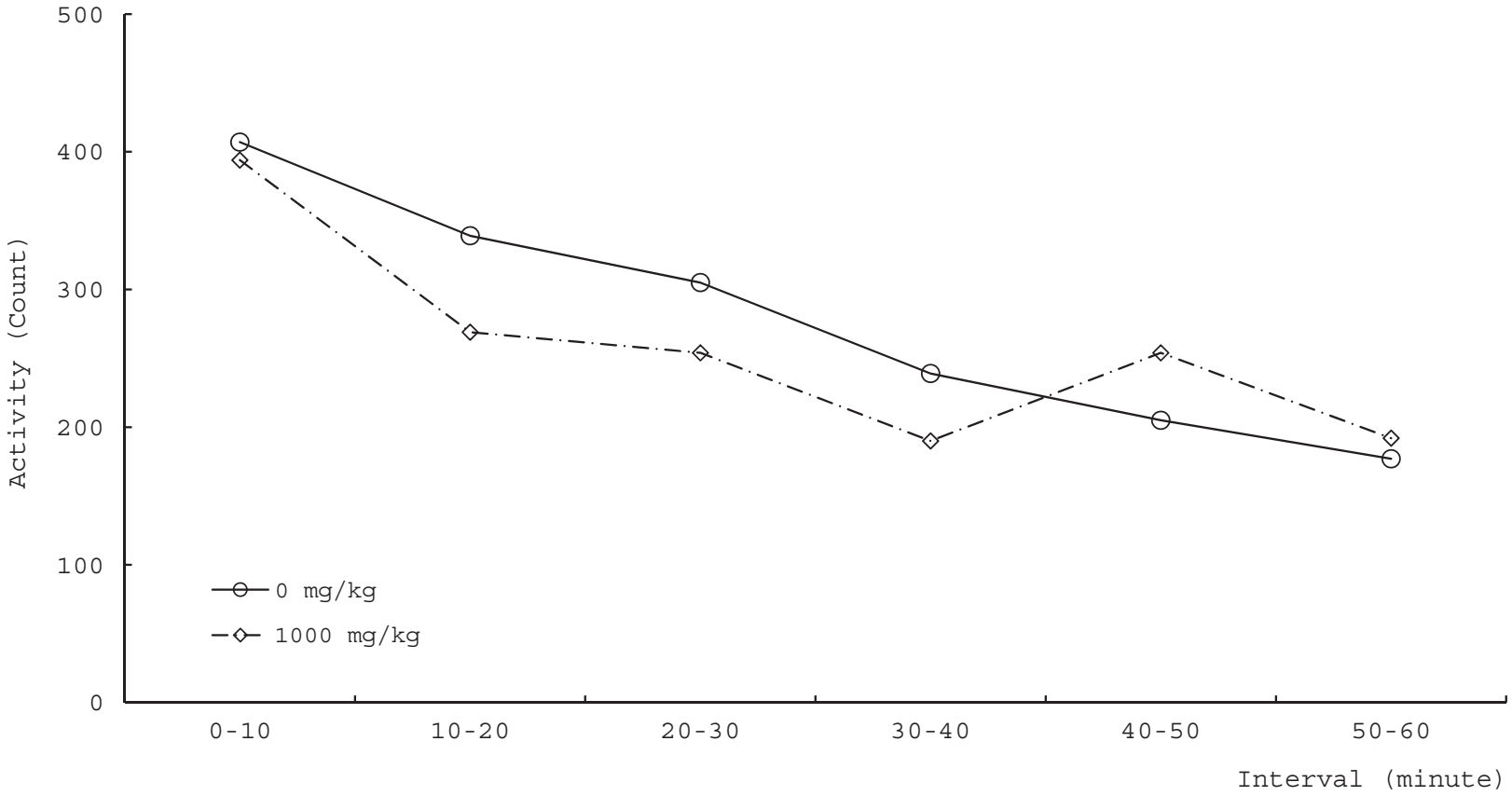

Fig.4 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Motor activity of male rats (Week 2 of recovery)

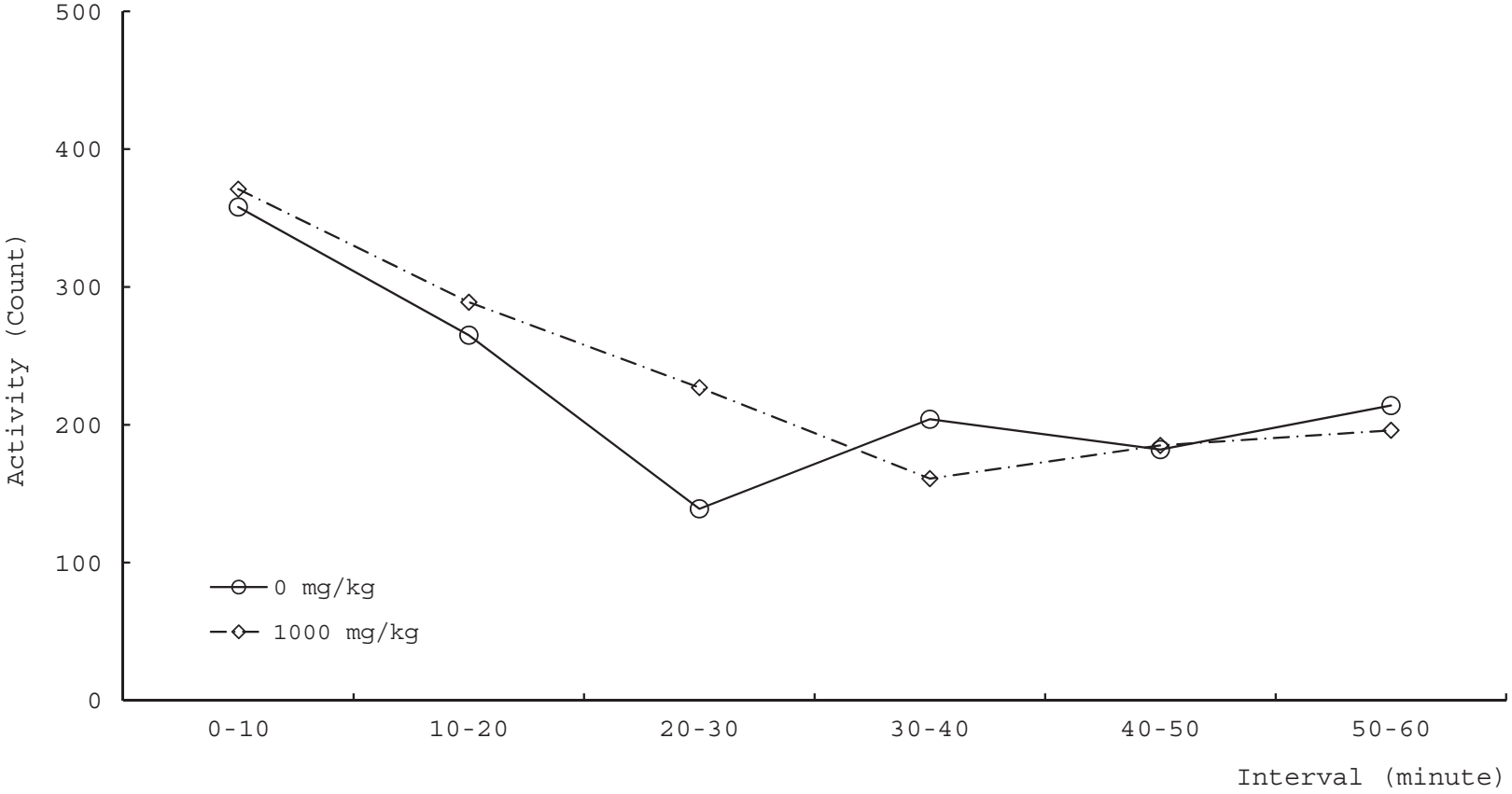

Fig.5 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Motor activity of female rats (Week 2 of recovery)

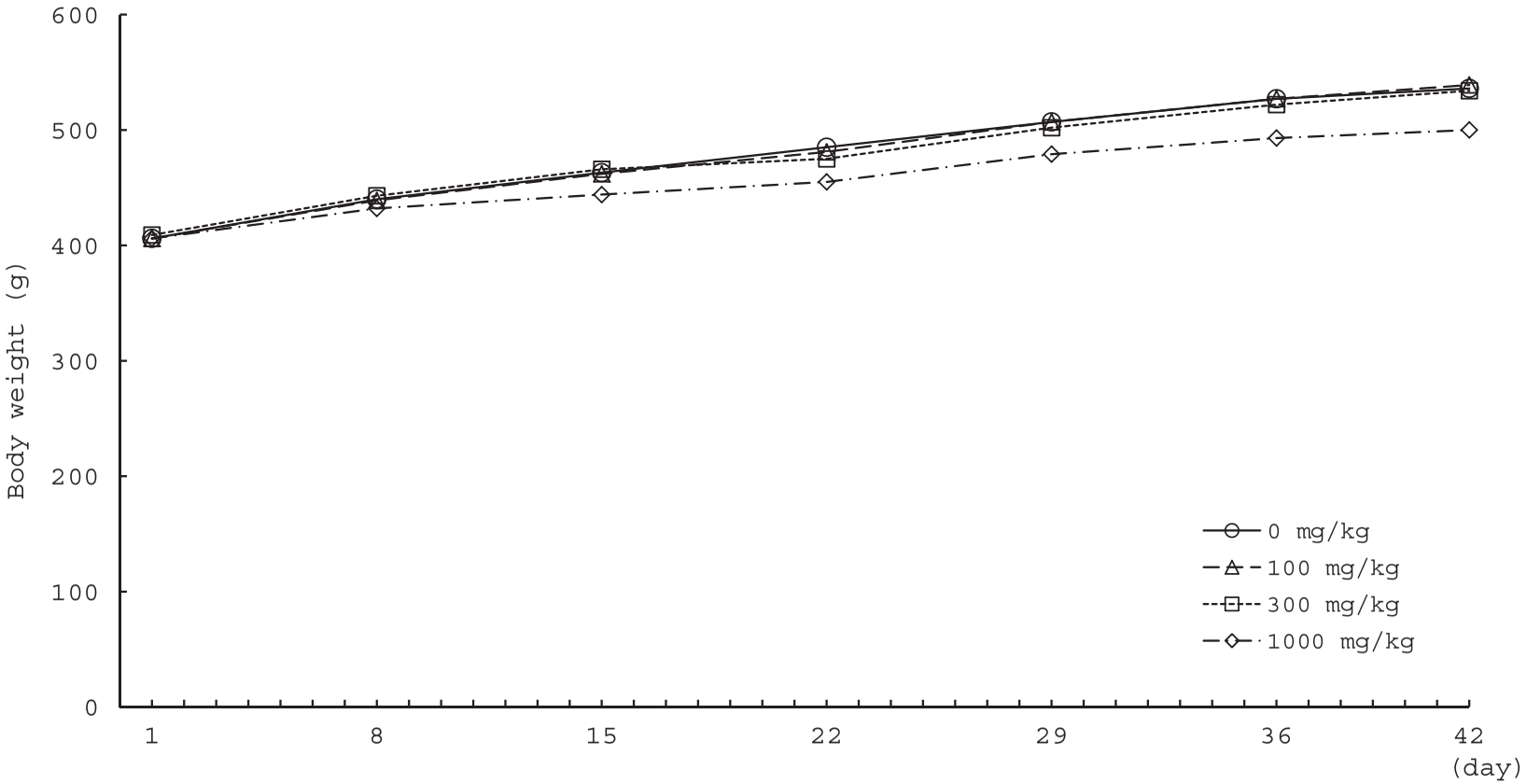

Fig.6 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Body weight of male rats (F0 before mating Day 1-15, F0 mating Day 15-43)

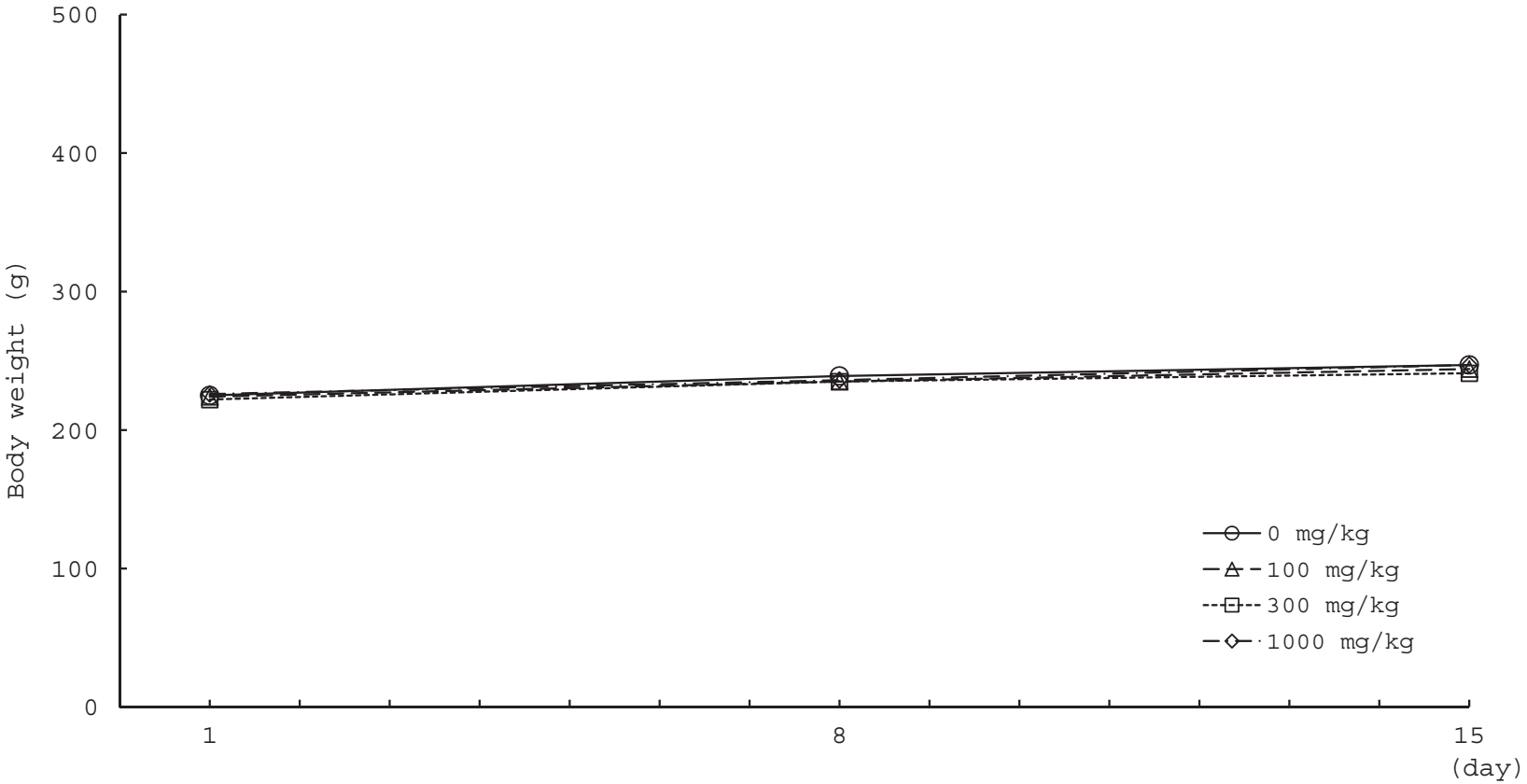

Fig.7 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Body weight of female rats (F0 before mating Day 1-15)

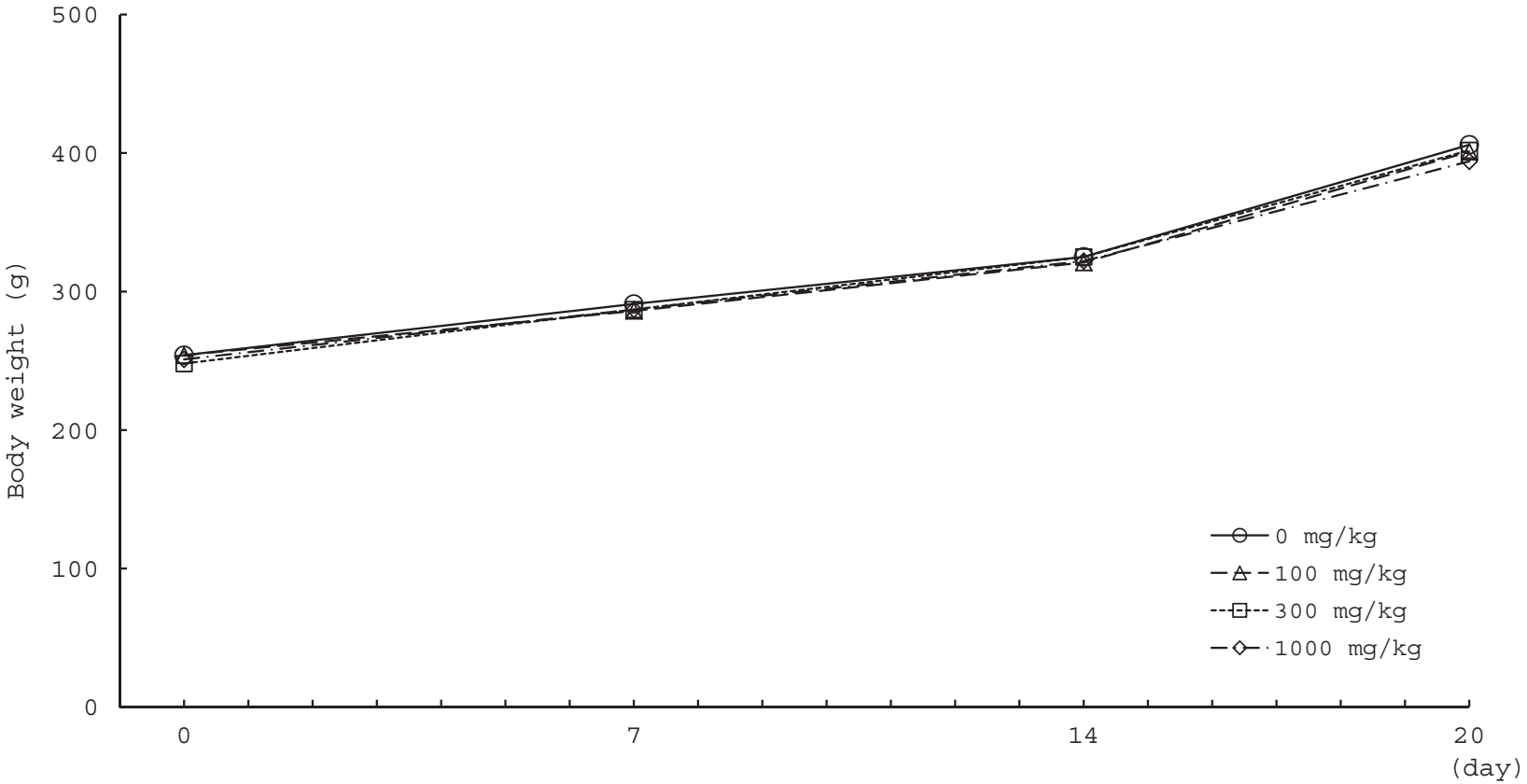

Fig.8 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Body weight of dams (F0 gestation Day 0-25)

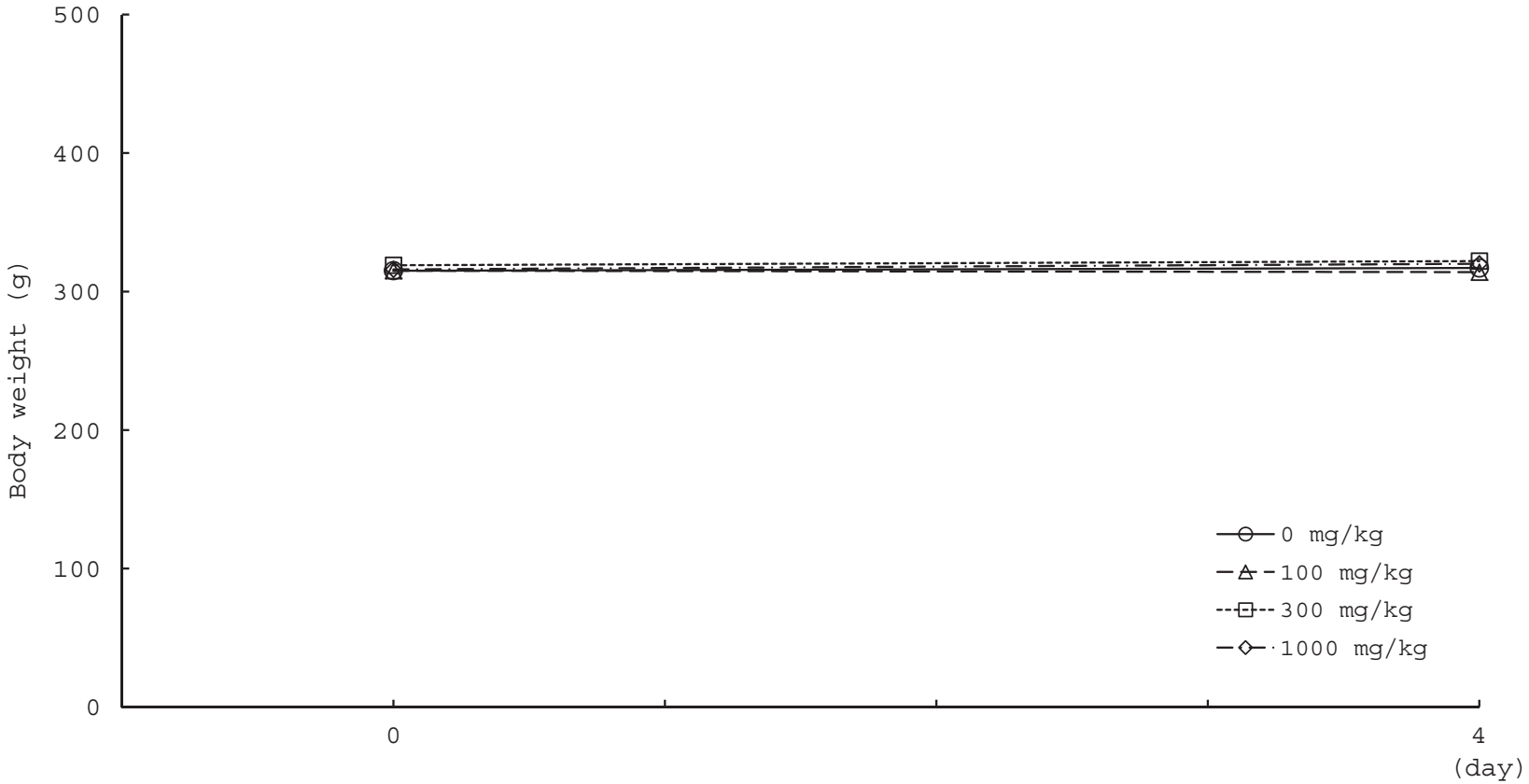

Fig.9 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Body weight of dams (F0 lactation Day 0-5)

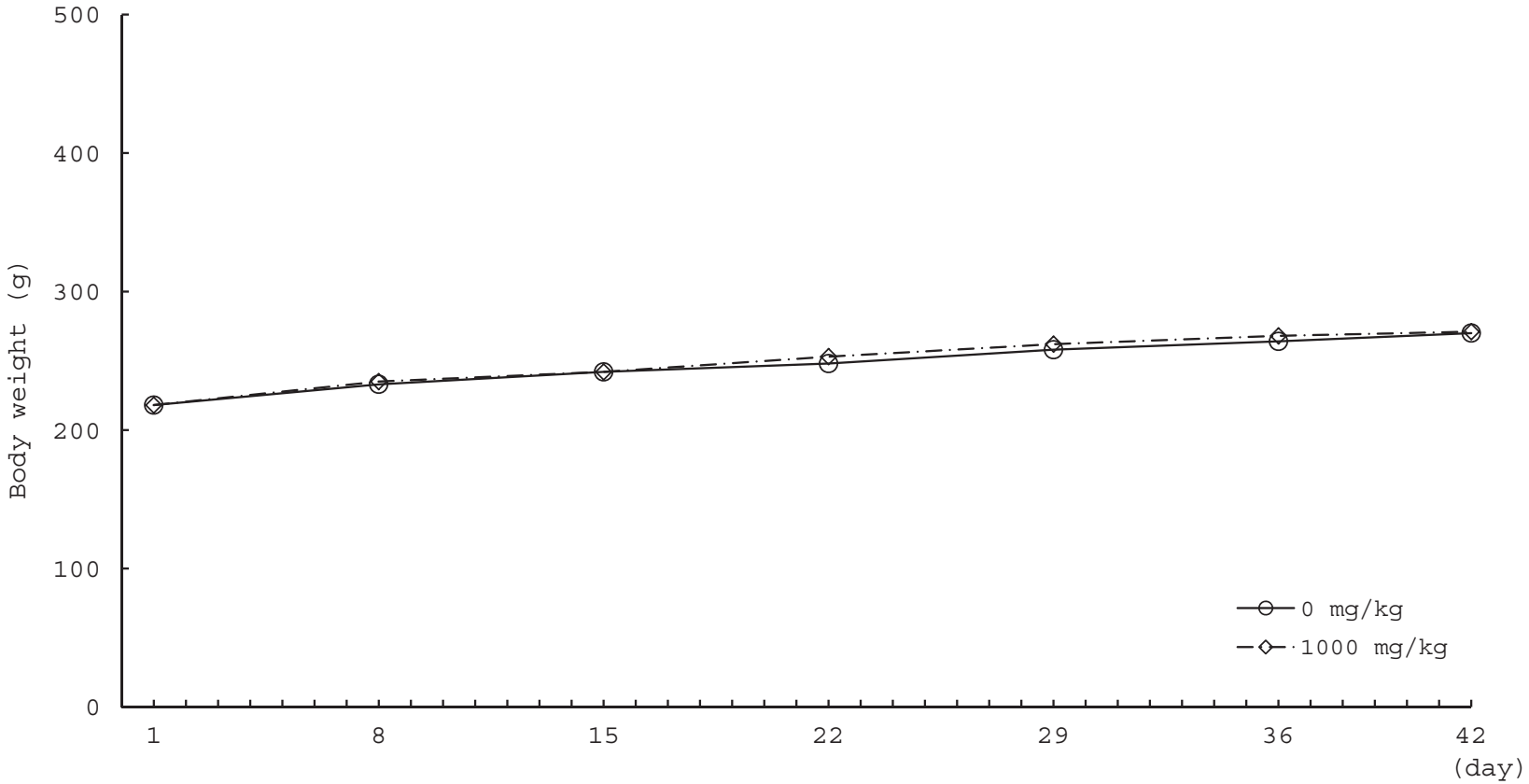

Fig.10 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Body weight of female rats (Administration period)

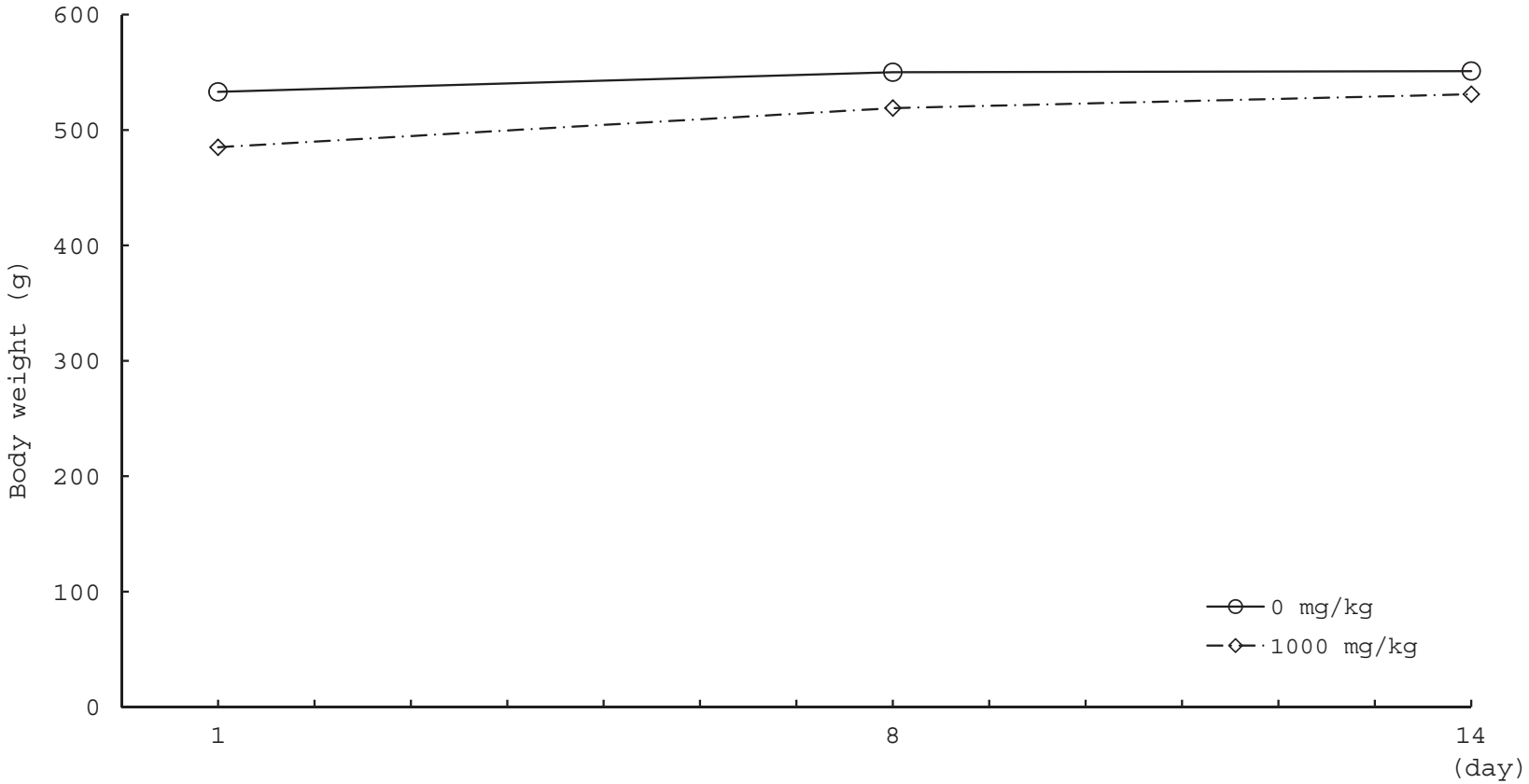

Fig.11 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Body weight of male rats (Recovery period)

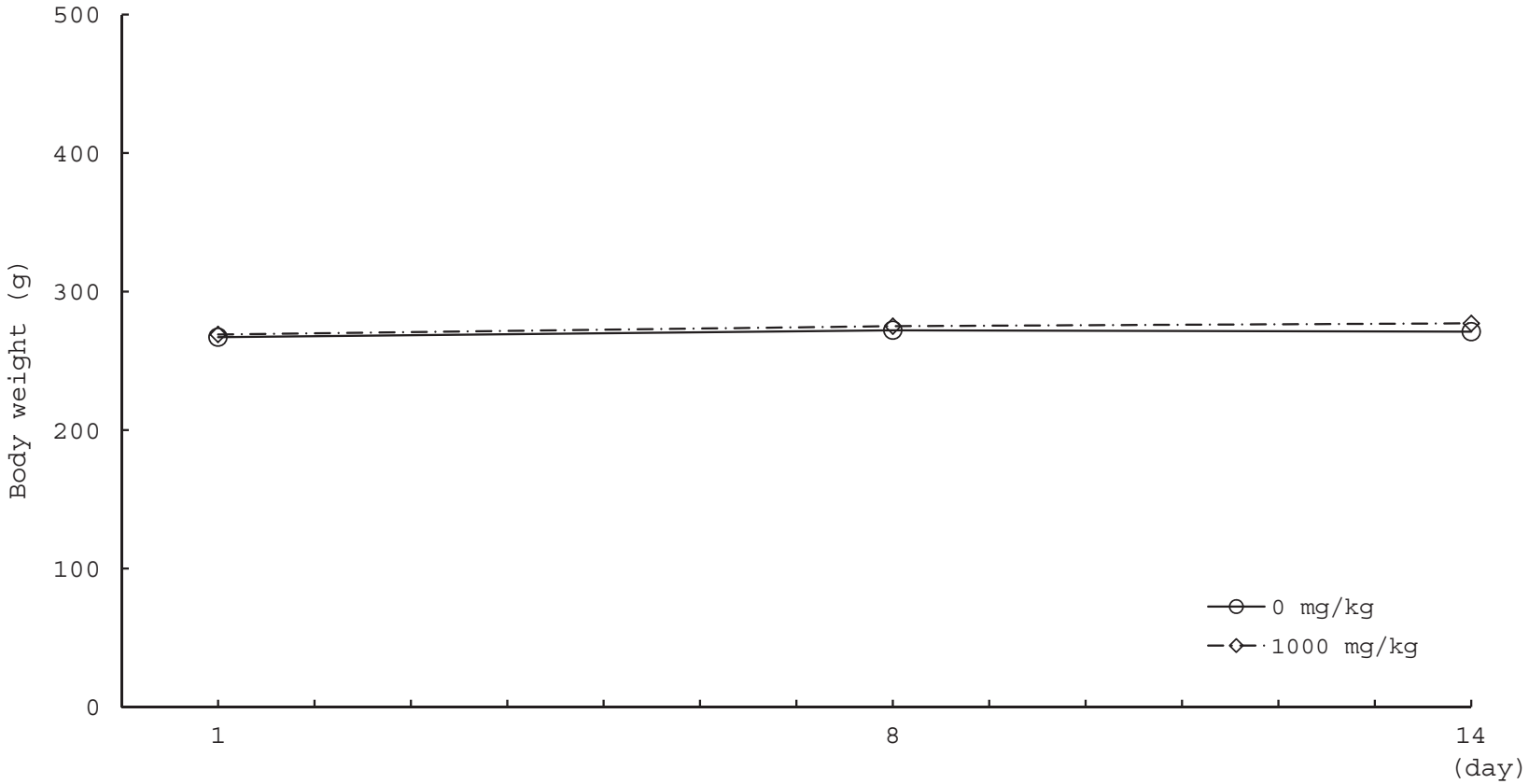

Fig.12 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Body weight of female rats (Recovery period)

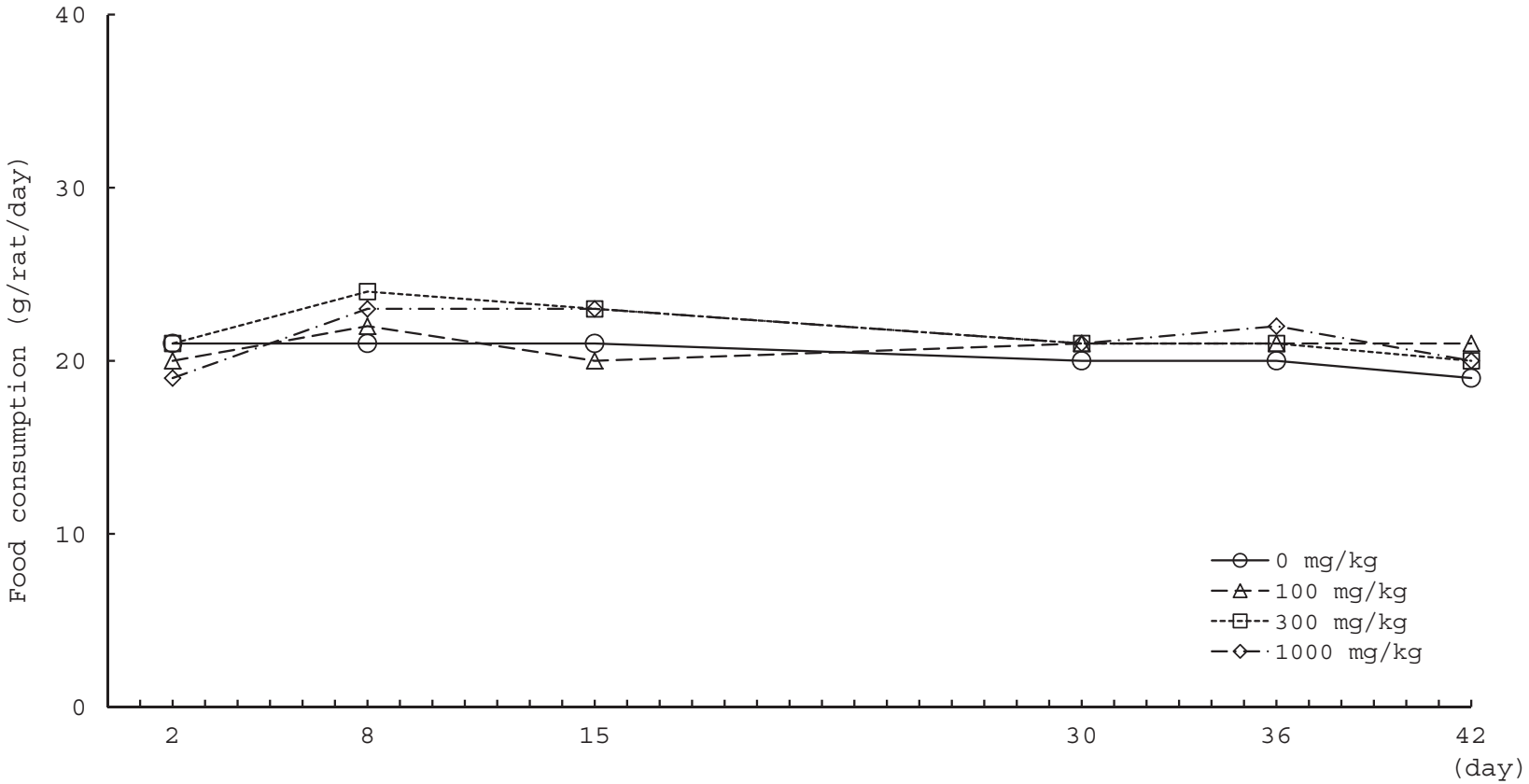

Fig.13 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Food consumption of male rats (F0 before mating Day 1-15, F0 mating Day 15-43)

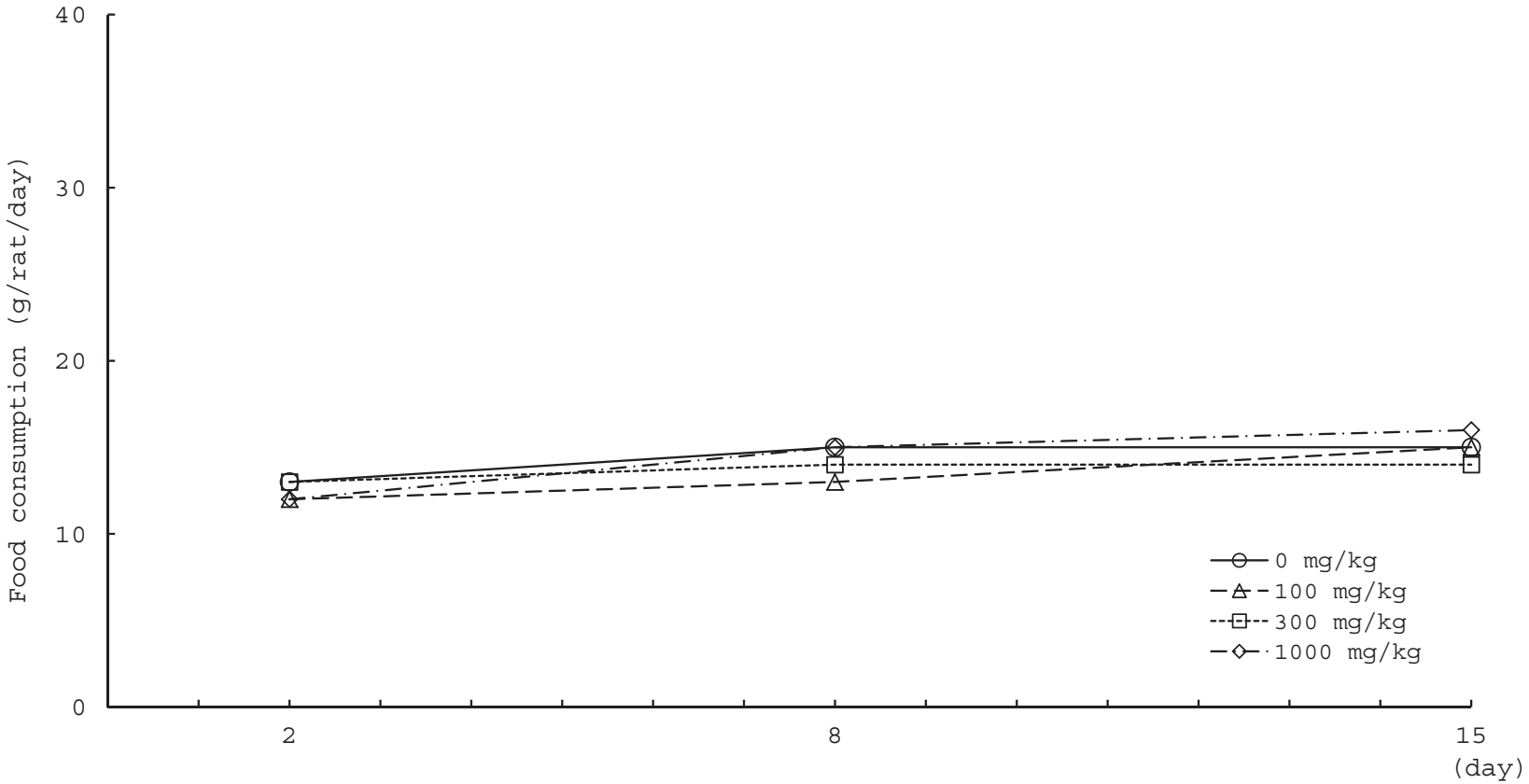

Fig.14 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Food consumption of female rats (F0 before mating Day 1-15)

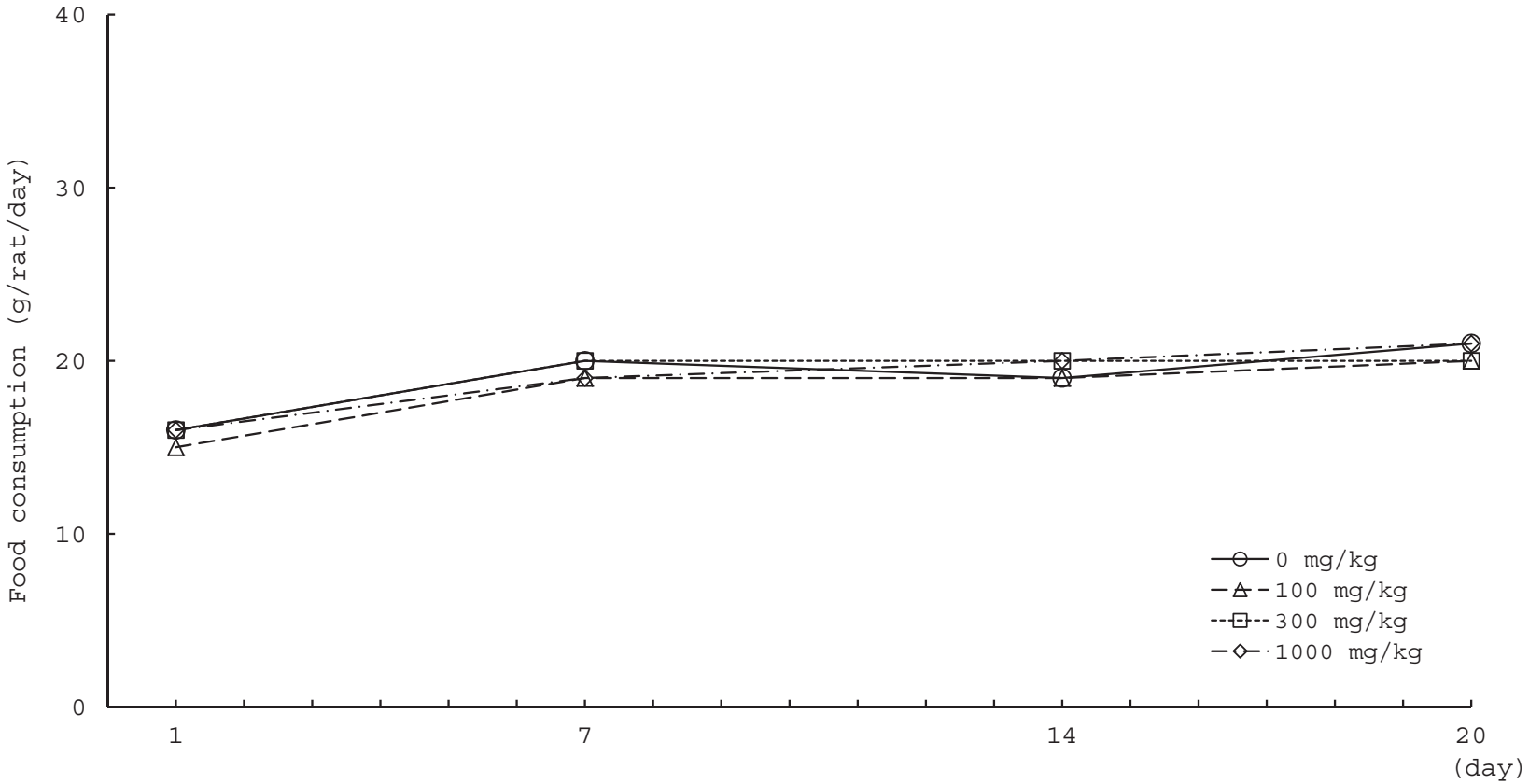

Fig.15 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Food consumption of dams (F0 gestation Day 0-25)

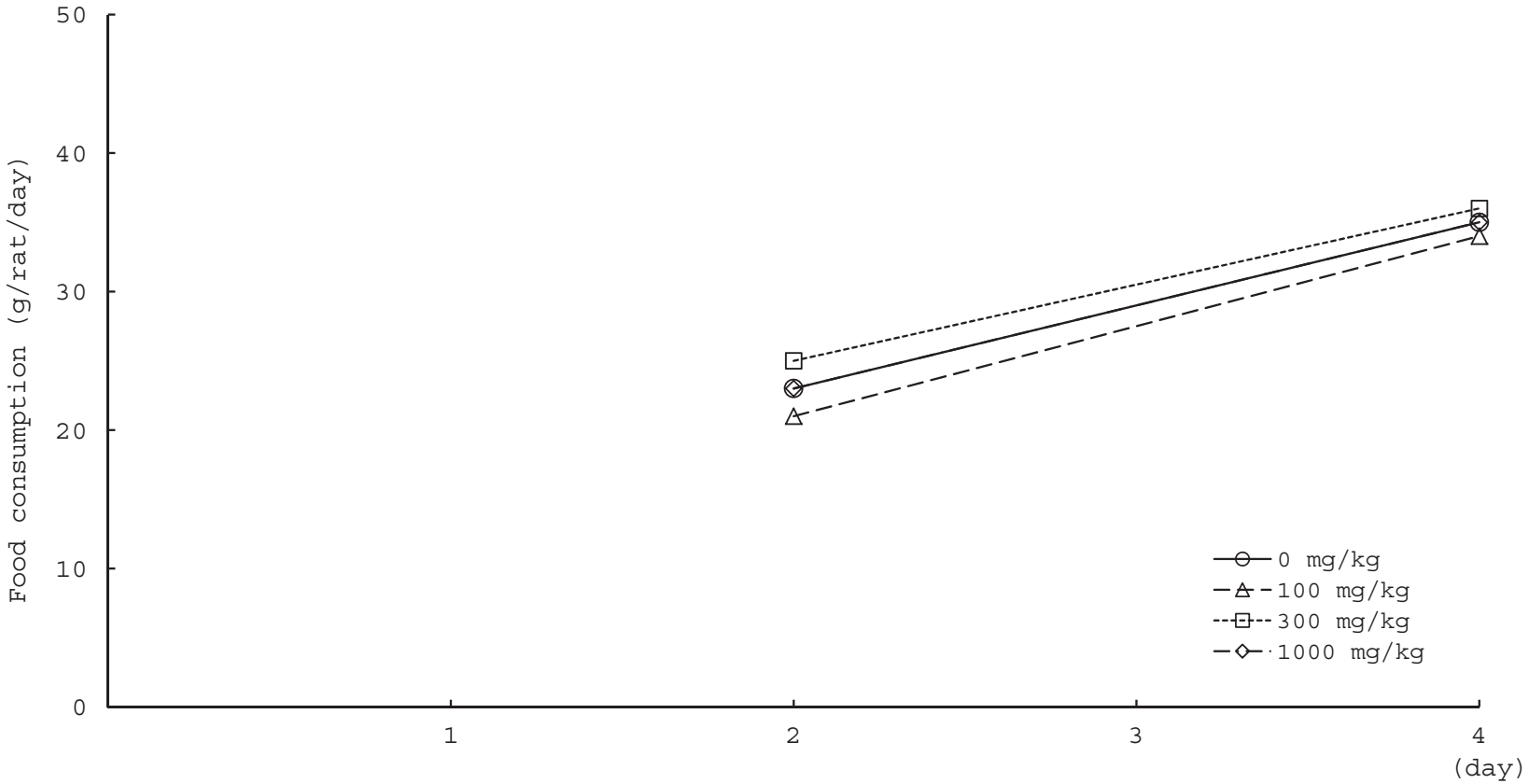

Fig.16 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Food consumption of dams (F0 lactation Day 0-5)

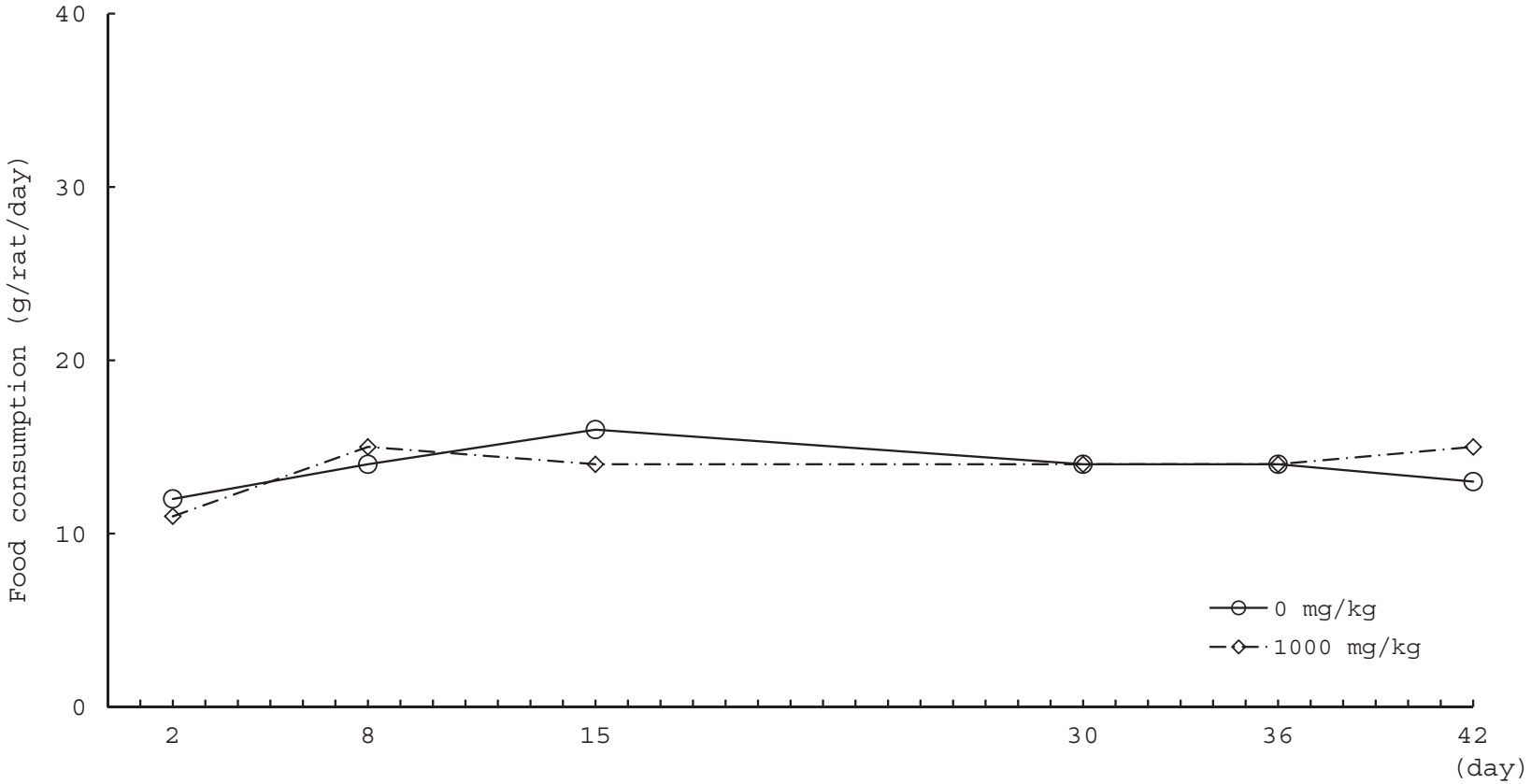

Fig.17 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Food consumption of female rats (Administration period)

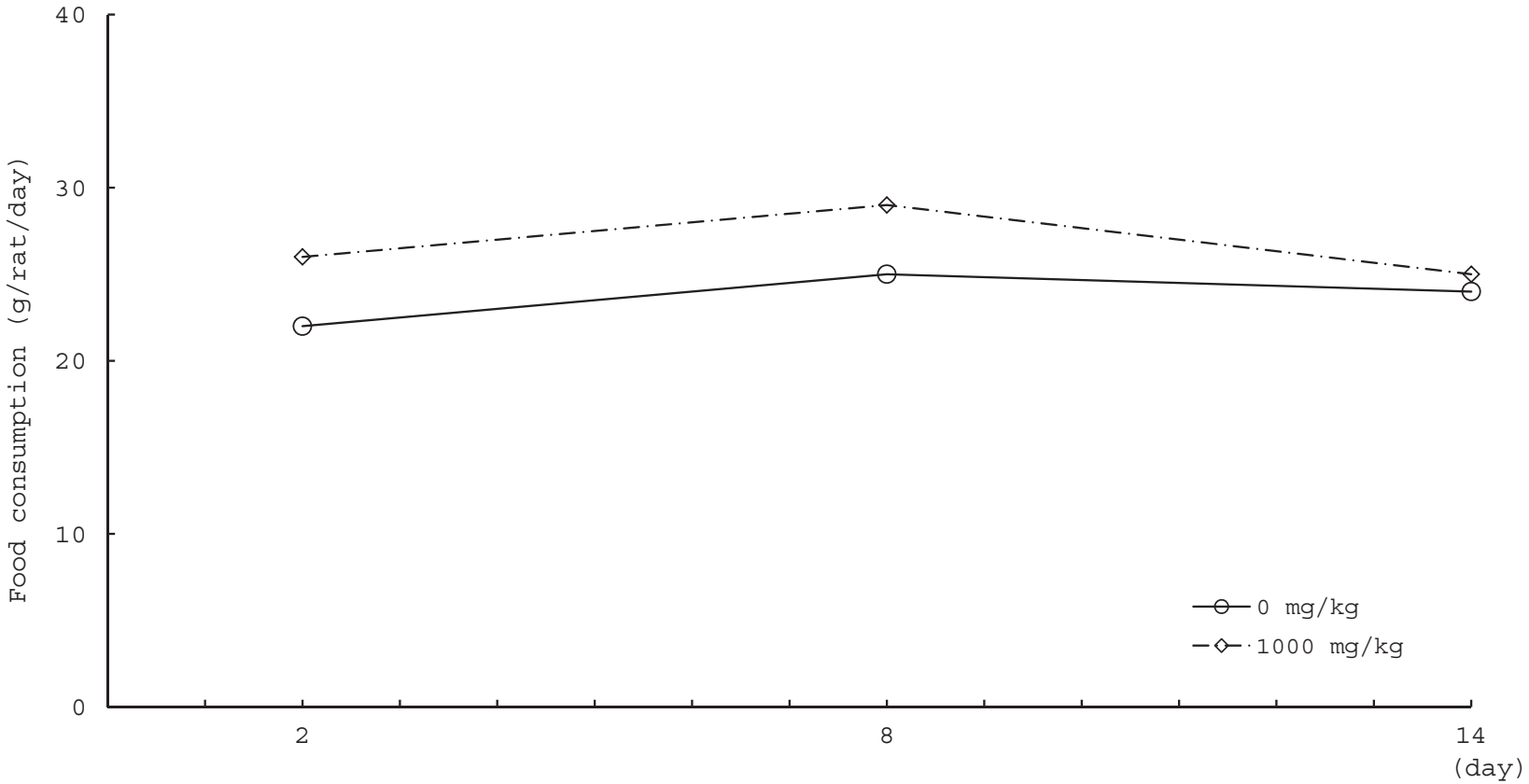

Fig.18 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Food consumption of male rats (Recovery period)

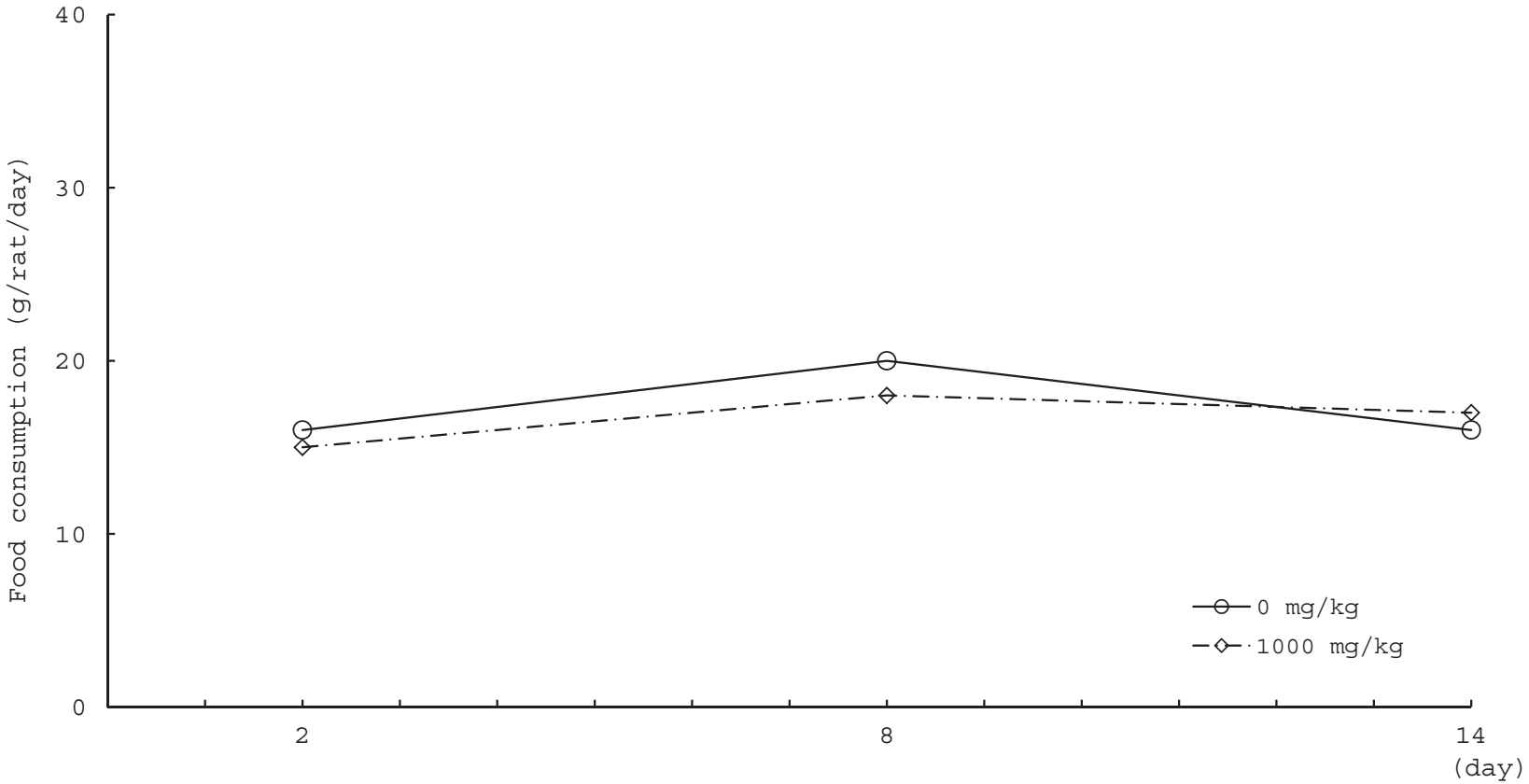

Fig.19 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Food consumption of female rats (Recovery period)

Study No.: R-1193

Table 1-1 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Clinical signs Period : F0 before mating Day 1-15, F0 mating Day 15-43

Sex : Male Species : Rat

Test article Dose	Signs	/Day 1	2	3	4	5	6	7	8	9	10	11	12	13	14
BTetCA	Number of animals	12	12	12	12	12	12	12	12	12	12	12	12	12	12
0 mg/kg	Number of animals with abnormal findings	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BTetCA	Number of animals	12	12	12	12	12	12	12	12	12	12	12	12	12	12
100 mg/kg	Number of animals with abnormal findings	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BTetCA	Number of animals	12	12	12	12	12	12	12	12	12	12	12	12	12	12
300 mg/kg	Number of animals with abnormal findings	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BTetCA	Number of animals	12	12	12	12	12	12	12	12	12	12	12	12	12	12
1000 mg/kg	Number of animals with abnormal findings	0	0	0	0	0	0	0	0	0	0	0	0	0	0

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Study No.: R-1193

Table 1-2 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Clinical signs Period : F0 before mating Day 1-15, F0 mating Day 15-43

Sex : Male Species : Rat

Test article Dose	Signs	/Day 15	16	17	18	19	20	21	22	23	24	25	26	27	28
BTetCA 0 mg/kg	Number of animals	12	12	12	12	12	12	12	12	12	12	12	12	12	12
	Number of animals with abnormal findings	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BTetCA 100 mg/kg	Number of animals	12	12	12	12	12	12	12	12	12	12	12	12	12	12
	Number of animals with abnormal findings	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BTetCA 300 mg/kg	Number of animals	12	12	12	12	12	12	12	12	12	12	12	12	12	12
	Number of animals with abnormal findings	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BTetCA 1000 mg/kg	Number of animals	12	12	12	12	12	12	12	12	12	12	12	12	12	12
	Number of animals with abnormal findings	0	0	0	0	0	0	0	0	0	0	0	0	0	0

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Study No.: R-1193

Table 1-3 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Clinical signs Period : F0 before mating Day 1-15, F0 mating Day 15-43

Sex : Male Species : Rat

Test article Dose	Signs	/Day 29	30	31	32	33	34	35	36	37	38	39	40	41	42	43a)
BTetCA	Number of animals	12	12	12	12	12	12	12	12	12	12	12	12	12	12	7
0 mg/kg	Number of animals with abnormal findings	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BTetCA	Number of animals	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
100 mg/kg	Number of animals with abnormal findings	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BTetCA	Number of animals	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
300 mg/kg	Number of animals with abnormal findings	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1
	Mass, cervical region	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1
BTetCA	Number of animals	12	12	12	12	12	12	12	12	12	12	12	12	12	12	7
1000 mg/kg	Number of animals with abnormal findings	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

a) : Day of necropsy

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Study No.: R-1193

Table 1-4 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Clinical signs Period : F0 before mating Day 1-15

Sex : Female Species : Rat

Test article Dose	Signs	/Day 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
BTetCA	Number of animals	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
0 mg/kg	Number of animals with abnormal findings	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BTetCA	Number of animals	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
100 mg/kg	Number of animals with abnormal findings	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BTetCA	Number of animals	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
300 mg/kg	Number of animals with abnormal findings	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BTetCA	Number of animals	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
1000 mg/kg	Number of animals with abnormal findings	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Study No.: R-1193

Table 1-5 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Clinical signs Period : F0 gestation Day 0-25

Sex : Female Species : Rat

Test article Dose	Signs	/Day 0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
BTetCA	Number of animals	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	1	0
0 mg/kg	Number of animals with abnormal findings	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
BTetCA	Number of animals	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	3	0
100 mg/kg	Number of animals with abnormal findings	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
BTetCA	Number of animals	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	1	0
300 mg/kg	Number of animals with abnormal findings	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
BTetCA	Number of animals	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	2	0
1000 mg/kg	Number of animals with abnormal findings	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Study No.: R-1193

Table 1-6 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Clinical signs Period : F0 lactation Day 0-5

Sex : Female Species : Rat

Test article Dose	Signs	/Day 0	1	2	3	4	5a)
BTetCA 0 mg/kg	Number of animals	12	12	12	12	12	12
	Number of animals with abnormal findings	0	0	0	0	0	0
BTetCA 100 mg/kg	Number of animals	12	12	12	12	12	12
	Number of animals with abnormal findings	0	0	0	0	0	0
BTetCA 300 mg/kg	Number of animals	12	12	12	12	12	12
	Number of animals with abnormal findings	0	0	0	0	0	0
BTetCA 1000 mg/kg	Number of animals	12	12	12	12	12	12
	Number of animals with abnormal findings	0	0	0	0	0	0

a) : Day of necropsy

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Study No.: R-1193

Table 1-7 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Clinical signs Period : Administration Day 1-43

Sex : Female Species : Rat

Test article Dose	Signs	/Day 1	2	3	4	5	6	7	8	9	10	11	12	13	14
BTetCA	Number of animals	10	10	10	10	10	10	10	10	10	10	10	10	10	10
0 mg/kg	Number of animals with abnormal findings	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BTetCA	Number of animals	10	10	10	10	10	10	10	10	10	10	10	10	10	10
1000 mg/kg	Number of animals with abnormal findings	0	0	0	0	0	0	0	0	0	0	0	0	0	0

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Study No.: R-1193

Table 1-8 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Clinical signs Period : Administration Day 1-43

Sex : Female Species : Rat

Test article Dose	Signs	/Day 15	16	17	18	19	20	21	22	23	24	25	26	27	28
BTetCA	Number of animals	10	10	10	10	10	10	10	10	10	10	10	10	10	10
0 mg/kg	Number of animals with abnormal findings	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BTetCA	Number of animals	10	10	10	10	10	10	10	10	10	10	10	10	10	10
1000 mg/kg	Number of animals with abnormal findings	0	0	0	0	0	0	0	0	0	0	0	0	0	0

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Study No.: R-1193

Table 1-9 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Clinical signs Period : Administration Day 1-43

Sex : Female Species : Rat

Test article Dose	Signs	/Day 29	30	31	32	33	34	35	36	37	38	39	40	41	42	43a)
BTetCA	Number of animals	10	10	10	10	10	10	10	10	10	10	10	10	10	10	5
0 mg/kg	Number of animals with abnormal findings	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BTetCA	Number of animals	10	10	10	10	10	10	10	10	10	10	10	10	10	10	5
1000 mg/kg	Number of animals with abnormal findings	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

a) : Day of necropsy

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Study No.: R-1193

Table 1-10 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Clinical signs Period : Recovery Day 1-15

Sex : Male Species : Rat

Test article Dose	Signs	/Day 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15a)
BTetCA 0 mg/kg	Number of animals	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	Number of animals with abnormal findings	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BTetCA 1000 mg/kg	Number of animals	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	Number of animals with abnormal findings	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

a) : Day of necropsy

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Study No.: R-1193

Table 1-11 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Clinical signs Period : Recovery Day 1-15

Sex : Female Species : Rat

Test article Dose	Signs	/Day 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15a)
BTetCA 0 mg/kg	Number of animals	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	Number of animals with abnormal findings	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BTetCA 1000 mg/kg	Number of animals	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	Number of animals with abnormal findings	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

a) : Day of necropsy

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 1 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Home cage observation Period : F0 before mating

Generation : F0 Sex : Male Week : 1 Species : Rat

Test article Dose		Posture NC N	F	H	Convulsion NC 0	1	2	3
BTetCA 0 mg/kg	n	12	0	0	12	0	0	0
BTetCA 100 mg/kg	n	12	0	0	12	0	0	0
BTetCA 300 mg/kg	n	12	0	0	12	0	0	0
BTetCA 1000 mg/kg	n	12	0	0	12	0	0	0

Test article Dose		Abnormal NC behavior 0	1	2	3
BTetCA 0 mg/kg	n	12	0	0	0
BTetCA 100 mg/kg	n	12	0	0	0
BTetCA 300 mg/kg	n	12	0	0	0
BTetCA 1000 mg/kg	n	12	0	0	0

Posture) N: Normal, F: Flattened, H: Hunched
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 2 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Home cage observation Period : F0 before mating

Generation : F0 Sex : Male Week : 2 Species : Rat

Test article Dose		Posture NC N	F	H	Convulsion NC 0	1	2	3
BTetCA 0 mg/kg	n	12	0	0	12	0	0	0
BTetCA 100 mg/kg	n	12	0	0	12	0	0	0
BTetCA 300 mg/kg	n	12	0	0	12	0	0	0
BTetCA 1000 mg/kg	n	12	0	0	12	0	0	0

Test article Dose		Abnormal NC behavior 0	1	2	3
BTetCA 0 mg/kg	n	12	0	0	0
BTetCA 100 mg/kg	n	12	0	0	0
BTetCA 300 mg/kg	n	12	0	0	0
BTetCA 1000 mg/kg	n	12	0	0	0

Posture) N: Normal, F: Flattened, H: Hunched
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 3 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Home cage observation Period : F0 mating

Generation : F0 Sex : Male Week : 3 Species : Rat

Test article Dose		Posture NC N	F	H	Convulsion NC 0	1	2	3
BTetCA 0 mg/kg	n	12	0	0	12	0	0	0
BTetCA 100 mg/kg	n	12	0	0	12	0	0	0
BTetCA 300 mg/kg	n	12	0	0	12	0	0	0
BTetCA 1000 mg/kg	n	12	0	0	12	0	0	0

Test article Dose		Abnormal NC behavior 0	1	2	3
BTetCA 0 mg/kg	n	12	0	0	0
BTetCA 100 mg/kg	n	12	0	0	0
BTetCA 300 mg/kg	n	12	0	0	0
BTetCA 1000 mg/kg	n	12	0	0	0

Posture) N: Normal, F: Flattened, H: Hunched
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 4 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Home cage observation Period : F0 mating

Generation : F0 Sex : Male Week : 4 Species : Rat

Test article Dose		Posture NC N	F	H	Convulsion NC 0	1	2	3
BTetCA 0 mg/kg	n	12	0	0	12	0	0	0
BTetCA 100 mg/kg	n	12	0	0	12	0	0	0
BTetCA 300 mg/kg	n	12	0	0	12	0	0	0
BTetCA 1000 mg/kg	n	12	0	0	12	0	0	0

Test article Dose		Abnormal NC behavior 0	1	2	3
BTetCA 0 mg/kg	n	12	0	0	0
BTetCA 100 mg/kg	n	12	0	0	0
BTetCA 300 mg/kg	n	12	0	0	0
BTetCA 1000 mg/kg	n	12	0	0	0

Posture) N: Normal, F: Flattened, H: Hunched
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 5 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Home cage observation Period : F0 mating

Generation : F0 Sex : Male Week : 5 Species : Rat

Test article Dose		Posture NC N	F	H	Convulsion NC 0	1	2	3
BTetCA 0 mg/kg	n	12	0	0	12	0	0	0
BTetCA 100 mg/kg	n	12	0	0	12	0	0	0
BTetCA 300 mg/kg	n	12	0	0	12	0	0	0
BTetCA 1000 mg/kg	n	12	0	0	12	0	0	0

Test article Dose		Abnormal NC behavior 0	1	2	3
BTetCA 0 mg/kg	n	12	0	0	0
BTetCA 100 mg/kg	n	12	0	0	0
BTetCA 300 mg/kg	n	12	0	0	0
BTetCA 1000 mg/kg	n	12	0	0	0

Posture) N: Normal, F: Flattened, H: Hunched
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 6 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Home cage observation Period : F0 mating

Generation : F0 Sex : Male Week : 6 Species : Rat

Test article Dose		Posture NC N	F	H	Convulsion NC 0	1	2	3
BTetCA 0 mg/kg	n	12	0	0	12	0	0	0
BTetCA 100 mg/kg	n	12	0	0	12	0	0	0
BTetCA 300 mg/kg	n	12	0	0	12	0	0	0
BTetCA 1000 mg/kg	n	12	0	0	12	0	0	0

Test article Dose		Abnormal NC behavior 0	1	2	3
BTetCA 0 mg/kg	n	12	0	0	0
BTetCA 100 mg/kg	n	12	0	0	0
BTetCA 300 mg/kg	n	12	0	0	0
BTetCA 1000 mg/kg	n	12	0	0	0

Posture) N: Normal, F: Flattened, H: Hunched
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 7 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Home cage observation Period : F0 before mating

Generation : F0 Sex : Female Week : 1 Species : Rat

Test article Dose		Posture NC N	F	H	Convulsion NC 0	1	2	3
BTetCA 0 mg/kg	n	12	0	0	12	0	0	0
BTetCA 100 mg/kg	n	12	0	0	12	0	0	0
BTetCA 300 mg/kg	n	12	0	0	12	0	0	0
BTetCA 1000 mg/kg	n	12	0	0	12	0	0	0

Test article Dose		Abnormal NC behavior 0	1	2	3
BTetCA 0 mg/kg	n	12	0	0	0
BTetCA 100 mg/kg	n	12	0	0	0
BTetCA 300 mg/kg	n	12	0	0	0
BTetCA 1000 mg/kg	n	12	0	0	0

Posture) N: Normal, F: Flattened, H: Hunched
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 8 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Home cage observation Period : F0 before mating

Generation : F0 Sex : Female Week : 2 Species : Rat

Test article Dose		Posture NC N	F	H	Convulsion NC 0	1	2	3
BTetCA 0 mg/kg	n	12	0	0	12	0	0	0
BTetCA 100 mg/kg	n	12	0	0	12	0	0	0
BTetCA 300 mg/kg	n	12	0	0	12	0	0	0
BTetCA 1000 mg/kg	n	12	0	0	12	0	0	0

Test article Dose		Abnormal NC behavior 0	1	2	3
BTetCA 0 mg/kg	n	12	0	0	0
BTetCA 100 mg/kg	n	12	0	0	0
BTetCA 300 mg/kg	n	12	0	0	0
BTetCA 1000 mg/kg	n	12	0	0	0

Posture) N: Normal, F: Flattened, H: Hunched
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 9 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Home cage observation Period : F0 gestation

Generation : F0 Sex : Female Day : 1 Species : Rat

Test article Dose		Posture NC N	F	H	Convulsion NC 0	1	2	3
BTetCA 0 mg/kg	n	12	0	0	12	0	0	0
BTetCA 100 mg/kg	n	12	0	0	12	0	0	0
BTetCA 300 mg/kg	n	12	0	0	12	0	0	0
BTetCA 1000 mg/kg	n	12	0	0	12	0	0	0

Test article Dose		Abnormal NC behavior 0	1	2	3
BTetCA 0 mg/kg	n	12	0	0	0
BTetCA 100 mg/kg	n	12	0	0	0
BTetCA 300 mg/kg	n	12	0	0	0
BTetCA 1000 mg/kg	n	12	0	0	0

Posture) N: Normal, F: Flattened, H: Hunched
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 10 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Home cage observation Period : F0 gestation

Generation : F0 Sex : Female Day : 7 Species : Rat

Test article Dose		Posture NC N	F	H	Convulsion NC 0	1	2	3
BTetCA 0 mg/kg	n	12	0	0	12	0	0	0
BTetCA 100 mg/kg	n	12	0	0	12	0	0	0
BTetCA 300 mg/kg	n	12	0	0	12	0	0	0
BTetCA 1000 mg/kg	n	12	0	0	12	0	0	0

Test article Dose		Abnormal NC behavior 0	1	2	3
BTetCA 0 mg/kg	n	12	0	0	0
BTetCA 100 mg/kg	n	12	0	0	0
BTetCA 300 mg/kg	n	12	0	0	0
BTetCA 1000 mg/kg	n	12	0	0	0

Posture) N: Normal, F: Flattened, H: Hunched
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 11 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Home cage observation Period : F0 gestation

Generation : F0 Sex : Female Day : 14 Species : Rat

Test article Dose		Posture NC N	F	H	Convulsion NC 0	1	2	3
BTetCA 0 mg/kg	n	12	0	0	12	0	0	0
BTetCA 100 mg/kg	n	12	0	0	12	0	0	0
BTetCA 300 mg/kg	n	12	0	0	12	0	0	0
BTetCA 1000 mg/kg	n	12	0	0	12	0	0	0

Test article Dose		Abnormal NC behavior 0	1	2	3
BTetCA 0 mg/kg	n	12	0	0	0
BTetCA 100 mg/kg	n	12	0	0	0
BTetCA 300 mg/kg	n	12	0	0	0
BTetCA 1000 mg/kg	n	12	0	0	0

Posture) N: Normal, F: Flattened, H: Hunched
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 12 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Home cage observation Period : F0 gestation

Generation : F0 Sex : Female Day : 20 Species : Rat

Test article Dose		Posture NC N	F	H	Convulsion NC 0	1	2	3
BTetCA 0 mg/kg	n	12	0	0	12	0	0	0
BTetCA 100 mg/kg	n	12	0	0	12	0	0	0
BTetCA 300 mg/kg	n	12	0	0	12	0	0	0
BTetCA 1000 mg/kg	n	12	0	0	12	0	0	0

Test article Dose		Abnormal NC behavior 0	1	2	3
BTetCA 0 mg/kg	n	12	0	0	0
BTetCA 100 mg/kg	n	12	0	0	0
BTetCA 300 mg/kg	n	12	0	0	0
BTetCA 1000 mg/kg	n	12	0	0	0

Posture) N: Normal, F: Flattened, H: Hunched
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 13 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Home cage observation Period : F0 lactation

Generation : F0 Sex : Female Day : 4 Species : Rat

Test article Dose		Posture NC N	F	H	Convulsion NC 0	1	2	3
BTetCA 0 mg/kg	n	12	0	0	12	0	0	0
BTetCA 100 mg/kg	n	12	0	0	12	0	0	0
BTetCA 300 mg/kg	n	12	0	0	12	0	0	0
BTetCA 1000 mg/kg	n	12	0	0	12	0	0	0

Test article Dose		Abnormal NC behavior 0	1	2	3
BTetCA 0 mg/kg	n	12	0	0	0
BTetCA 100 mg/kg	n	12	0	0	0
BTetCA 300 mg/kg	n	12	0	0	0
BTetCA 1000 mg/kg	n	12	0	0	0

Posture) N: Normal, F: Flattened, H: Hunched
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 14 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Home cage observation Period : Administration

Generation : F0 Sex : Female Week : 1 Species : Rat

Test article Dose		Posture NC N	F	H	Convulsion NC 0	1	2	3
BTetCA 0 mg/kg	n	10	0	0	10	0	0	0
BTetCA 1000 mg/kg	n	10	0	0	10	0	0	0

Test article Dose		Abnormal NC behavior 0	1	2	3
BTetCA 0 mg/kg	n	10	0	0	0
BTetCA 1000 mg/kg	n	10	0	0	0

Posture) N: Normal, F: Flattened, H: Hunched
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 15 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Home cage observation Period : Administration

Generation : F0 Sex : Female Week : 2 Species : Rat

Test article Dose		Posture NC N	F	H	Convulsion NC 0	1	2	3
BTetCA 0 mg/kg	n	10	0	0	10	0	0	0
BTetCA 1000 mg/kg	n	10	0	0	10	0	0	0

Test article Dose		Abnormal NC behavior 0	1	2	3
BTetCA 0 mg/kg	n	10	0	0	0
BTetCA 1000 mg/kg	n	10	0	0	0

Posture) N: Normal, F: Flattened, H: Hunched
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 16 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Home cage observation Period : Administration

Generation : F0 Sex : Female Week : 3 Species : Rat

Test article Dose		Posture NC N	F	H	Convulsion NC 0	1	2	3
BTetCA 0 mg/kg	n	10	0	0	10	0	0	0
BTetCA 1000 mg/kg	n	10	0	0	10	0	0	0

Test article Dose		Abnormal NC behavior 0	1	2	3
BTetCA 0 mg/kg	n	10	0	0	0
BTetCA 1000 mg/kg	n	10	0	0	0

Posture) N: Normal, F: Flattened, H: Hunched
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 17 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Home cage observation Period : Administration

Generation : F0 Sex : Female Week : 4 Species : Rat

Test article Dose		Posture NC N	F	H	Convulsion NC 0	1	2	3
BTetCA 0 mg/kg	n	10	0	0	10	0	0	0
BTetCA 1000 mg/kg	n	10	0	0	10	0	0	0

Test article Dose		Abnormal NC behavior 0	1	2	3
BTetCA 0 mg/kg	n	10	0	0	0
BTetCA 1000 mg/kg	n	10	0	0	0

Posture) N: Normal, F: Flattened, H: Hunched
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 18 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Home cage observation Period : Administration

Generation : F0 Sex : Female Week : 5 Species : Rat

Test article Dose		Posture NC N	F	H	Convulsion NC 0	1	2	3
BTetCA 0 mg/kg	n	10	0	0	10	0	0	0
BTetCA 1000 mg/kg	n	10	0	0	10	0	0	0

Test article Dose		Abnormal NC behavior 0	1	2	3
BTetCA 0 mg/kg	n	10	0	0	0
BTetCA 1000 mg/kg	n	10	0	0	0

Posture) N: Normal, F: Flattened, H: Hunched
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 19 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Home cage observation Period : Administration

Generation : F0 Sex : Female Week : 6 Species : Rat

Test article Dose		Posture NC N	F	H	Convulsion NC 0	1	2	3
BTetCA 0 mg/kg	n	10	0	0	10	0	0	0
BTetCA 1000 mg/kg	n	10	0	0	10	0	0	0

Test article Dose		Abnormal NC behavior 0	1	2	3
BTetCA 0 mg/kg	n	10	0	0	0
BTetCA 1000 mg/kg	n	10	0	0	0

Posture) N: Normal, F: Flattened, H: Hunched
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 20 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Home cage observation Period : Recovery

Generation : F0 Sex : Male Week : 1 Species : Rat

Test article Dose		Posture NC N	 F	 H	Convulsion NC 0	 1	 2	 3
BTetCA 0 mg/kg	n	5	0	0	5	0	0	0
BTetCA 1000 mg/kg	n	5	0	0	5	0	0	0

Test article Dose		Abnormal NC behavior 0	 1	 2	 3
BTetCA 0 mg/kg	n	5	0	0	0
BTetCA 1000 mg/kg	n	5	0	0	0

Posture) N: Normal, F: Flattened, H: Hunched
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 21 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Home cage observation Period : Recovery

Generation : F0 Sex : Male Week : 2 Species : Rat

Test article Dose		Posture NC N	F	H	Convulsion NC 0	1	2	3
BTetCA 0 mg/kg	n	5	0	0	5	0	0	0
BTetCA 1000 mg/kg	n	5	0	0	5	0	0	0

Test article Dose		Abnormal NC behavior 0	1	2	3
BTetCA 0 mg/kg	n	5	0	0	0
BTetCA 1000 mg/kg	n	5	0	0	0

Posture) N: Normal, F: Flattened, H: Hunched
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 22 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Home cage observation Period : Recovery

Generation : F0 Sex : Female Week : 1 Species : Rat

Test article Dose		Posture NC N	F	H	Convulsion NC 0	1	2	3
BTetCA 0 mg/kg	n	5	0	0	5	0	0	0
BTetCA 1000 mg/kg	n	5	0	0	5	0	0	0

Test article Dose		Abnormal NC behavior 0	1	2	3
BTetCA 0 mg/kg	n	5	0	0	0
BTetCA 1000 mg/kg	n	5	0	0	0

Posture) N: Normal, F: Flattened, H: Hunched
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 23 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Home cage observation Period : Recovery

Generation : F0 Sex : Female Week : 2 Species : Rat

Test article Dose		Posture NC N	F	H	Convulsion NC 0	1	2	3
BTetCA 0 mg/kg	n	5	0	0	5	0	0	0
BTetCA 1000 mg/kg	n	5	0	0	5	0	0	0

Test article Dose		Abnormal NC behavior 0	1	2	3
BTetCA 0 mg/kg	n	5	0	0	0
BTetCA 1000 mg/kg	n	5	0	0	0

Posture) N: Normal, F: Flattened, H: Hunched
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 24 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

In-the-hand observation Period : F0 before mating

Generation : F0 Sex : Male Week : 1 Species : Rat

Test article		Ease of removal from cage NC					Fur condition NC			
Dose		-1	0	1	2	3	0	1	2	3
BTetCA 0 mg/kg	n	0	12	0	0	0	12	0	0	0
BTetCA 100 mg/kg	n	0	12	0	0	0	12	0	0	0
BTetCA 300 mg/kg	n	0	12	0	0	0	12	0	0	0
BTetCA 1000 mg/kg	n	0	12	0	0	0	12	0	0	0

Test article		Skin NC				Secretions- NC Eye, Nose		Exophthalmos NC	
Dose		0	1	2	3	0	1	0	1
BTetCA 0 mg/kg	n	12	0	0	0	12	0	12	0
BTetCA 100 mg/kg	n	12	0	0	0	12	0	12	0
BTetCA 300 mg/kg	n	12	0	0	0	12	0	12	0
BTetCA 1000 mg/kg	n	12	0	0	0	12	0	12	0

Ease of removal from cage) -1: Atypically docile, 0: Easy, 1: Some resistance/avoidance, 2: Difficult, 3: Very difficult
Fur condition) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Skin) 0: Nomal, 1: Slight, 2: Moderate, 3: Severe
Secretions-Eye, Nose) 0: Absent, 1: Present
Exophthalmos) 0: Absent, 1: Present
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 25 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

In-the-hand observation Period : F0 before mating

Generation : F0 Sex : Male Week : 1 Species : Rat

Test article		Palpebral NC closure				Mucosal NC membranes				Lacrimation NC	
Dose		0	1	2	3	0	1	2	3	0	1
BTetCA 0 mg/kg	n	12	0	0	0	12	0	0	0	12	0
BTetCA 100 mg/kg	n	12	0	0	0	12	0	0	0	12	0
BTetCA 300 mg/kg	n	12	0	0	0	12	0	0	0	12	0
BTetCA 1000 mg/kg	n	12	0	0	0	12	0	0	0	12	0

Test article		Piloerection NC		Pupil size NC				Salivation NC			
Dose		0	1	-1	0	1	2	0	1	2	3
BTetCA 0 mg/kg	n	12	0	0	12	0	0	12	0	0	0
BTetCA 100 mg/kg	n	12	0	0	12	0	0	12	0	0	0
BTetCA 300 mg/kg	n	12	0	0	12	0	0	12	0	0	0
BTetCA 1000 mg/kg	n	12	0	0	12	0	0	12	0	0	0

Palpebral closure) 0: Nomal, 1: Slightly closed, 2: Half closed, 3: Completely closed
Mucosal membranes) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Lacrimation) 0: Absent, 1: Present
Piloerection) 0: Absent, 1: Present
Pupil size) -1: Miosis, 0: Nomal, 1: Half opened pupil, 2: Mydriasis
Salivation) 0: None, 1: Slight, 2: Moderate, 3: Marked
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 26 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

In-the-hand observation Period : F0 before mating

Generation : F0 Sex : Male Week : 1 Species : Rat

Test article		Abnormal NC respiration				Vocalization NC			
Dose		0	1	2	3	0	1	2	3
BTetCA 0 mg/kg	n	12	0	0	0	12	0	0	0
BTetCA 100 mg/kg	n	12	0	0	0	12	0	0	0
BTetCA 300 mg/kg	n	12	0	0	0	12	0	0	0
BTetCA 1000 mg/kg	n	12	0	0	0	12	0	0	0

Test article		Reactivity to NC handling				
Dose		-1	0	1	2	3
BTetCA 0 mg/kg	n	0	12	0	0	0
BTetCA 100 mg/kg	n	0	12	0	0	0
BTetCA 300 mg/kg	n	0	12	0	0	0
BTetCA 1000 mg/kg	n	0	12	0	0	0

Abnormal respiration) 0: None, 1: Slight, 2: Moderate, 3: Severe
Vocalization) 0: None, 1: Soft, 2: Moderate, 3: Loud/aggressive
Reactivity to handling) -1: Atypically docile, 0: Easy, 1: Slightly awkward, 2: Awkward, 3: Very Awkward
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 27 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

In-the-hand observation Period : F0 before mating

Generation : F0 Sex : Male Week : 2 Species : Rat

Test article		Ease of removal from cage NC					Fur condition NC			
Dose		-1	0	1	2	3	0	1	2	3
BTetCA 0 mg/kg	n	0	12	0	0	0	12	0	0	0
BTetCA 100 mg/kg	n	0	12	0	0	0	12	0	0	0
BTetCA 300 mg/kg	n	0	12	0	0	0	12	0	0	0
BTetCA 1000 mg/kg	n	0	12	0	0	0	12	0	0	0

Test article		Skin NC				Secretions- NC Eye, Nose		Exophthalmos NC	
Dose		0	1	2	3	0	1	0	1
BTetCA 0 mg/kg	n	12	0	0	0	12	0	12	0
BTetCA 100 mg/kg	n	12	0	0	0	12	0	12	0
BTetCA 300 mg/kg	n	12	0	0	0	12	0	12	0
BTetCA 1000 mg/kg	n	12	0	0	0	12	0	12	0

Ease of removal from cage) -1: Atypically docile, 0: Easy, 1: Some resistance/avoidance, 2: Difficult, 3: Very difficult
Fur condition) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Skin) 0: Nomal, 1: Slight, 2: Moderate, 3: Severe
Secretions-Eye, Nose) 0: Absent, 1: Present
Exophthalmos) 0: Absent, 1: Present
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 28 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

In-the-hand observation Period : F0 before mating

Generation : F0 Sex : Male Week : 2 Species : Rat

Test article		Palpebral NC closure				Mucosal NC membranes				Lacrimation NC	
Dose		0	1	2	3	0	1	2	3	0	1
BTetCA 0 mg/kg	n	12	0	0	0	12	0	0	0	12	0
BTetCA 100 mg/kg	n	12	0	0	0	12	0	0	0	12	0
BTetCA 300 mg/kg	n	12	0	0	0	12	0	0	0	12	0
BTetCA 1000 mg/kg	n	12	0	0	0	12	0	0	0	12	0

Test article		Piloerection NC		Pupil size NC				Salivation NC			
Dose		0	1	-1	0	1	2	0	1	2	3
BTetCA 0 mg/kg	n	12	0	0	12	0	0	12	0	0	0
BTetCA 100 mg/kg	n	12	0	0	12	0	0	12	0	0	0
BTetCA 300 mg/kg	n	12	0	0	12	0	0	12	0	0	0
BTetCA 1000 mg/kg	n	12	0	0	12	0	0	12	0	0	0

Palpebral closure) 0: Nomal, 1: Slightly closed, 2: Half closed, 3: Completely closed
Mucosal membranes) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Lacrimation) 0: Absent, 1: Present
Piloerection) 0: Absent, 1: Present
Pupil size) -1: Miosis, 0: Nomal, 1: Half opened pupil, 2: Mydriasis
Salivation) 0: None, 1: Slight, 2: Moderate, 3: Marked
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 29 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

In-the-hand observation Period : F0 before mating

Generation : F0 Sex : Male Week : 2 Species : Rat

Test article		Abnormal NC respiration				Vocalization NC			
Dose		0	1	2	3	0	1	2	3
BTetCA 0 mg/kg	n	12	0	0	0	12	0	0	0
BTetCA 100 mg/kg	n	12	0	0	0	12	0	0	0
BTetCA 300 mg/kg	n	12	0	0	0	12	0	0	0
BTetCA 1000 mg/kg	n	12	0	0	0	12	0	0	0

Test article		Reactivity to NC handling				
Dose		-1	0	1	2	3
BTetCA 0 mg/kg	n	0	12	0	0	0
BTetCA 100 mg/kg	n	0	12	0	0	0
BTetCA 300 mg/kg	n	0	12	0	0	0
BTetCA 1000 mg/kg	n	0	12	0	0	0

Abnormal respiration) 0: None, 1: Slight, 2: Moderate, 3: Severe
Vocalization) 0: None, 1: Soft, 2: Moderate, 3: Loud/aggressive
Reactivity to handling) -1: Atypically docile, 0: Easy, 1: Slightly awkward, 2: Awkward, 3: Very Awkward
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 30 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

In-the-hand observation Period : F0 mating

Generation : F0 Sex : Male Week : 3 Species : Rat

Test article		Ease of removal from cage NC					Fur condition NC			
Dose		-1	0	1	2	3	0	1	2	3
BTetCA 0 mg/kg	n	0	12	0	0	0	12	0	0	0
BTetCA 100 mg/kg	n	0	12	0	0	0	12	0	0	0
BTetCA 300 mg/kg	n	0	12	0	0	0	12	0	0	0
BTetCA 1000 mg/kg	n	0	12	0	0	0	12	0	0	0

Test article		Skin NC				Secretions- NC Eye, Nose		Exophthalmos NC	
Dose		0	1	2	3	0	1	0	1
BTetCA 0 mg/kg	n	12	0	0	0	12	0	12	0
BTetCA 100 mg/kg	n	12	0	0	0	12	0	12	0
BTetCA 300 mg/kg	n	12	0	0	0	12	0	12	0
BTetCA 1000 mg/kg	n	12	0	0	0	12	0	12	0

Ease of removal from cage) -1: Atypically docile, 0: Easy, 1: Some resistance/avoidance, 2: Difficult, 3: Very difficult
Fur condition) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Skin) 0: Nomal, 1: Slight, 2: Moderate, 3: Severe
Secretions-Eye, Nose) 0: Absent, 1: Present
Exophthalmos) 0: Absent, 1: Present
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 31 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

In-the-hand observation Period : F0 mating

Generation : F0 Sex : Male Week : 3 Species : Rat

Test article		Palpebral NC closure				Mucosal NC membranes				Lacrimation NC	
Dose		0	1	2	3	0	1	2	3	0	1
BTetCA 0 mg/kg	n	12	0	0	0	12	0	0	0	12	0
BTetCA 100 mg/kg	n	12	0	0	0	12	0	0	0	12	0
BTetCA 300 mg/kg	n	12	0	0	0	12	0	0	0	12	0
BTetCA 1000 mg/kg	n	12	0	0	0	12	0	0	0	12	0

Test article		Piloerection NC		Pupil size NC				Salivation NC			
Dose		0	1	-1	0	1	2	0	1	2	3
BTetCA 0 mg/kg	n	12	0	0	12	0	0	12	0	0	0
BTetCA 100 mg/kg	n	12	0	0	12	0	0	12	0	0	0
BTetCA 300 mg/kg	n	12	0	0	12	0	0	12	0	0	0
BTetCA 1000 mg/kg	n	12	0	0	12	0	0	12	0	0	0

Palpebral closure) 0: Nomal, 1: Slightly closed, 2: Half closed, 3: Completely closed
Mucosal membranes) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Lacrimation) 0: Absent, 1: Present
Piloerection) 0: Absent, 1: Present
Pupil size) -1: Miosis, 0: Nomal, 1: Half opened pupil, 2: Mydriasis
Salivation) 0: None, 1: Slight, 2: Moderate, 3: Marked
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 32 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

In-the-hand observation Period : F0 mating

Generation : F0 Sex : Male Week : 3 Species : Rat

Test article		Abnormal NC respiration				Vocalization NC			
Dose		0	1	2	3	0	1	2	3
BTetCA 0 mg/kg	n	12	0	0	0	12	0	0	0
BTetCA 100 mg/kg	n	12	0	0	0	10	2	0	0
BTetCA 300 mg/kg	n	12	0	0	0	11	1	0	0
BTetCA 1000 mg/kg	n	12	0	0	0	10	2	0	0

Test article		Reactivity to NC handling				
Dose		-1	0	1	2	3
BTetCA 0 mg/kg	n	0	12	0	0	0
BTetCA 100 mg/kg	n	0	12	0	0	0
BTetCA 300 mg/kg	n	0	12	0	0	0
BTetCA 1000 mg/kg	n	0	12	0	0	0

Abnormal respiration) 0: None, 1: Slight, 2: Moderate, 3: Severe
Vocalization) 0: None, 1: Soft, 2: Moderate, 3: Loud/aggressive
Reactivity to handling) -1: Atypically docile, 0: Easy, 1: Slightly awkward, 2: Awkward, 3: Very Awkward
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 33 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

In-the-hand observation Period : F0 mating

Generation : F0 Sex : Male Week : 4 Species : Rat

Test article		Ease of removal from cage NC					Fur condition NC			
Dose		-1	0	1	2	3	0	1	2	3
BTetCA 0 mg/kg	n	0	12	0	0	0	12	0	0	0
BTetCA 100 mg/kg	n	0	12	0	0	0	12	0	0	0
BTetCA 300 mg/kg	n	0	12	0	0	0	12	0	0	0
BTetCA 1000 mg/kg	n	0	12	0	0	0	12	0	0	0

Test article		Skin NC				Secretions-Eye, Nose NC		Exophthalmos NC	
Dose		0	1	2	3	0	1	0	1
BTetCA 0 mg/kg	n	12	0	0	0	12	0	12	0
BTetCA 100 mg/kg	n	12	0	0	0	12	0	12	0
BTetCA 300 mg/kg	n	12	0	0	0	12	0	12	0
BTetCA 1000 mg/kg	n	12	0	0	0	12	0	12	0

Ease of removal from cage) -1: Atypically docile, 0: Easy, 1: Some resistance/avoidance, 2: Difficult, 3: Very difficult
Fur condition) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Skin) 0: Nomal, 1: Slight, 2: Moderate, 3: Severe
Secretions-Eye, Nose) 0: Absent, 1: Present
Exophthalmos) 0: Absent, 1: Present
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 34 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

In-the-hand observation Period : F0 mating

Generation : F0 Sex : Male Week : 4 Species : Rat

Test article		Palpebral NC closure				Mucosal NC membranes				Lacrimation NC	
Dose		0	1	2	3	0	1	2	3	0	1
BTetCA 0 mg/kg	n	12	0	0	0	12	0	0	0	12	0
BTetCA 100 mg/kg	n	12	0	0	0	12	0	0	0	12	0
BTetCA 300 mg/kg	n	12	0	0	0	12	0	0	0	12	0
BTetCA 1000 mg/kg	n	12	0	0	0	12	0	0	0	12	0

Test article		Piloerection NC		Pupil size NC				Salivation NC			
Dose		0	1	-1	0	1	2	0	1	2	3
BTetCA 0 mg/kg	n	12	0	0	12	0	0	12	0	0	0
BTetCA 100 mg/kg	n	12	0	0	12	0	0	12	0	0	0
BTetCA 300 mg/kg	n	12	0	0	12	0	0	12	0	0	0
BTetCA 1000 mg/kg	n	12	0	0	12	0	0	12	0	0	0

Palpebral closure) 0: Nomal, 1: Slightly closed, 2: Half closed, 3: Completely closed
Mucosal membranes) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Lacrimation) 0: Absent, 1: Present
Piloerection) 0: Absent, 1: Present
Pupil size) -1: Miosis, 0: Nomal, 1: Half opened pupil, 2: Mydriasis
Salivation) 0: None, 1: Slight, 2: Moderate, 3: Marked
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 35 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

In-the-hand observation Period : F0 mating

Generation : F0 Sex : Male Week : 4 Species : Rat

Test article		Abnormal NC respiration				Vocalization NC			
Dose		0	1	2	3	0	1	2	3
BTetCA 0 mg/kg	n	12	0	0	0	12	0	0	0
BTetCA 100 mg/kg	n	12	0	0	0	12	0	0	0
BTetCA 300 mg/kg	n	12	0	0	0	12	0	0	0
BTetCA 1000 mg/kg	n	12	0	0	0	12	0	0	0

Test article		Reactivity to NC handling				
Dose		-1	0	1	2	3
BTetCA 0 mg/kg	n	0	12	0	0	0
BTetCA 100 mg/kg	n	0	12	0	0	0
BTetCA 300 mg/kg	n	0	12	0	0	0
BTetCA 1000 mg/kg	n	0	12	0	0	0

Abnormal respiration) 0: None, 1: Slight, 2: Moderate, 3: Severe
Vocalization) 0: None, 1: Soft, 2: Moderate, 3: Loud/aggressive
Reactivity to handling) -1: Atypically docile, 0: Easy, 1: Slightly awkward, 2: Awkward, 3: Very Awkward
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 36 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

In-the-hand observation Period : F0 mating

Generation : F0 Sex : Male Week : 5 Species : Rat

Test article		Ease of removal from cage NC					Fur condition NC			
Dose		-1	0	1	2	3	0	1	2	3
BTetCA 0 mg/kg	n	0	12	0	0	0	12	0	0	0
BTetCA 100 mg/kg	n	0	12	0	0	0	12	0	0	0
BTetCA 300 mg/kg	n	0	12	0	0	0	12	0	0	0
BTetCA 1000 mg/kg	n	0	12	0	0	0	12	0	0	0

Test article		Skin NC				Secretions- NC Eye, Nose		Exophthalmos NC	
Dose		0	1	2	3	0	1	0	1
BTetCA 0 mg/kg	n	12	0	0	0	12	0	12	0
BTetCA 100 mg/kg	n	12	0	0	0	12	0	12	0
BTetCA 300 mg/kg	n	12	0	0	0	12	0	12	0
BTetCA 1000 mg/kg	n	12	0	0	0	12	0	12	0

Ease of removal from cage) -1: Atypically docile, 0: Easy, 1: Some resistance/avoidance, 2: Difficult, 3: Very difficult
Fur condition) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Skin) 0: Nomal, 1: Slight, 2: Moderate, 3: Severe
Secretions-Eye, Nose) 0: Absent, 1: Present
Exophthalmos) 0: Absent, 1: Present
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 37 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

In-the-hand observation Period : F0 mating

Generation : F0 Sex : Male Week : 5 Species : Rat

Test article		Palpebral NC closure				Mucosal NC membranes				Lacrimation NC	
Dose		0	1	2	3	0	1	2	3	0	1
BTetCA 0 mg/kg	n	12	0	0	0	12	0	0	0	12	0
BTetCA 100 mg/kg	n	12	0	0	0	12	0	0	0	12	0
BTetCA 300 mg/kg	n	12	0	0	0	12	0	0	0	12	0
BTetCA 1000 mg/kg	n	12	0	0	0	12	0	0	0	12	0

Test article		Piloerection NC		Pupil size NC				Salivation NC			
Dose		0	1	-1	0	1	2	0	1	2	3
BTetCA 0 mg/kg	n	12	0	0	12	0	0	12	0	0	0
BTetCA 100 mg/kg	n	12	0	0	12	0	0	12	0	0	0
BTetCA 300 mg/kg	n	12	0	0	12	0	0	12	0	0	0
BTetCA 1000 mg/kg	n	12	0	0	12	0	0	12	0	0	0

Palpebral closure) 0: Nomal, 1: Slightly closed, 2: Half closed, 3: Completely closed
Mucosal membranes) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Lacrimation) 0: Absent, 1: Present
Piloerection) 0: Absent, 1: Present
Pupil size) -1: Miosis, 0: Nomal, 1: Half opened pupil, 2: Mydriasis
Salivation) 0: None, 1: Slight, 2: Moderate, 3: Marked
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 38 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

In-the-hand observation Period : F0 mating

Generation : F0 Sex : Male Week : 5 Species : Rat

Test article		Abnormal NC respiration				Vocalization NC			
Dose		0	1	2	3	0	1	2	3
BTetCA 0 mg/kg	n	12	0	0	0	12	0	0	0
BTetCA 100 mg/kg	n	12	0	0	0	11	1	0	0
BTetCA 300 mg/kg	n	12	0	0	0	12	0	0	0
BTetCA 1000 mg/kg	n	12	0	0	0	12	0	0	0

Test article		Reactivity to NC handling				
Dose		-1	0	1	2	3
BTetCA 0 mg/kg	n	0	12	0	0	0
BTetCA 100 mg/kg	n	0	12	0	0	0
BTetCA 300 mg/kg	n	0	12	0	0	0
BTetCA 1000 mg/kg	n	0	12	0	0	0

Abnormal respiration) 0: None, 1: Slight, 2: Moderate, 3: Severe
Vocalization) 0: None, 1: Soft, 2: Moderate, 3: Loud/aggressive
Reactivity to handling) -1: Atypically docile, 0: Easy, 1: Slightly awkward, 2: Awkward, 3: Very Awkward
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 39 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

In-the-hand observation Period : F0 mating

Generation : F0 Sex : Male Week : 6 Species : Rat

Test article		Ease of removal from cage NC					Fur condition NC			
Dose		-1	0	1	2	3	0	1	2	3
BTetCA 0 mg/kg	n	0	12	0	0	0	12	0	0	0
BTetCA 100 mg/kg	n	0	12	0	0	0	12	0	0	0
BTetCA 300 mg/kg	n	0	12	0	0	0	12	0	0	0
BTetCA 1000 mg/kg	n	0	12	0	0	0	12	0	0	0

Test article		Skin NC				Secretions-Eye, Nose NC		Exophthalmos NC	
Dose		0	1	2	3	0	1	0	1
BTetCA 0 mg/kg	n	12	0	0	0	12	0	12	0
BTetCA 100 mg/kg	n	12	0	0	0	12	0	12	0
BTetCA 300 mg/kg	n	12	0	0	0	12	0	12	0
BTetCA 1000 mg/kg	n	12	0	0	0	12	0	12	0

Ease of removal from cage) -1: Atypically docile, 0: Easy, 1: Some resistance/avoidance, 2: Difficult, 3: Very difficult
Fur condition) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Skin) 0: Nomal, 1: Slight, 2: Moderate, 3: Severe
Secretions-Eye, Nose) 0: Absent, 1: Present
Exophthalmos) 0: Absent, 1: Present
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 40 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

In-the-hand observation Period : F0 mating

Generation : F0 Sex : Male Week : 6 Species : Rat

Test article		Palpebral NC closure				Mucosal NC membranes				Lacrimation NC	
Dose		0	1	2	3	0	1	2	3	0	1
BTetCA 0 mg/kg	n	12	0	0	0	12	0	0	0	12	0
BTetCA 100 mg/kg	n	12	0	0	0	12	0	0	0	12	0
BTetCA 300 mg/kg	n	12	0	0	0	12	0	0	0	12	0
BTetCA 1000 mg/kg	n	12	0	0	0	12	0	0	0	12	0

Test article		Piloerection NC		Pupil size NC				Salivation NC			
Dose		0	1	-1	0	1	2	0	1	2	3
BTetCA 0 mg/kg	n	12	0	0	12	0	0	12	0	0	0
BTetCA 100 mg/kg	n	12	0	0	12	0	0	12	0	0	0
BTetCA 300 mg/kg	n	12	0	0	12	0	0	12	0	0	0
BTetCA 1000 mg/kg	n	12	0	0	12	0	0	12	0	0	0

Palpebral closure) 0: Nomal, 1: Slightly closed, 2: Half closed, 3: Completely closed
Mucosal membranes) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Lacrimation) 0: Absent, 1: Present
Piloerection) 0: Absent, 1: Present
Pupil size) -1: Miosis, 0: Nomal, 1: Half opened pupil, 2: Mydriasis
Salivation) 0: None, 1: Slight, 2: Moderate, 3: Marked
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 41 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

In-the-hand observation Period : F0 mating

Generation : F0 Sex : Male Week : 6 Species : Rat

Test article		Abnormal NC respiration				Vocalization NC			
Dose		0	1	2	3	0	1	2	3
BTetCA 0 mg/kg	n	12	0	0	0	12	0	0	0
BTetCA 100 mg/kg	n	12	0	0	0	11	1	0	0
BTetCA 300 mg/kg	n	12	0	0	0	12	0	0	0
BTetCA 1000 mg/kg	n	12	0	0	0	12	0	0	0

Test article		Reactivity to NC handling				
Dose		-1	0	1	2	3
BTetCA 0 mg/kg	n	0	12	0	0	0
BTetCA 100 mg/kg	n	0	12	0	0	0
BTetCA 300 mg/kg	n	0	12	0	0	0
BTetCA 1000 mg/kg	n	0	12	0	0	0

Abnormal respiration) 0: None, 1: Slight, 2: Moderate, 3: Severe
Vocalization) 0: None, 1: Soft, 2: Moderate, 3: Loud/aggressive
Reactivity to handling) -1: Atypically docile, 0: Easy, 1: Slightly awkward, 2: Awkward, 3: Very Awkward
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 42 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

In-the-hand observation Period : F0 before mating

Generation : F0 Sex : Female Week : 1 Species : Rat

Test article		Ease of removal from cage NC					Fur condition NC			
Dose		-1	0	1	2	3	0	1	2	3
BTetCA 0 mg/kg	n	0	12	0	0	0	12	0	0	0
BTetCA 100 mg/kg	n	0	12	0	0	0	12	0	0	0
BTetCA 300 mg/kg	n	0	12	0	0	0	12	0	0	0
BTetCA 1000 mg/kg	n	0	12	0	0	0	12	0	0	0

Test article		Skin NC				Secretions-Eye, Nose NC		Exophthalmos NC	
Dose		0	1	2	3	0	1	0	1
BTetCA 0 mg/kg	n	12	0	0	0	12	0	12	0
BTetCA 100 mg/kg	n	12	0	0	0	12	0	12	0
BTetCA 300 mg/kg	n	12	0	0	0	12	0	12	0
BTetCA 1000 mg/kg	n	12	0	0	0	12	0	12	0

Ease of removal from cage) -1: Atypically docile, 0: Easy, 1: Some resistance/avoidance, 2: Difficult, 3: Very difficult
Fur condition) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Skin) 0: Nomal, 1: Slight, 2: Moderate, 3: Severe
Secretions-Eye, Nose) 0: Absent, 1: Present
Exophthalmos) 0: Absent, 1: Present
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 43 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

In-the-hand observation Period : F0 before mating

Generation : F0 Sex : Female Week : 1 Species : Rat

Test article		Palpebral NC closure				Mucosal NC membranes				Lacrimation NC	
Dose		0	1	2	3	0	1	2	3	0	1
BTetCA 0 mg/kg	n	12	0	0	0	12	0	0	0	12	0
BTetCA 100 mg/kg	n	12	0	0	0	12	0	0	0	12	0
BTetCA 300 mg/kg	n	12	0	0	0	12	0	0	0	12	0
BTetCA 1000 mg/kg	n	12	0	0	0	12	0	0	0	12	0

Test article		Piloerection NC		Pupil size NC				Salivation NC			
Dose		0	1	-1	0	1	2	0	1	2	3
BTetCA 0 mg/kg	n	12	0	0	12	0	0	12	0	0	0
BTetCA 100 mg/kg	n	12	0	0	12	0	0	12	0	0	0
BTetCA 300 mg/kg	n	12	0	0	12	0	0	12	0	0	0
BTetCA 1000 mg/kg	n	12	0	0	12	0	0	12	0	0	0

Palpebral closure) 0: Nomal, 1: Slightly closed, 2: Half closed, 3: Completely closed
Mucosal membranes) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Lacrimation) 0: Absent, 1: Present
Piloerection) 0: Absent, 1: Present
Pupil size) -1: Miosis, 0: Nomal, 1: Half opened pupil, 2: Mydriasis
Salivation) 0: None, 1: Slight, 2: Moderate, 3: Marked
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 44 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

In-the-hand observation Period : F0 before mating

Generation : F0 Sex : Female Week : 1 Species : Rat

Test article		Abnormal NC respiration				Vocalization NC			
Dose		0	1	2	3	0	1	2	3
BTetCA 0 mg/kg	n	12	0	0	0	12	0	0	0
BTetCA 100 mg/kg	n	12	0	0	0	12	0	0	0
BTetCA 300 mg/kg	n	12	0	0	0	12	0	0	0
BTetCA 1000 mg/kg	n	12	0	0	0	12	0	0	0

Test article		Reactivity to NC handling				
Dose		-1	0	1	2	3
BTetCA 0 mg/kg	n	0	12	0	0	0
BTetCA 100 mg/kg	n	0	12	0	0	0
BTetCA 300 mg/kg	n	0	12	0	0	0
BTetCA 1000 mg/kg	n	0	12	0	0	0

Abnormal respiration) 0: None, 1: Slight, 2: Moderate, 3: Severe
Vocalization) 0: None, 1: Soft, 2: Moderate, 3: Loud/aggressive
Reactivity to handling) -1: Atypically docile, 0: Easy, 1: Slightly awkward, 2: Awkward, 3: Very Awkward
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 45 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

In-the-hand observation Period : F0 before mating

Generation : F0 Sex : Female Week : 2 Species : Rat

Test article		Ease of removal from cage NC					Fur condition NC			
Dose		-1	0	1	2	3	0	1	2	3
BTetCA 0 mg/kg	n	0	12	0	0	0	12	0	0	0
BTetCA 100 mg/kg	n	0	12	0	0	0	12	0	0	0
BTetCA 300 mg/kg	n	0	12	0	0	0	12	0	0	0
BTetCA 1000 mg/kg	n	0	12	0	0	0	12	0	0	0

Test article		Skin NC				Secretions-Eye, Nose NC		Exophthalmos NC	
Dose		0	1	2	3	0	1	0	1
BTetCA 0 mg/kg	n	12	0	0	0	12	0	12	0
BTetCA 100 mg/kg	n	12	0	0	0	12	0	12	0
BTetCA 300 mg/kg	n	12	0	0	0	12	0	12	0
BTetCA 1000 mg/kg	n	12	0	0	0	12	0	12	0

Ease of removal from cage) -1: Atypically docile, 0: Easy, 1: Some resistance/avoidance, 2: Difficult, 3: Very difficult
Fur condition) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Skin) 0: Nomal, 1: Slight, 2: Moderate, 3: Severe
Secretions-Eye, Nose) 0: Absent, 1: Present
Exophthalmos) 0: Absent, 1: Present
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 46 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

In-the-hand observation Period : F0 before mating

Generation : F0 Sex : Female Week : 2 Species : Rat

Test article		Palpebral NC closure				Mucosal NC membranes				Lacrimation NC	
Dose		0	1	2	3	0	1	2	3	0	1
BTetCA 0 mg/kg	n	12	0	0	0	12	0	0	0	12	0
BTetCA 100 mg/kg	n	12	0	0	0	12	0	0	0	12	0
BTetCA 300 mg/kg	n	12	0	0	0	12	0	0	0	12	0
BTetCA 1000 mg/kg	n	12	0	0	0	12	0	0	0	12	0

Test article		Piloerection NC		Pupil size NC				Salivation NC			
Dose		0	1	-1	0	1	2	0	1	2	3
BTetCA 0 mg/kg	n	12	0	0	12	0	0	12	0	0	0
BTetCA 100 mg/kg	n	12	0	0	12	0	0	12	0	0	0
BTetCA 300 mg/kg	n	12	0	0	12	0	0	12	0	0	0
BTetCA 1000 mg/kg	n	12	0	0	12	0	0	12	0	0	0

Palpebral closure) 0: Nomal, 1: Slightly closed, 2: Half closed, 3: Completely closed
Mucosal membranes) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Lacrimation) 0: Absent, 1: Present
Piloerection) 0: Absent, 1: Present
Pupil size) -1: Miosis, 0: Nomal, 1: Half opened pupil, 2: Mydriasis
Salivation) 0: None, 1: Slight, 2: Moderate, 3: Marked
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 47 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

In-the-hand observation Period : F0 before mating

Generation : F0 Sex : Female Week : 2 Species : Rat

Test article		Abnormal NC respiration				Vocalization NC			
Dose		0	1	2	3	0	1	2	3
BTetCA 0 mg/kg	n	12	0	0	0	12	0	0	0
BTetCA 100 mg/kg	n	12	0	0	0	12	0	0	0
BTetCA 300 mg/kg	n	12	0	0	0	12	0	0	0
BTetCA 1000 mg/kg	n	12	0	0	0	12	0	0	0

Test article		Reactivity to NC handling				
Dose		-1	0	1	2	3
BTetCA 0 mg/kg	n	0	12	0	0	0
BTetCA 100 mg/kg	n	0	12	0	0	0
BTetCA 300 mg/kg	n	0	12	0	0	0
BTetCA 1000 mg/kg	n	0	12	0	0	0

Abnormal respiration) 0: None, 1: Slight, 2: Moderate, 3: Severe
Vocalization) 0: None, 1: Soft, 2: Moderate, 3: Loud/aggressive
Reactivity to handling) -1: Atypically docile, 0: Easy, 1: Slightly awkward, 2: Awkward, 3: Very Awkward
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 48 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

In-the-hand observation Period : F0 gestation

Generation : F0 Sex : Female Day : 1 Species : Rat

Test article		Ease of removal from cage NC					Fur condition NC			
Dose		-1	0	1	2	3	0	1	2	3
BTetCA 0 mg/kg	n	0	12	0	0	0	12	0	0	0
BTetCA 100 mg/kg	n	0	12	0	0	0	12	0	0	0
BTetCA 300 mg/kg	n	0	12	0	0	0	12	0	0	0
BTetCA 1000 mg/kg	n	0	12	0	0	0	12	0	0	0

Test article		Skin NC				Secretions-Eye, Nose NC		Exophthalmos NC	
Dose		0	1	2	3	0	1	0	1
BTetCA 0 mg/kg	n	12	0	0	0	12	0	12	0
BTetCA 100 mg/kg	n	12	0	0	0	12	0	12	0
BTetCA 300 mg/kg	n	12	0	0	0	12	0	12	0
BTetCA 1000 mg/kg	n	12	0	0	0	12	0	12	0

Ease of removal from cage) -1: Atypically docile, 0: Easy, 1: Some resistance/avoidance, 2: Difficult, 3: Very difficult
Fur condition) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Skin) 0: Nomal, 1: Slight, 2: Moderate, 3: Severe
Secretions-Eye, Nose) 0: Absent, 1: Present
Exophthalmos) 0: Absent, 1: Present
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 49 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

In-the-hand observation Period : F0 gestation

Generation : F0 Sex : Female Day : 1 Species : Rat

Test article		Palpebral NC closure				Mucosal NC membranes				Lacrimation NC	
Dose		0	1	2	3	0	1	2	3	0	1
BTetCA 0 mg/kg	n	12	0	0	0	12	0	0	0	12	0
BTetCA 100 mg/kg	n	12	0	0	0	12	0	0	0	12	0
BTetCA 300 mg/kg	n	12	0	0	0	12	0	0	0	12	0
BTetCA 1000 mg/kg	n	12	0	0	0	12	0	0	0	12	0

Test article		Piloerection NC		Pupil size NC				Salivation NC			
Dose		0	1	-1	0	1	2	0	1	2	3
BTetCA 0 mg/kg	n	12	0	0	12	0	0	12	0	0	0
BTetCA 100 mg/kg	n	12	0	0	12	0	0	12	0	0	0
BTetCA 300 mg/kg	n	12	0	0	12	0	0	12	0	0	0
BTetCA 1000 mg/kg	n	12	0	0	12	0	0	12	0	0	0

Palpebral closure) 0: Nomal, 1: Slightly closed, 2: Half closed, 3: Completely closed
Mucosal membranes) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Lacrimation) 0: Absent, 1: Present
Piloerection) 0: Absent, 1: Present
Pupil size) -1: Miosis, 0: Nomal, 1: Half opened pupil, 2: Mydriasis
Salivation) 0: None, 1: Slight, 2: Moderate, 3: Marked
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 50 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

In-the-hand observation Period : F0 gestation

Generation : F0 Sex : Female Day : 1 Species : Rat

Test article		Abnormal NC respiration				Vocalization NC			
Dose		0	1	2	3	0	1	2	3
BTetCA 0 mg/kg	n	12	0	0	0	12	0	0	0
BTetCA 100 mg/kg	n	12	0	0	0	12	0	0	0
BTetCA 300 mg/kg	n	12	0	0	0	12	0	0	0
BTetCA 1000 mg/kg	n	12	0	0	0	11	1	0	0

Test article		Reactivity to NC handling				
Dose		-1	0	1	2	3
BTetCA 0 mg/kg	n	0	12	0	0	0
BTetCA 100 mg/kg	n	0	12	0	0	0
BTetCA 300 mg/kg	n	0	12	0	0	0
BTetCA 1000 mg/kg	n	0	12	0	0	0

Abnormal respiration) 0: None, 1: Slight, 2: Moderate, 3: Severe
Vocalization) 0: None, 1: Soft, 2: Moderate, 3: Loud/aggressive
Reactivity to handling) -1: Atypically docile, 0: Easy, 1: Slightly awkward, 2: Awkward, 3: Very Awkward
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 51 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

In-the-hand observation Period : F0 gestation

Generation : F0 Sex : Female Day : 7 Species : Rat

Test article		Ease of removal from cage NC					Fur condition NC			
Dose		-1	0	1	2	3	0	1	2	3
BTetCA 0 mg/kg	n	0	12	0	0	0	12	0	0	0
BTetCA 100 mg/kg	n	0	12	0	0	0	12	0	0	0
BTetCA 300 mg/kg	n	0	12	0	0	0	12	0	0	0
BTetCA 1000 mg/kg	n	0	12	0	0	0	12	0	0	0

Test article		Skin NC				Secretions- NC Eye, Nose		Exophthalmos NC	
Dose		0	1	2	3	0	1	0	1
BTetCA 0 mg/kg	n	12	0	0	0	12	0	12	0
BTetCA 100 mg/kg	n	12	0	0	0	12	0	12	0
BTetCA 300 mg/kg	n	12	0	0	0	12	0	12	0
BTetCA 1000 mg/kg	n	12	0	0	0	12	0	12	0

Ease of removal from cage) -1: Atypically docile, 0: Easy, 1: Some resistance/avoidance, 2: Difficult, 3: Very difficult
Fur condition) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Skin) 0: Nomal, 1: Slight, 2: Moderate, 3: Severe
Secretions-Eye, Nose) 0: Absent, 1: Present
Exophthalmos) 0: Absent, 1: Present
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 52 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

In-the-hand observation Period : F0 gestation

Generation : F0 Sex : Female Day : 7 Species : Rat

Test article		Palpebral NC closure				Mucosal NC membranes				Lacrimation NC	
Dose		0	1	2	3	0	1	2	3	0	1
BTetCA 0 mg/kg	n	12	0	0	0	12	0	0	0	12	0
BTetCA 100 mg/kg	n	12	0	0	0	12	0	0	0	12	0
BTetCA 300 mg/kg	n	12	0	0	0	12	0	0	0	12	0
BTetCA 1000 mg/kg	n	12	0	0	0	12	0	0	0	12	0

Test article		Piloerection NC		Pupil size NC				Salivation NC			
Dose		0	1	-1	0	1	2	0	1	2	3
BTetCA 0 mg/kg	n	12	0	0	12	0	0	12	0	0	0
BTetCA 100 mg/kg	n	12	0	0	12	0	0	12	0	0	0
BTetCA 300 mg/kg	n	12	0	0	12	0	0	12	0	0	0
BTetCA 1000 mg/kg	n	12	0	0	12	0	0	12	0	0	0

Palpebral closure) 0: Nomal, 1: Slightly closed, 2: Half closed, 3: Completely closed
Mucosal membranes) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Lacrimation) 0: Absent, 1: Present
Piloerection) 0: Absent, 1: Present
Pupil size) -1: Miosis, 0: Nomal, 1: Half opened pupil, 2: Mydriasis
Salivation) 0: None, 1: Slight, 2: Moderate, 3: Marked
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 53 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

In-the-hand observation Period : F0 gestation

Generation : F0 Sex : Female Day : 7 Species : Rat

Test article		Abnormal NC respiration				Vocalization NC			
Dose		0	1	2	3	0	1	2	3
BTetCA 0 mg/kg	n	12	0	0	0	11	1	0	0
BTetCA 100 mg/kg	n	12	0	0	0	12	0	0	0
BTetCA 300 mg/kg	n	12	0	0	0	12	0	0	0
BTetCA 1000 mg/kg	n	12	0	0	0	11	1	0	0

Test article		Reactivity to NC handling				
Dose		-1	0	1	2	3
BTetCA 0 mg/kg	n	0	12	0	0	0
BTetCA 100 mg/kg	n	0	12	0	0	0
BTetCA 300 mg/kg	n	0	12	0	0	0
BTetCA 1000 mg/kg	n	0	12	0	0	0

Abnormal respiration) 0: None, 1: Slight, 2: Moderate, 3: Severe
Vocalization) 0: None, 1: Soft, 2: Moderate, 3: Loud/aggressive
Reactivity to handling) -1: Atypically docile, 0: Easy, 1: Slightly awkward, 2: Awkward, 3: Very Awkward
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 54 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

In-the-hand observation Period : F0 gestation

Generation : F0 Sex : Female Day : 14 Species : Rat

Test article		Ease of removal from cage NC					Fur condition NC			
Dose		-1	0	1	2	3	0	1	2	3
BTetCA 0 mg/kg	n	0	12	0	0	0	12	0	0	0
BTetCA 100 mg/kg	n	0	12	0	0	0	12	0	0	0
BTetCA 300 mg/kg	n	0	12	0	0	0	12	0	0	0
BTetCA 1000 mg/kg	n	0	12	0	0	0	12	0	0	0

Test article		Skin NC				Secretions- NC Eye, Nose		Exophthalmos NC	
Dose		0	1	2	3	0	1	0	1
BTetCA 0 mg/kg	n	12	0	0	0	12	0	12	0
BTetCA 100 mg/kg	n	12	0	0	0	12	0	12	0
BTetCA 300 mg/kg	n	12	0	0	0	12	0	12	0
BTetCA 1000 mg/kg	n	12	0	0	0	12	0	12	0

Ease of removal from cage) -1: Atypically docile, 0: Easy, 1: Some resistance/avoidance, 2: Difficult, 3: Very difficult
Fur condition) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Skin) 0: Nomal, 1: Slight, 2: Moderate, 3: Severe
Secretions-Eye, Nose) 0: Absent, 1: Present
Exophthalmos) 0: Absent, 1: Present
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 55 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

In-the-hand observation Period : F0 gestation

Generation : F0 Sex : Female Day : 14 Species : Rat

Test article		Palpebral NC closure				Mucosal NC membranes				Lacrimation NC	
Dose		0	1	2	3	0	1	2	3	0	1
BTetCA 0 mg/kg	n	12	0	0	0	12	0	0	0	12	0
BTetCA 100 mg/kg	n	12	0	0	0	12	0	0	0	12	0
BTetCA 300 mg/kg	n	12	0	0	0	12	0	0	0	12	0
BTetCA 1000 mg/kg	n	12	0	0	0	12	0	0	0	12	0

Test article		Piloerection NC		Pupil size NC				Salivation NC			
Dose		0	1	-1	0	1	2	0	1	2	3
BTetCA 0 mg/kg	n	12	0	0	12	0	0	12	0	0	0
BTetCA 100 mg/kg	n	12	0	0	12	0	0	12	0	0	0
BTetCA 300 mg/kg	n	12	0	0	12	0	0	12	0	0	0
BTetCA 1000 mg/kg	n	12	0	0	12	0	0	12	0	0	0

Palpebral closure) 0: Nomal, 1: Slightly closed, 2: Half closed, 3: Completely closed
Mucosal membranes) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Lacrimation) 0: Absent, 1: Present
Piloerection) 0: Absent, 1: Present
Pupil size) -1: Miosis, 0: Nomal, 1: Half opened pupil, 2: Mydriasis
Salivation) 0: None, 1: Slight, 2: Moderate, 3: Marked
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 56 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

In-the-hand observation Period : F0 gestation

Generation : F0 Sex : Female Day : 14 Species : Rat

Test article		Abnormal NC respiration				Vocalization NC			
Dose		0	1	2	3	0	1	2	3
BTetCA 0 mg/kg	n	12	0	0	0	11	1	0	0
BTetCA 100 mg/kg	n	12	0	0	0	12	0	0	0
BTetCA 300 mg/kg	n	12	0	0	0	12	0	0	0
BTetCA 1000 mg/kg	n	12	0	0	0	12	0	0	0

Test article		Reactivity to NC handling				
Dose		-1	0	1	2	3
BTetCA 0 mg/kg	n	0	12	0	0	0
BTetCA 100 mg/kg	n	0	12	0	0	0
BTetCA 300 mg/kg	n	0	12	0	0	0
BTetCA 1000 mg/kg	n	0	12	0	0	0

Abnormal respiration) 0: None, 1: Slight, 2: Moderate, 3: Severe
Vocalization) 0: None, 1: Soft, 2: Moderate, 3: Loud/aggressive
Reactivity to handling) -1: Atypically docile, 0: Easy, 1: Slightly awkward, 2: Awkward, 3: Very Awkward
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 57 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

In-the-hand observation Period : F0 gestation

Generation : F0 Sex : Female Day : 20 Species : Rat

Test article		Ease of removal from cage NC					Fur condition NC			
Dose		-1	0	1	2	3	0	1	2	3
BTetCA 0 mg/kg	n	0	12	0	0	0	12	0	0	0
BTetCA 100 mg/kg	n	0	12	0	0	0	12	0	0	0
BTetCA 300 mg/kg	n	0	12	0	0	0	12	0	0	0
BTetCA 1000 mg/kg	n	0	12	0	0	0	12	0	0	0

Test article		Skin NC				Secretions- NC Eye, Nose		Exophthalmos NC	
Dose		0	1	2	3	0	1	0	1
BTetCA 0 mg/kg	n	12	0	0	0	12	0	12	0
BTetCA 100 mg/kg	n	12	0	0	0	12	0	12	0
BTetCA 300 mg/kg	n	12	0	0	0	12	0	12	0
BTetCA 1000 mg/kg	n	12	0	0	0	12	0	12	0

Ease of removal from cage) -1: Atypically docile, 0: Easy, 1: Some resistance/avoidance, 2: Difficult, 3: Very difficult
Fur condition) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Skin) 0: Nomal, 1: Slight, 2: Moderate, 3: Severe
Secretions-Eye, Nose) 0: Absent, 1: Present
Exophthalmos) 0: Absent, 1: Present
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 58 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

In-the-hand observation Period : F0 gestation

Generation : F0 Sex : Female Day : 20 Species : Rat

Test article		Palpebral NC closure				Mucosal NC membranes				Lacrimation NC	
Dose		0	1	2	3	0	1	2	3	0	1
BTetCA 0 mg/kg	n	12	0	0	0	12	0	0	0	12	0
BTetCA 100 mg/kg	n	12	0	0	0	12	0	0	0	12	0
BTetCA 300 mg/kg	n	12	0	0	0	12	0	0	0	12	0
BTetCA 1000 mg/kg	n	12	0	0	0	12	0	0	0	12	0

Test article		Piloerection NC		Pupil size NC				Salivation NC			
Dose		0	1	-1	0	1	2	0	1	2	3
BTetCA 0 mg/kg	n	12	0	0	12	0	0	12	0	0	0
BTetCA 100 mg/kg	n	12	0	0	12	0	0	12	0	0	0
BTetCA 300 mg/kg	n	12	0	0	12	0	0	12	0	0	0
BTetCA 1000 mg/kg	n	12	0	0	12	0	0	12	0	0	0

Palpebral closure) 0: Nomal, 1: Slightly closed, 2: Half closed, 3: Completely closed
Mucosal membranes) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Lacrimation) 0: Absent, 1: Present
Piloerection) 0: Absent, 1: Present
Pupil size) -1: Miosis, 0: Nomal, 1: Half opened pupil, 2: Mydriasis
Salivation) 0: None, 1: Slight, 2: Moderate, 3: Marked
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 59 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

In-the-hand observation Period : F0 gestation

Generation : F0 Sex : Female Day : 20 Species : Rat

Test article		Abnormal NC respiration				Vocalization NC			
Dose		0	1	2	3	0	1	2	3
BTetCA 0 mg/kg	n	12	0	0	0	12	0	0	0
BTetCA 100 mg/kg	n	12	0	0	0	12	0	0	0
BTetCA 300 mg/kg	n	12	0	0	0	12	0	0	0
BTetCA 1000 mg/kg	n	12	0	0	0	12	0	0	0

Test article		Reactivity to NC handling				
Dose		-1	0	1	2	3
BTetCA 0 mg/kg	n	0	12	0	0	0
BTetCA 100 mg/kg	n	0	12	0	0	0
BTetCA 300 mg/kg	n	0	12	0	0	0
BTetCA 1000 mg/kg	n	0	12	0	0	0

Abnormal respiration) 0: None, 1: Slight, 2: Moderate, 3: Severe
Vocalization) 0: None, 1: Soft, 2: Moderate, 3: Loud/aggressive
Reactivity to handling) -1: Atypically docile, 0: Easy, 1: Slightly awkward, 2: Awkward, 3: Very Awkward
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 60 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

In-the-hand observation Period : F0 lactation

Generation : F0 Sex : Female Day : 4 Species : Rat

Test article		Ease of removal from cage NC					Fur condition NC			
Dose		-1	0	1	2	3	0	1	2	3
BTetCA 0 mg/kg	n	0	12	0	0	0	12	0	0	0
BTetCA 100 mg/kg	n	0	12	0	0	0	12	0	0	0
BTetCA 300 mg/kg	n	0	12	0	0	0	12	0	0	0
BTetCA 1000 mg/kg	n	0	12	0	0	0	12	0	0	0

Test article		Skin NC				Secretions- NC Eye, Nose		Exophthalmos NC	
Dose		0	1	2	3	0	1	0	1
BTetCA 0 mg/kg	n	12	0	0	0	12	0	12	0
BTetCA 100 mg/kg	n	12	0	0	0	12	0	12	0
BTetCA 300 mg/kg	n	12	0	0	0	12	0	12	0
BTetCA 1000 mg/kg	n	12	0	0	0	12	0	12	0

Ease of removal from cage) -1: Atypically docile, 0: Easy, 1: Some resistance/avoidance, 2: Difficult, 3: Very difficult
Fur condition) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Skin) 0: Nomal, 1: Slight, 2: Moderate, 3: Severe
Secretions-Eye, Nose) 0: Absent, 1: Present
Exophthalmos) 0: Absent, 1: Present
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 61 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

In-the-hand observation Period : F0 lactation

Generation : F0 Sex : Female Day : 4 Species : Rat

Test article		Palpebral NC closure				Mucosal NC membranes				Lacrimation NC	
Dose		0	1	2	3	0	1	2	3	0	1
BTetCA 0 mg/kg	n	12	0	0	0	12	0	0	0	12	0
BTetCA 100 mg/kg	n	12	0	0	0	12	0	0	0	12	0
BTetCA 300 mg/kg	n	12	0	0	0	12	0	0	0	12	0
BTetCA 1000 mg/kg	n	12	0	0	0	12	0	0	0	12	0

Test article		Piloerection NC		Pupil size NC				Salivation NC			
Dose		0	1	-1	0	1	2	0	1	2	3
BTetCA 0 mg/kg	n	12	0	0	12	0	0	12	0	0	0
BTetCA 100 mg/kg	n	12	0	0	12	0	0	12	0	0	0
BTetCA 300 mg/kg	n	12	0	0	12	0	0	12	0	0	0
BTetCA 1000 mg/kg	n	12	0	0	12	0	0	12	0	0	0

Palpebral closure) 0: Nomal, 1: Slightly closed, 2: Half closed, 3: Completely closed
Mucosal membranes) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Lacrimation) 0: Absent, 1: Present
Piloerection) 0: Absent, 1: Present
Pupil size) -1: Miosis, 0: Nomal, 1: Half opened pupil, 2: Mydriasis
Salivation) 0: None, 1: Slight, 2: Moderate, 3: Marked
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 62 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

In-the-hand observation Period : F0 lactation

Generation : F0 Sex : Female Day : 4 Species : Rat

Test article		Abnormal NC respiration				Vocalization NC			
Dose		0	1	2	3	0	1	2	3
BTetCA 0 mg/kg	n	12	0	0	0	12	0	0	0
BTetCA 100 mg/kg	n	12	0	0	0	12	0	0	0
BTetCA 300 mg/kg	n	12	0	0	0	12	0	0	0
BTetCA 1000 mg/kg	n	12	0	0	0	12	0	0	0

Test article		Reactivity to NC handling				
Dose		-1	0	1	2	3
BTetCA 0 mg/kg	n	0	12	0	0	0
BTetCA 100 mg/kg	n	0	12	0	0	0
BTetCA 300 mg/kg	n	0	12	0	0	0
BTetCA 1000 mg/kg	n	0	12	0	0	0

Abnormal respiration) 0: None, 1: Slight, 2: Moderate, 3: Severe
Vocalization) 0: None, 1: Soft, 2: Moderate, 3: Loud/aggressive
Reactivity to handling) -1: Atypically docile, 0: Easy, 1: Slightly awkward, 2: Awkward, 3: Very Awkward
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 63 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

In-the-hand observation Period : Administration

Generation : F0 Sex : Female Week : 1 Species : Rat

Test article		Ease of removal from cage NC					Fur condition NC			
Dose		-1	0	1	2	3	0	1	2	3
BTetCA 0 mg/kg	n	0	10	0	0	0	10	0	0	0
BTetCA 1000 mg/kg	n	0	10	0	0	0	10	0	0	0

Test article		Skin NC				Secretions- NC Eye, Nose		Exophthalmos NC	
Dose		0	1	2	3	0	1	0	1
BTetCA 0 mg/kg	n	10	0	0	0	10	0	10	0
BTetCA 1000 mg/kg	n	10	0	0	0	10	0	10	0

Test article		Palpebral NC closure				Mucosal NC membranes				Lacrimation NC	
Dose		0	1	2	3	0	1	2	3	0	1
BTetCA 0 mg/kg	n	10	0	0	0	10	0	0	0	10	0
BTetCA 1000 mg/kg	n	10	0	0	0	10	0	0	0	10	0

Ease of removal from cage) -1: Atypically docile, 0: Easy, 1: Some resistance/avoidance, 2: Difficult, 3: Very difficult
Fur condition) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Skin) 0: Nomal, 1: Slight, 2: Moderate, 3: Severe
Secretions-Eye, Nose) 0: Absent, 1: Present
Exophthalmos) 0: Absent, 1: Present
Palpebral closure) 0: Nomal, 1: Slightly closed, 2: Half closed, 3: Completely closed
Mucosal membranes) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Lacrimation) 0: Absent, 1: Present
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 64 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

In-the-hand observation Period : Administration

Generation : F0 Sex : Female Week : 1 Species : Rat

Test article		Piloerection NC		Pupil size NC			Salivation NC			
Dose		0	1	-1	0	1	2	0	1	2	3
BTetCA 0 mg/kg	n	10	0	0	10	0	0	10	0	0	0
BTetCA 1000 mg/kg	n	10	0	0	10	0	0	10	0	0	0

Test article		Abnormal NC respiration				Vocalization NC			
Dose		0	1	2	3	0	1	2	3
BTetCA 0 mg/kg	n	10	0	0	0	10	0	0	0
BTetCA 1000 mg/kg	n	10	0	0	0	10	0	0	0

Test article		Reactivity to NC handling				
Dose		-1	0	1	2	3
BTetCA 0 mg/kg	n	0	10	0	0	0
BTetCA 1000 mg/kg	n	0	10	0	0	0

Piloerection) 0: Absent, 1: Present
Pupil size) -1: Miosis, 0: Nomal, 1: Half opened pupil, 2: Mydriasis
Salivation) 0: None, 1: Slight, 2: Moderate, 3: Marked
Abnormal respiration) 0: None, 1: Slight, 2: Moderate, 3: Severe
Vocalization) 0: None, 1: Soft, 2: Moderate, 3: Loud/aggressive
Reactivity to handling) -1: Atypically docile, 0: Easy, 1: Slightly awkward, 2: Awkward, 3: Very Awkward
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 65 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

In-the-hand observation Period : Administration

Generation : F0 Sex : Female Week : 2 Species : Rat

Test article		Ease of removal from cage NC					Fur condition NC			
Dose		-1	0	1	2	3	0	1	2	3
BTetCA 0 mg/kg	n	0	10	0	0	0	10	0	0	0
BTetCA 1000 mg/kg	n	0	10	0	0	0	10	0	0	0

Test article		Skin NC				Secretions- NC Eye, Nose		Exophthalmos NC	
Dose		0	1	2	3	0	1	0	1
BTetCA 0 mg/kg	n	10	0	0	0	10	0	10	0
BTetCA 1000 mg/kg	n	10	0	0	0	10	0	10	0

Test article		Palpebral NC closure				Mucosal NC membranes				Lacrimation NC	
Dose		0	1	2	3	0	1	2	3	0	1
BTetCA 0 mg/kg	n	10	0	0	0	10	0	0	0	10	0
BTetCA 1000 mg/kg	n	10	0	0	0	10	0	0	0	10	0

Ease of removal from cage) -1: Atypically docile, 0: Easy, 1: Some resistance/avoidance, 2: Difficult, 3: Very difficult
Fur condition) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Skin) 0: Nomal, 1: Slight, 2: Moderate, 3: Severe
Secretions-Eye, Nose) 0: Absent, 1: Present
Exophthalmos) 0: Absent, 1: Present
Palpebral closure) 0: Nomal, 1: Slightly closed, 2: Half closed, 3: Completely closed
Mucosal membranes) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Lacrimation) 0: Absent, 1: Present
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 66 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

In-the-hand observation Period : Administration

Generation : F0 Sex : Female Week : 2 Species : Rat

Test article		Piloerection NC		Pupil size NC			Salivation NC			
Dose		0	1	-1	0	1	2	0	1	2	3
BTetCA 0 mg/kg	n	10	0	0	10	0	0	10	0	0	0
BTetCA 1000 mg/kg	n	10	0	0	10	0	0	10	0	0	0

Test article		Abnormal NC respiration				Vocalization NC			
Dose		0	1	2	3	0	1	2	3
BTetCA 0 mg/kg	n	10	0	0	0	10	0	0	0
BTetCA 1000 mg/kg	n	10	0	0	0	10	0	0	0

Test article		Reactivity to NC handling				
Dose		-1	0	1	2	3
BTetCA 0 mg/kg	n	0	10	0	0	0
BTetCA 1000 mg/kg	n	0	10	0	0	0

Piloerection) 0: Absent, 1: Present
Pupil size) -1: Miosis, 0: Nomal, 1: Half opened pupil, 2: Mydriasis
Salivation) 0: None, 1: Slight, 2: Moderate, 3: Marked
Abnormal respiration) 0: None, 1: Slight, 2: Moderate, 3: Severe
Vocalization) 0: None, 1: Soft, 2: Moderate, 3: Loud/aggressive
Reactivity to handling) -1: Atypically docile, 0: Easy, 1: Slightly awkward, 2: Awkward, 3: Very Awkward
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 67 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

In-the-hand observation Period : Administration

Generation : F0 Sex : Female Week : 3 Species : Rat

Test article		Ease of removal from cage NC					Fur condition NC			
Dose		-1	0	1	2	3	0	1	2	3
BTetCA 0 mg/kg	n	0	10	0	0	0	10	0	0	0
BTetCA 1000 mg/kg	n	0	10	0	0	0	10	0	0	0

Test article		Skin NC				Secretions- NC Eye, Nose		Exophthalmos NC	
Dose		0	1	2	3	0	1	0	1
BTetCA 0 mg/kg	n	10	0	0	0	10	0	10	0
BTetCA 1000 mg/kg	n	10	0	0	0	10	0	10	0

Test article		Palpebral NC closure				Mucosal NC membranes				Lacrimation NC	
Dose		0	1	2	3	0	1	2	3	0	1
BTetCA 0 mg/kg	n	10	0	0	0	10	0	0	0	10	0
BTetCA 1000 mg/kg	n	10	0	0	0	10	0	0	0	10	0

Ease of removal from cage) -1: Atypically docile, 0: Easy, 1: Some resistance/avoidance, 2: Difficult, 3: Very difficult
Fur condition) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Skin) 0: Nomal, 1: Slight, 2: Moderate, 3: Severe
Secretions-Eye, Nose) 0: Absent, 1: Present
Exophthalmos) 0: Absent, 1: Present
Palpebral closure) 0: Nomal, 1: Slightly closed, 2: Half closed, 3: Completely closed
Mucosal membranes) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Lacrimation) 0: Absent, 1: Present
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 68 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

In-the-hand observation Period : Administration

Generation : F0 Sex : Female Week : 3 Species : Rat

Test article		Piloerection NC		Pupil size NC			Salivation NC			
Dose		0	1	-1	0	1	2	0	1	2	3
BTetCA 0 mg/kg	n	10	0	0	10	0	0	10	0	0	0
BTetCA 1000 mg/kg	n	10	0	0	10	0	0	10	0	0	0

Test article		Abnormal NC respiration				Vocalization NC			
Dose		0	1	2	3	0	1	2	3
BTetCA 0 mg/kg	n	10	0	0	0	10	0	0	0
BTetCA 1000 mg/kg	n	10	0	0	0	9	1	0	0

Test article		Reactivity to NC handling				
Dose		-1	0	1	2	3
BTetCA 0 mg/kg	n	0	9	1	0	0
BTetCA 1000 mg/kg	n	0	10	0	0	0

Piloerection) 0: Absent, 1: Present
Pupil size) -1: Miosis, 0: Nomal, 1: Half opened pupil, 2: Mydriasis
Salivation) 0: None, 1: Slight, 2: Moderate, 3: Marked
Abnormal respiration) 0: None, 1: Slight, 2: Moderate, 3: Severe
Vocalization) 0: None, 1: Soft, 2: Moderate, 3: Loud/aggressive
Reactivity to handling) -1: Atypically docile, 0: Easy, 1: Slightly awkward, 2: Awkward, 3: Very Awkward
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 69 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

In-the-hand observation Period : Administration

Generation : F0 Sex : Female Week : 4 Species : Rat

Test article		Ease of removal from cage NC					Fur condition NC			
Dose		-1	0	1	2	3	0	1	2	3
BTetCA 0 mg/kg	n	0	10	0	0	0	10	0	0	0
BTetCA 1000 mg/kg	n	0	10	0	0	0	10	0	0	0

Test article		Skin NC				Secretions- NC Eye, Nose		Exophthalmos NC	
Dose		0	1	2	3	0	1	0	1
BTetCA 0 mg/kg	n	10	0	0	0	10	0	10	0
BTetCA 1000 mg/kg	n	10	0	0	0	10	0	10	0

Test article		Palpebral NC closure				Mucosal NC membranes				Lacrimation NC	
Dose		0	1	2	3	0	1	2	3	0	1
BTetCA 0 mg/kg	n	10	0	0	0	10	0	0	0	10	0
BTetCA 1000 mg/kg	n	10	0	0	0	10	0	0	0	10	0

Ease of removal from cage) -1: Atypically docile, 0: Easy, 1: Some resistance/avoidance, 2: Difficult, 3: Very difficult
Fur condition) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Skin) 0: Nomal, 1: Slight, 2: Moderate, 3: Severe
Secretions-Eye, Nose) 0: Absent, 1: Present
Exophthalmos) 0: Absent, 1: Present
Palpebral closure) 0: Nomal, 1: Slightly closed, 2: Half closed, 3: Completely closed
Mucosal membranes) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Lacrimation) 0: Absent, 1: Present
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 70 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

In-the-hand observation Period : Administration

Generation : F0 Sex : Female Week : 4 Species : Rat

Test article		Piloerection NC		Pupil size NC			Salivation NC			
Dose		0	1	-1	0	1	2	0	1	2	3
BTetCA 0 mg/kg	n	10	0	0	10	0	0	10	0	0	0
BTetCA 1000 mg/kg	n	10	0	0	10	0	0	10	0	0	0

Test article		Abnormal NC respiration				Vocalization NC			
Dose		0	1	2	3	0	1	2	3
BTetCA 0 mg/kg	n	10	0	0	0	10	0	0	0
BTetCA 1000 mg/kg	n	10	0	0	0	10	0	0	0

Test article		Reactivity to NC handling				
Dose		-1	0	1	2	3
BTetCA 0 mg/kg	n	0	10	0	0	0
BTetCA 1000 mg/kg	n	0	10	0	0	0

Piloerection) 0: Absent, 1: Present
Pupil size) -1: Miosis, 0: Nomal, 1: Half opened pupil, 2: Mydriasis
Salivation) 0: None, 1: Slight, 2: Moderate, 3: Marked
Abnormal respiration) 0: None, 1: Slight, 2: Moderate, 3: Severe
Vocalization) 0: None, 1: Soft, 2: Moderate, 3: Loud/aggressive
Reactivity to handling) -1: Atypically docile, 0: Easy, 1: Slightly awkward, 2: Awkward, 3: Very Awkward
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 71 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

In-the-hand observation Period : Administration

Generation : F0 Sex : Female Week : 5 Species : Rat

Test article		Ease of removal from cage NC					Fur condition NC			
Dose		-1	0	1	2	3	0	1	2	3
BTetCA 0 mg/kg	n	0	10	0	0	0	10	0	0	0
BTetCA 1000 mg/kg	n	0	10	0	0	0	10	0	0	0

Test article		Skin NC				Secretions- NC Eye, Nose		Exophthalmos NC	
Dose		0	1	2	3	0	1	0	1
BTetCA 0 mg/kg	n	10	0	0	0	10	0	10	0
BTetCA 1000 mg/kg	n	10	0	0	0	10	0	10	0

Test article		Palpebral NC closure				Mucosal NC membranes				Lacrimation NC	
Dose		0	1	2	3	0	1	2	3	0	1
BTetCA 0 mg/kg	n	10	0	0	0	10	0	0	0	10	0
BTetCA 1000 mg/kg	n	10	0	0	0	10	0	0	0	10	0

Ease of removal from cage) -1: Atypically docile, 0: Easy, 1: Some resistance/avoidance, 2: Difficult, 3: Very difficult
Fur condition) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Skin) 0: Nomal, 1: Slight, 2: Moderate, 3: Severe
Secretions-Eye, Nose) 0: Absent, 1: Present
Exophthalmos) 0: Absent, 1: Present
Palpebral closure) 0: Nomal, 1: Slightly closed, 2: Half closed, 3: Completely closed
Mucosal membranes) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Lacrimation) 0: Absent, 1: Present
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 72 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

In-the-hand observation Period : Administration

Generation : F0 Sex : Female Week : 5 Species : Rat

Test article		Piloerection NC		Pupil size NC			Salivation NC			
Dose		0	1	-1	0	1	2	0	1	2	3
BTetCA 0 mg/kg	n	10	0	0	10	0	0	10	0	0	0
BTetCA 1000 mg/kg	n	10	0	0	10	0	0	10	0	0	0

Test article		Abnormal NC respiration				Vocalization NC			
Dose		0	1	2	3	0	1	2	3
BTetCA 0 mg/kg	n	10	0	0	0	10	0	0	0
BTetCA 1000 mg/kg	n	10	0	0	0	10	0	0	0

Test article		Reactivity to NC handling				
Dose		-1	0	1	2	3
BTetCA 0 mg/kg	n	0	10	0	0	0
BTetCA 1000 mg/kg	n	0	10	0	0	0

Piloerection) 0: Absent, 1: Present
Pupil size) -1: Miosis, 0: Nomal, 1: Half opened pupil, 2: Mydriasis
Salivation) 0: None, 1: Slight, 2: Moderate, 3: Marked
Abnormal respiration) 0: None, 1: Slight, 2: Moderate, 3: Severe
Vocalization) 0: None, 1: Soft, 2: Moderate, 3: Loud/aggressive
Reactivity to handling) -1: Atypically docile, 0: Easy, 1: Slightly awkward, 2: Awkward, 3: Very Awkward
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 73 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

In-the-hand observation Period : Administration

Generation : F0 Sex : Female Week : 6 Species : Rat

Test article		Ease of removal from cage NC					Fur condition NC			
Dose		-1	0	1	2	3	0	1	2	3
BTetCA 0 mg/kg	n	0	10	0	0	0	10	0	0	0
BTetCA 1000 mg/kg	n	0	10	0	0	0	10	0	0	0

Test article		Skin NC				Secretions- NC Eye, Nose		Exophthalmos NC	
Dose		0	1	2	3	0	1	0	1
BTetCA 0 mg/kg	n	10	0	0	0	10	0	10	0
BTetCA 1000 mg/kg	n	10	0	0	0	10	0	10	0

Test article		Palpebral NC closure				Mucosal NC membranes				Lacrimation NC	
Dose		0	1	2	3	0	1	2	3	0	1
BTetCA 0 mg/kg	n	10	0	0	0	10	0	0	0	10	0
BTetCA 1000 mg/kg	n	10	0	0	0	10	0	0	0	10	0

Ease of removal from cage) -1: Atypically docile, 0: Easy, 1: Some resistance/avoidance, 2: Difficult, 3: Very difficult
Fur condition) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Skin) 0: Nomal, 1: Slight, 2: Moderate, 3: Severe
Secretions-Eye, Nose) 0: Absent, 1: Present
Exophthalmos) 0: Absent, 1: Present
Palpebral closure) 0: Nomal, 1: Slightly closed, 2: Half closed, 3: Completely closed
Mucosal membranes) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Lacrimation) 0: Absent, 1: Present
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 74 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

In-the-hand observation Period : Administration

Generation : F0 Sex : Female Week : 6 Species : Rat

Test article		Piloerection NC		Pupil size NC			Salivation NC			
Dose		0	1	-1	0	1	2	0	1	2	3
BTetCA 0 mg/kg	n	10	0	0	10	0	0	10	0	0	0
BTetCA 1000 mg/kg	n	10	0	0	10	0	0	10	0	0	0

Test article		Abnormal NC respiration				Vocalization NC			
Dose		0	1	2	3	0	1	2	3
BTetCA 0 mg/kg	n	10	0	0	0	10	0	0	0
BTetCA 1000 mg/kg	n	10	0	0	0	10	0	0	0

Test article		Reactivity to NC handling				
Dose		-1	0	1	2	3
BTetCA 0 mg/kg	n	0	10	0	0	0
BTetCA 1000 mg/kg	n	0	10	0	0	0

Piloerection) 0: Absent, 1: Present
Pupil size) -1: Miosis, 0: Nomal, 1: Half opened pupil, 2: Mydriasis
Salivation) 0: None, 1: Slight, 2: Moderate, 3: Marked
Abnormal respiration) 0: None, 1: Slight, 2: Moderate, 3: Severe
Vocalization) 0: None, 1: Soft, 2: Moderate, 3: Loud/aggressive
Reactivity to handling) -1: Atypically docile, 0: Easy, 1: Slightly awkward, 2: Awkward, 3: Very Awkward
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 75 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

In-the-hand observation Period : Recovery

Generation : F0 Sex : Male Week : 1 Species : Rat

Test article		Ease of removal from cage NC					Fur condition NC			
Dose		-1	0	1	2	3	0	1	2	3
BTetCA 0 mg/kg	n	0	5	0	0	0	5	0	0	0
BTetCA 1000 mg/kg	n	0	5	0	0	0	5	0	0	0

Test article		Skin NC				Secretions- NC Eye, Nose		Exophthalmos NC	
Dose		0	1	2	3	0	1	0	1
BTetCA 0 mg/kg	n	5	0	0	0	5	0	5	0
BTetCA 1000 mg/kg	n	5	0	0	0	5	0	5	0

Test article		Palpebral NC closure				Mucosal NC membranes				Lacrimation NC	
Dose		0	1	2	3	0	1	2	3	0	1
BTetCA 0 mg/kg	n	5	0	0	0	5	0	0	0	5	0
BTetCA 1000 mg/kg	n	5	0	0	0	5	0	0	0	5	0

Ease of removal from cage) -1: Atypically docile, 0: Easy, 1: Some resistance/avoidance, 2: Difficult, 3: Very difficult
Fur condition) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Skin) 0: Nomal, 1: Slight, 2: Moderate, 3: Severe
Secretions-Eye, Nose) 0: Absent, 1: Present
Exophthalmos) 0: Absent, 1: Present
Palpebral closure) 0: Nomal, 1: Slightly closed, 2: Half closed, 3: Completely closed
Mucosal membranes) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Lacrimation) 0: Absent, 1: Present
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 76 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

In-the-hand observation Period : Recovery

Generation : F0 Sex : Male Week : 1 Species : Rat

Test article		Piloerection NC		Pupil size NC			Salivation NC			
Dose		0	1	-1	0	1	2	0	1	2	3
BTetCA 0 mg/kg	n	5	0	0	5	0	0	5	0	0	0
BTetCA 1000 mg/kg	n	5	0	0	5	0	0	5	0	0	0

Test article		Abnormal NC respiration				Vocalization NC			
Dose		0	1	2	3	0	1	2	3
BTetCA 0 mg/kg	n	5	0	0	0	5	0	0	0
BTetCA 1000 mg/kg	n	5	0	0	0	5	0	0	0

Test article		Reactivity to NC handling				
Dose		-1	0	1	2	3
BTetCA 0 mg/kg	n	0	5	0	0	0
BTetCA 1000 mg/kg	n	0	5	0	0	0

Piloerection) 0: Absent, 1: Present
Pupil size) -1: Miosis, 0: Nomal, 1: Half opened pupil, 2: Mydriasis
Salivation) 0: None, 1: Slight, 2: Moderate, 3: Marked
Abnormal respiration) 0: None, 1: Slight, 2: Moderate, 3: Severe
Vocalization) 0: None, 1: Soft, 2: Moderate, 3: Loud/aggressive
Reactivity to handling) -1: Atypically docile, 0: Easy, 1: Slightly awkward, 2: Awkward, 3: Very Awkward
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 77 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

In-the-hand observation Period : Recovery

Generation : F0 Sex : Male Week : 2 Species : Rat

Test article		Ease of removal from cage NC					Fur condition NC			
Dose		-1	0	1	2	3	0	1	2	3
BTetCA 0 mg/kg	n	0	5	0	0	0	5	0	0	0
BTetCA 1000 mg/kg	n	0	5	0	0	0	5	0	0	0

Test article		Skin NC				Secretions- NC Eye, Nose		Exophthalmos NC	
Dose		0	1	2	3	0	1	0	1
BTetCA 0 mg/kg	n	5	0	0	0	5	0	5	0
BTetCA 1000 mg/kg	n	5	0	0	0	5	0	5	0

Test article		Palpebral NC closure				Mucosal NC membranes				Lacrimation NC	
Dose		0	1	2	3	0	1	2	3	0	1
BTetCA 0 mg/kg	n	5	0	0	0	5	0	0	0	5	0
BTetCA 1000 mg/kg	n	5	0	0	0	5	0	0	0	5	0

Ease of removal from cage) -1: Atypically docile, 0: Easy, 1: Some resistance/avoidance, 2: Difficult, 3: Very difficult
Fur condition) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Skin) 0: Nomal, 1: Slight, 2: Moderate, 3: Severe
Secretions-Eye, Nose) 0: Absent, 1: Present
Exophthalmos) 0: Absent, 1: Present
Palpebral closure) 0: Nomal, 1: Slightly closed, 2: Half closed, 3: Completely closed
Mucosal membranes) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Lacrimation) 0: Absent, 1: Present
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 78 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

In-the-hand observation Period : Recovery

Generation : F0 Sex : Male Week : 2 Species : Rat

Test article		Piloerection NC		Pupil size NC			Salivation NC			
Dose		0	1	-1	0	1	2	0	1	2	3
BTetCA 0 mg/kg	n	5	0	0	5	0	0	5	0	0	0
BTetCA 1000 mg/kg	n	5	0	0	5	0	0	5	0	0	0

Test article		Abnormal NC respiration				Vocalization NC			
Dose		0	1	2	3	0	1	2	3
BTetCA 0 mg/kg	n	5	0	0	0	5	0	0	0
BTetCA 1000 mg/kg	n	5	0	0	0	5	0	0	0

Test article		Reactivity to NC handling				
Dose		-1	0	1	2	3
BTetCA 0 mg/kg	n	0	5	0	0	0
BTetCA 1000 mg/kg	n	0	5	0	0	0

Piloerection) 0: Absent, 1: Present
Pupil size) -1: Miosis, 0: Nomal, 1: Half opened pupil, 2: Mydriasis
Salivation) 0: None, 1: Slight, 2: Moderate, 3: Marked
Abnormal respiration) 0: None, 1: Slight, 2: Moderate, 3: Severe
Vocalization) 0: None, 1: Soft, 2: Moderate, 3: Loud/aggressive
Reactivity to handling) -1: Atypically docile, 0: Easy, 1: Slightly awkward, 2: Awkward, 3: Very Awkward
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 79 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

In-the-hand observation Period : Recovery

Generation : F0 Sex : Female Week : 1 Species : Rat

Test article		Ease of removal from cage NC					Fur condition NC			
Dose		-1	0	1	2	3	0	1	2	3
BTetCA 0 mg/kg	n	0	5	0	0	0	5	0	0	0
BTetCA 1000 mg/kg	n	0	5	0	0	0	5	0	0	0

Test article		Skin NC				Secretions- NC Eye, Nose		Exophthalmos NC	
Dose		0	1	2	3	0	1	0	1
BTetCA 0 mg/kg	n	5	0	0	0	5	0	5	0
BTetCA 1000 mg/kg	n	5	0	0	0	5	0	5	0

Test article		Palpebral NC closure				Mucosal NC membranes				Lacrimation NC	
Dose		0	1	2	3	0	1	2	3	0	1
BTetCA 0 mg/kg	n	5	0	0	0	5	0	0	0	5	0
BTetCA 1000 mg/kg	n	5	0	0	0	5	0	0	0	5	0

Ease of removal from cage) -1: Atypically docile, 0: Easy, 1: Some resistance/avoidance, 2: Difficult, 3: Very difficult
Fur condition) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Skin) 0: Nomal, 1: Slight, 2: Moderate, 3: Severe
Secretions-Eye, Nose) 0: Absent, 1: Present
Exophthalmos) 0: Absent, 1: Present
Palpebral closure) 0: Nomal, 1: Slightly closed, 2: Half closed, 3: Completely closed
Mucosal membranes) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Lacrimation) 0: Absent, 1: Present
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 80

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Study No. : R-1193

In-the-hand observation

Period : Recovery

Generation : F0 Sex : Female Week : 1

Species : Rat

Test article		Piloerection NC		Pupil size NC			Salivation NC			
Dose		0	1	-1	0	1	2	0	1	2	3
BTetCA 0 mg/kg	n	5	0	0	5	0	0	5	0	0	0
BTetCA 1000 mg/kg	n	5	0	0	5	0	0	5	0	0	0

Test article		Abnormal NC respiration				Vocalization NC			
Dose		0	1	2	3	0	1	2	3
BTetCA 0 mg/kg	n	5	0	0	0	5	0	0	0
BTetCA 1000 mg/kg	n	5	0	0	0	5	0	0	0

Test article		Reactivity to NC handling				
Dose		-1	0	1	2	3
BTetCA 0 mg/kg	n	0	5	0	0	0
BTetCA 1000 mg/kg	n	0	5	0	0	0

Piloerection) 0: Absent, 1: Present
Pupil size) -1: Miosis, 0: Nomal, 1: Half opened pupil, 2: Mydriasis
Salivation) 0: None, 1: Slight, 2: Moderate, 3: Marked
Abnormal respiration) 0: None, 1: Slight, 2: Moderate, 3: Severe
Vocalization) 0: None, 1: Soft, 2: Moderate, 3: Loud/aggressive
Reactivity to handling) -1: Atypically docile, 0: Easy, 1: Slightly awkward, 2: Awkward, 3: Very Awkward
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 81 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

In-the-hand observation Period : Recovery

Generation : F0 Sex : Female Week : 2 Species : Rat

Test article		Ease of removal from cage NC					Fur condition NC			
Dose		-1	0	1	2	3	0	1	2	3
BTetCA 0 mg/kg	n	0	5	0	0	0	5	0	0	0
BTetCA 1000 mg/kg	n	0	5	0	0	0	5	0	0	0

Test article		Skin NC				Secretions- NC Eye, Nose		Exophthalmos NC	
Dose		0	1	2	3	0	1	0	1
BTetCA 0 mg/kg	n	5	0	0	0	5	0	5	0
BTetCA 1000 mg/kg	n	5	0	0	0	5	0	5	0

Test article		Palpebral NC closure				Mucosal NC membranes				Lacrimation NC	
Dose		0	1	2	3	0	1	2	3	0	1
BTetCA 0 mg/kg	n	5	0	0	0	5	0	0	0	5	0
BTetCA 1000 mg/kg	n	5	0	0	0	5	0	0	0	5	0

Ease of removal from cage) -1: Atypically docile, 0: Easy, 1: Some resistance/avoidance, 2: Difficult, 3: Very difficult
Fur condition) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Skin) 0: Nomal, 1: Slight, 2: Moderate, 3: Severe
Secretions-Eye, Nose) 0: Absent, 1: Present
Exophthalmos) 0: Absent, 1: Present
Palpebral closure) 0: Nomal, 1: Slightly closed, 2: Half closed, 3: Completely closed
Mucosal membranes) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Lacrimation) 0: Absent, 1: Present
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 82 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

In-the-hand observation Period : Recovery

Generation : F0 Sex : Female Week : 2 Species : Rat

Test article		Piloerection NC		Pupil size NC			Salivation NC			
Dose		0	1	-1	0	1	2	0	1	2	3
BTetCA 0 mg/kg	n	5	0	0	5	0	0	5	0	0	0
BTetCA 1000 mg/kg	n	5	0	0	5	0	0	5	0	0	0

Test article		Abnormal NC respiration				Vocalization NC			
Dose		0	1	2	3	0	1	2	3
BTetCA 0 mg/kg	n	5	0	0	0	5	0	0	0
BTetCA 1000 mg/kg	n	5	0	0	0	5	0	0	0

Test article		Reactivity to NC handling				
Dose		-1	0	1	2	3
BTetCA 0 mg/kg	n	0	5	0	0	0
BTetCA 1000 mg/kg	n	0	5	0	0	0

Piloerection) 0: Absent, 1: Present
Pupil size) -1: Miosis, 0: Nomal, 1: Half opened pupil, 2: Mydriasis
Salivation) 0: None, 1: Slight, 2: Moderate, 3: Marked
Abnormal respiration) 0: None, 1: Slight, 2: Moderate, 3: Severe
Vocalization) 0: None, 1: Soft, 2: Moderate, 3: Loud/aggressive
Reactivity to handling) -1: Atypically docile, 0: Easy, 1: Slightly awkward, 2: Awkward, 3: Very Awkward
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 83 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Open field observation Period : F0 before mating

Generation : F0 Sex : Male Week : 1 Species : Rat

Test article		Arousal NC					Convulsion NC			
Dose		-2	-1	0	1	2	0	1	2	3
BTetCA 0 mg/kg	n	0	0	12	0	0	12	0	0	0
BTetCA 100 mg/kg	n	0	0	12	0	0	12	0	0	0
BTetCA 300 mg/kg	n	0	0	12	0	0	12	0	0	0
BTetCA 1000 mg/kg	n	0	0	12	0	0	12	0	0	0

Test article		Abnormal NC behavior				Stereotypy NC			
Dose		0	1	2	3	0	1	2	3
BTetCA 0 mg/kg	n	12	0	0	0	12	0	0	0
BTetCA 100 mg/kg	n	12	0	0	0	12	0	0	0
BTetCA 300 mg/kg	n	12	0	0	0	12	0	0	0
BTetCA 1000 mg/kg	n	12	0	0	0	12	0	0	0

Arousal) -2: Unconscious/semi-conscious, -1: Reduced awareness, 0: Nomal, 1: Increased alertness, 2: Markedly alert
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Stereotypy) 0: None, 1: Minor, 2: Moderate, 3: Sevear
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 84 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Open field observation Period : F0 before mating

Generation : F0 Sex : Male Week : 1 Species : Rat

Test article		Gait NC					Posture NC		
Dose		U	0	1	2	3	N	F	H
BTetCA 0 mg/kg	n	0	12	0	0	0	12	0	0
BTetCA 100 mg/kg	n	0	12	0	0	0	12	0	0
BTetCA 300 mg/kg	n	0	12	0	0	0	12	0	0
BTetCA 1000 mg/kg	n	0	12	0	0	0	12	0	0

Test article		Grooming NC			Urination NC			
Dose		0	1	2	0	1	2	3
BTetCA 0 mg/kg	n	12	0	0	12	0	0	0
BTetCA 100 mg/kg	n	12	0	0	12	0	0	0
BTetCA 300 mg/kg	n	12	0	0	12	0	0	0
BTetCA 1000 mg/kg	n	12	0	0	12	0	0	0

Gait) U: No/minimal location, 0: Nomal, 1: Slight, 2: Moderate, 3: Markedly
Posture) N: Normal, F: Flattened, H: Hunched
Grooming) 0: None, 1: Occasional bouts (up to four), 2: Numerous (more than four)
Urination) 0: None, 1: Small amount, 2: Moderate amount, 3: Large/excessive amount
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 85 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Open field observation Period : F0 before mating

Generation : F0 Sex : Male Week : 1 Species : Rat

Test article Dose		Rearing	Defecation count
BTetCA 0 mg/kg	n	12	12
	Mean	4	0
	S.D.	2	1
BTetCA 100 mg/kg	n	12	12
	Mean	3	0
	S.D.	3	1
BTetCA 300 mg/kg	n	12	12
	Mean	5	0
	S.D.	1	0
BTetCA 1000 mg/kg	n	12	12
	Mean	5	0
	S.D.	2	0

Not significantly different from BTetCA 0 mg/kg
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 86 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Open field observation Period : F0 before mating

Generation : F0 Sex : Male Week : 2 Species : Rat

Test article		Arousal NC					Convulsion NC			
Dose		-2	-1	0	1	2	0	1	2	3
BTetCA 0 mg/kg	n	0	0	12	0	0	12	0	0	0
BTetCA 100 mg/kg	n	0	0	12	0	0	12	0	0	0
BTetCA 300 mg/kg	n	0	0	12	0	0	12	0	0	0
BTetCA 1000 mg/kg	n	0	0	12	0	0	12	0	0	0

Test article		Abnormal NC behavior				Stereotypy NC			
Dose		0	1	2	3	0	1	2	3
BTetCA 0 mg/kg	n	12	0	0	0	12	0	0	0
BTetCA 100 mg/kg	n	12	0	0	0	12	0	0	0
BTetCA 300 mg/kg	n	12	0	0	0	12	0	0	0
BTetCA 1000 mg/kg	n	12	0	0	0	12	0	0	0

Arousal) -2: Unconscious/semi-conscious, -1: Reduced awareness, 0: Nomal, 1: Increased alertness, 2: Markedly alert
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Stereotypy) 0: None, 1: Minor, 2: Moderate, 3: Sevear
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 87 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Open field observation Period : F0 before mating

Generation : F0 Sex : Male Week : 2 Species : Rat

Test article Dose		Gait NC					Posture NC		
		U	0	1	2	3	N	F	H
BTetCA 0 mg/kg	n	0	12	0	0	0	12	0	0
BTetCA 100 mg/kg	n	0	12	0	0	0	12	0	0
BTetCA 300 mg/kg	n	0	12	0	0	0	12	0	0
BTetCA 1000 mg/kg	n	0	12	0	0	0	12	0	0

Test article Dose		Grooming NC			Urination NC			
		0	1	2	0	1	2	3
BTetCA 0 mg/kg	n	12	0	0	9	3	0	0
BTetCA 100 mg/kg	n	12	0	0	11	1	0	0
BTetCA 300 mg/kg	n	12	0	0	12	0	0	0
BTetCA 1000 mg/kg	n	12	0	0	10	2	0	0

Gait) U: No/minimal location, 0: Nomal, 1: Slight, 2: Moderate, 3: Markedly
Posture) N: Normal, F: Flattened, H: Hunched
Grooming) 0: None, 1: Occasional bouts (up to four), 2: Numerous (more than four)
Urination) 0: None, 1: Small amount, 2: Moderate amount, 3: Large/excessive amount
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 88 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Open field observation Period : F0 before mating

Generation : F0 Sex : Male Week : 2 Species : Rat

Test article Dose		Rearing	Defecation count
BTetCA 0 mg/kg	n	12	12
	Mean	4	0
	S.D.	2	0
BTetCA 100 mg/kg	n	12	12
	Mean	2	0
	S.D.	1	1
BTetCA 300 mg/kg	n	12	12
	Mean	4	0
	S.D.	2	0
BTetCA 1000 mg/kg	n	12	12
	Mean	4	0
	S.D.	2	1

Not significantly different from BTetCA 0 mg/kg
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 89 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Open field observation Period : F0 mating

Generation : F0 Sex : Male Week : 3 Species : Rat

Test article		Arousal NC					Convulsion NC			
Dose		-2	-1	0	1	2	0	1	2	3
BTetCA 0 mg/kg	n	0	0	12	0	0	12	0	0	0
BTetCA 100 mg/kg	n	0	0	12	0	0	12	0	0	0
BTetCA 300 mg/kg	n	0	0	12	0	0	12	0	0	0
BTetCA 1000 mg/kg	n	0	0	12	0	0	12	0	0	0

Test article		Abnormal NC behavior				Stereotypy NC			
Dose		0	1	2	3	0	1	2	3
BTetCA 0 mg/kg	n	12	0	0	0	12	0	0	0
BTetCA 100 mg/kg	n	12	0	0	0	12	0	0	0
BTetCA 300 mg/kg	n	12	0	0	0	12	0	0	0
BTetCA 1000 mg/kg	n	12	0	0	0	12	0	0	0

Arousal) -2: Unconscious/semi-conscious, -1: Reduced awareness, 0: Nomal, 1: Increased alertness, 2: Markedly alert
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Stereotypy) 0: None, 1: Minor, 2: Moderate, 3: Sevear
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 90 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Open field observation Period : F0 mating

Generation : F0 Sex : Male Week : 3 Species : Rat

Test article Dose		Gait NC					Posture NC		
		U	0	1	2	3	N	F	H
BTetCA 0 mg/kg	n	2	10	0	0	0	12	0	0
BTetCA 100 mg/kg	n	0	12	0	0	0	12	0	0
BTetCA 300 mg/kg	n	1	11	0	0	0	12	0	0
BTetCA 1000 mg/kg	n	1	11	0	0	0	12	0	0

Test article Dose		Grooming NC			Urination NC			
		0	1	2	0	1	2	3
BTetCA 0 mg/kg	n	12	0	0	11	1	0	0
BTetCA 100 mg/kg	n	12	0	0	12	0	0	0
BTetCA 300 mg/kg	n	12	0	0	11	1	0	0
BTetCA 1000 mg/kg	n	12	0	0	11	1	0	0

Gait) U: No/minimal location, 0: Nomal, 1: Slight, 2: Moderate, 3: Markedly
Posture) N: Normal, F: Flattened, H: Hunched
Grooming) 0: None, 1: Occasional bouts (up to four), 2: Numerous (more than four)
Urination) 0: None, 1: Small amount, 2: Moderate amount, 3: Large/excessive amount
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 91 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Open field observation Period : F0 mating

Generation : F0 Sex : Male Week : 3 Species : Rat

Test article Dose		Rearing	Defecation count
BTetCA 0 mg/kg	n	12	12
	Mean	4	0
	S.D.	2	0
BTetCA 100 mg/kg	n	12	12
	Mean	4	0
	S.D.	2	0
BTetCA 300 mg/kg	n	12	12
	Mean	5	0
	S.D.	2	0
BTetCA 1000 mg/kg	n	12	12
	Mean	5	0
	S.D.	2	0

Not significantly different from BTetCA 0 mg/kg

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 92 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Open field observation Period : F0 mating

Generation : F0 Sex : Male Week : 4 Species : Rat

Test article		Arousal NC					Convulsion NC			
Dose		-2	-1	0	1	2	0	1	2	3
BTetCA 0 mg/kg	n	0	0	12	0	0	12	0	0	0
BTetCA 100 mg/kg	n	0	0	12	0	0	12	0	0	0
BTetCA 300 mg/kg	n	0	0	12	0	0	12	0	0	0
BTetCA 1000 mg/kg	n	0	0	12	0	0	12	0	0	0

Test article		Abnormal NC behavior				Stereotypy NC			
Dose		0	1	2	3	0	1	2	3
BTetCA 0 mg/kg	n	12	0	0	0	12	0	0	0
BTetCA 100 mg/kg	n	12	0	0	0	12	0	0	0
BTetCA 300 mg/kg	n	12	0	0	0	12	0	0	0
BTetCA 1000 mg/kg	n	12	0	0	0	12	0	0	0

Arousal) -2: Unconscious/semi-conscious, -1: Reduced awareness, 0: Nomal, 1: Increased alertness, 2: Markedly alert
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Stereotypy) 0: None, 1: Minor, 2: Moderate, 3: Sevear
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 93 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Open field observation Period : F0 mating

Generation : F0 Sex : Male Week : 4 Species : Rat

Test article Dose		Gait NC U	0	1	2	3	Posture NC N	F	H
BTetCA 0 mg/kg	n	0	12	0	0	0	12	0	0
BTetCA 100 mg/kg	n	0	12	0	0	0	12	0	0
BTetCA 300 mg/kg	n	0	12	0	0	0	12	0	0
BTetCA 1000 mg/kg	n	0	12	0	0	0	12	0	0

Test article Dose		Grooming NC 0	1	2	Urination NC 0	1	2	3
BTetCA 0 mg/kg	n	12	0	0	12	0	0	0
BTetCA 100 mg/kg	n	12	0	0	11	1	0	0
BTetCA 300 mg/kg	n	12	0	0	12	0	0	0
BTetCA 1000 mg/kg	n	12	0	0	12	0	0	0

Gait) U: No/minimal location, 0: Nomal, 1: Slight, 2: Moderate, 3: Markedly
Posture) N: Normal, F: Flattened, H: Hunched
Grooming) 0: None, 1: Occasional bouts (up to four), 2: Numerous (more than four)
Urination) 0: None, 1: Small amount, 2: Moderate amount, 3: Large/excessive amount
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 94 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Open field observation Period : F0 mating

Generation : F0 Sex : Male Week : 4 Species : Rat

Test article Dose		Rearing	Defecation count
BTetCA 0 mg/kg	n	12	12
	Mean	4	0
	S.D.	2	0
BTetCA 100 mg/kg	n	12	12
	Mean	4	0
	S.D.	2	0
			EF
BTetCA 300 mg/kg	n	12	12
	Mean	4	0
	S.D.	1	0
			EF
BTetCA 1000 mg/kg	n	12	12
	Mean	5	0
	S.D.	2	0
			EF

Not significantly different from BTetCA 0 mg/kg

EF : The group mean is the same and unbiased variance 0 for all groups. All data of all groups are same.

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 95 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Open field observation Period : F0 mating

Generation : F0 Sex : Male Week : 5 Species : Rat

Test article		Arousal NC					Convulsion NC			
Dose		-2	-1	0	1	2	0	1	2	3
BTetCA 0 mg/kg	n	0	0	12	0	0	12	0	0	0
BTetCA 100 mg/kg	n	0	0	12	0	0	12	0	0	0
BTetCA 300 mg/kg	n	0	0	12	0	0	12	0	0	0
BTetCA 1000 mg/kg	n	0	0	12	0	0	12	0	0	0

Test article		Abnormal NC behavior				Stereotypy NC			
Dose		0	1	2	3	0	1	2	3
BTetCA 0 mg/kg	n	12	0	0	0	12	0	0	0
BTetCA 100 mg/kg	n	12	0	0	0	12	0	0	0
BTetCA 300 mg/kg	n	12	0	0	0	12	0	0	0
BTetCA 1000 mg/kg	n	12	0	0	0	12	0	0	0

Arousal) -2: Unconscious/semi-conscious, -1: Reduced awareness, 0: Nomal, 1: Increased alertness, 2: Markedly alert
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Stereotypy) 0: None, 1: Minor, 2: Moderate, 3: Sevear
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 96 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Open field observation Period : F0 mating

Generation : F0 Sex : Male Week : 5 Species : Rat

Test article Dose		Gait NC U	0	1	2	3	Posture NC N	F	H
BTetCA 0 mg/kg	n	0	12	0	0	0	12	0	0
BTetCA 100 mg/kg	n	0	12	0	0	0	12	0	0
BTetCA 300 mg/kg	n	0	12	0	0	0	12	0	0
BTetCA 1000 mg/kg	n	0	12	0	0	0	12	0	0

Test article Dose		Grooming NC 0	1	2	Urination NC 0	1	2	3
BTetCA 0 mg/kg	n	12	0	0	11	1	0	0
BTetCA 100 mg/kg	n	12	0	0	10	2	0	0
BTetCA 300 mg/kg	n	12	0	0	11	1	0	0
BTetCA 1000 mg/kg	n	12	0	0	10	2	0	0

Gait) U: No/minimal location, 0: Nomal, 1: Slight, 2: Moderate, 3: Markedly
Posture) N: Normal, F: Flattened, H: Hunched
Grooming) 0: None, 1: Occasional bouts (up to four), 2: Numerous (more than four)
Urination) 0: None, 1: Small amount, 2: Moderate amount, 3: Large/excessive amount
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 97 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Open field observation Period : F0 mating

Generation : F0 Sex : Male Week : 5 Species : Rat

Test article Dose		Rearing	Defecation count
BTetCA 0 mg/kg	n	12	12
	Mean	5	0
	S.D.	2	0
BTetCA 100 mg/kg	n	12	12
	Mean	5	0
	S.D.	2	0
BTetCA 300 mg/kg	n	12	12
	Mean	5	0
	S.D.	1	0
BTetCA 1000 mg/kg	n	12	12
	Mean	6	0
	S.D.	3	0

Not significantly different from BTetCA 0 mg/kg
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 98 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Open field observation Period : F0 mating

Generation : F0 Sex : Male Week : 6 Species : Rat

Test article		Arousal NC					Convulsion NC			
Dose		-2	-1	0	1	2	0	1	2	3
BTetCA 0 mg/kg	n	0	0	12	0	0	12	0	0	0
BTetCA 100 mg/kg	n	0	0	12	0	0	12	0	0	0
BTetCA 300 mg/kg	n	0	0	12	0	0	12	0	0	0
BTetCA 1000 mg/kg	n	0	0	12	0	0	12	0	0	0

Test article		Abnormal NC behavior				Stereotypy NC			
Dose		0	1	2	3	0	1	2	3
BTetCA 0 mg/kg	n	12	0	0	0	12	0	0	0
BTetCA 100 mg/kg	n	12	0	0	0	12	0	0	0
BTetCA 300 mg/kg	n	12	0	0	0	12	0	0	0
BTetCA 1000 mg/kg	n	12	0	0	0	12	0	0	0

Arousal) -2: Unconscious/semi-conscious, -1: Reduced awareness, 0: Nomal, 1: Increased alertness, 2: Markedly alert
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Stereotypy) 0: None, 1: Minor, 2: Moderate, 3: Sevear
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 99 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Open field observation Period : F0 mating

Generation : F0 Sex : Male Week : 6 Species : Rat

Test article Dose		Gait NC U	0	1	2	3	Posture NC N	F	H
BTetCA 0 mg/kg	n	0	12	0	0	0	12	0	0
BTetCA 100 mg/kg	n	0	12	0	0	0	12	0	0
BTetCA 300 mg/kg	n	0	12	0	0	0	12	0	0
BTetCA 1000 mg/kg	n	0	12	0	0	0	12	0	0

Test article Dose		Grooming NC 0	1	2	Urination NC 0	1	2	3
BTetCA 0 mg/kg	n	12	0	0	10	2	0	0
BTetCA 100 mg/kg	n	12	0	0	9	3	0	0
BTetCA 300 mg/kg	n	12	0	0	8	4	0	0
BTetCA 1000 mg/kg	n	12	0	0	11	1	0	0

Gait) U: No/minimal location, 0: Nomal, 1: Slight, 2: Moderate, 3: Markedly
Posture) N: Normal, F: Flattened, H: Hunched
Grooming) 0: None, 1: Occasional bouts (up to four), 2: Numerous (more than four)
Urination) 0: None, 1: Small amount, 2: Moderate amount, 3: Large/excessive amount
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 100 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Open field observation Period : F0 mating

Generation : F0 Sex : Male Week : 6 Species : Rat

Test article Dose		Rearing	Defecation count
BTetCA 0 mg/kg	n	12	12
	Mean	4	0
	S.D.	2	0
BTetCA 100 mg/kg	n	12	12
	Mean	4	0
	S.D.	2	0
			EF
BTetCA 300 mg/kg	n	12	12
	Mean	5	0
	S.D.	1	0
			EF
BTetCA 1000 mg/kg	n	12	12
	Mean	4	0
	S.D.	1	0
			EF

Not significantly different from BTetCA 0 mg/kg

EF : The group mean is the same and unbiased variance 0 for all groups. All data of all groups are same.

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 101 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Open field observation Period : F0 before mating

Generation : F0 Sex : Female Week : 1 Species : Rat

Test article		Arousal NC					Convulsion NC			
Dose		-2	-1	0	1	2	0	1	2	3
BTetCA 0 mg/kg	n	0	0	12	0	0	12	0	0	0
BTetCA 100 mg/kg	n	0	0	12	0	0	12	0	0	0
BTetCA 300 mg/kg	n	0	0	12	0	0	12	0	0	0
BTetCA 1000 mg/kg	n	0	0	12	0	0	12	0	0	0

Test article		Abnormal NC behavior				Stereotypy NC			
Dose		0	1	2	3	0	1	2	3
BTetCA 0 mg/kg	n	12	0	0	0	12	0	0	0
BTetCA 100 mg/kg	n	12	0	0	0	12	0	0	0
BTetCA 300 mg/kg	n	12	0	0	0	12	0	0	0
BTetCA 1000 mg/kg	n	12	0	0	0	12	0	0	0

Arousal) -2: Unconscious/semi-conscious, -1: Reduced awareness, 0: Nomal, 1: Increased alertness, 2: Markedly alert
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Stereotypy) 0: None, 1: Minor, 2: Moderate, 3: Sevear
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 102 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Open field observation Period : F0 before mating

Generation : F0 Sex : Female Week : 1 Species : Rat

Test article		Gait NC					Posture NC		
Dose		U	0	1	2	3	N	F	H
BTetCA 0 mg/kg	n	0	12	0	0	0	12	0	0
BTetCA 100 mg/kg	n	0	12	0	0	0	12	0	0
BTetCA 300 mg/kg	n	0	12	0	0	0	12	0	0
BTetCA 1000 mg/kg	n	0	12	0	0	0	12	0	0

Test article		Grooming NC			Urination NC			
Dose		0	1	2	0	1	2	3
BTetCA 0 mg/kg	n	12	0	0	12	0	0	0
BTetCA 100 mg/kg	n	12	0	0	12	0	0	0
BTetCA 300 mg/kg	n	12	0	0	12	0	0	0
BTetCA 1000 mg/kg	n	12	0	0	12	0	0	0

Gait) U: No/minimal location, 0: Nomal, 1: Slight, 2: Moderate, 3: Markedly
Posture) N: Normal, F: Flattened, H: Hunched
Grooming) 0: None, 1: Occasional bouts (up to four), 2: Numerous (more than four)
Urination) 0: None, 1: Small amount, 2: Moderate amount, 3: Large/excessive amount
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 103 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Open field observation Period : F0 before mating

Generation : F0 Sex : Female Week : 1 Species : Rat

Test article Dose		Rearing	Defecation count
BTetCA 0 mg/kg	n	12	12
	Mean	7	0
	S.D.	2	0
BTetCA 100 mg/kg	n	12	12
	Mean	7	0
	S.D.	2	0
			EF
BTetCA 300 mg/kg	n	12	12
	Mean	7	0
	S.D.	3	0
			EF
BTetCA 1000 mg/kg	n	12	12
	Mean	7	0
	S.D.	2	0
			EF

Not significantly different from BTetCA 0 mg/kg
EF : The group mean is the same and unbiased variance 0 for all groups. All data of all groups are same.
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 104 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Open field observation Period : F0 before mating

Generation : F0 Sex : Female Week : 2 Species : Rat

Test article		Arousal NC					Convulsion NC			
Dose		-2	-1	0	1	2	0	1	2	3
BTetCA 0 mg/kg	n	0	0	12	0	0	12	0	0	0
BTetCA 100 mg/kg	n	0	0	12	0	0	12	0	0	0
BTetCA 300 mg/kg	n	0	0	12	0	0	12	0	0	0
BTetCA 1000 mg/kg	n	0	0	12	0	0	12	0	0	0

Test article		Abnormal NC behavior				Stereotypy NC			
Dose		0	1	2	3	0	1	2	3
BTetCA 0 mg/kg	n	12	0	0	0	12	0	0	0
BTetCA 100 mg/kg	n	12	0	0	0	12	0	0	0
BTetCA 300 mg/kg	n	12	0	0	0	12	0	0	0
BTetCA 1000 mg/kg	n	12	0	0	0	12	0	0	0

Arousal) -2: Unconscious/semi-conscious, -1: Reduced awareness, 0: Nomal, 1: Increased alertness, 2: Markedly alert
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Stereotypy) 0: None, 1: Minor, 2: Moderate, 3: Sevear
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 105 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Open field observation Period : F0 before mating

Generation : F0 Sex : Female Week : 2 Species : Rat

Test article Dose		Gait NC					Posture NC		
		U	0	1	2	3	N	F	H
BTetCA 0 mg/kg	n	0	12	0	0	0	12	0	0
BTetCA 100 mg/kg	n	0	12	0	0	0	12	0	0
BTetCA 300 mg/kg	n	0	12	0	0	0	12	0	0
BTetCA 1000 mg/kg	n	0	12	0	0	0	12	0	0

Test article Dose		Grooming NC			Urination NC			
		0	1	2	0	1	2	3
BTetCA 0 mg/kg	n	12	0	0	12	0	0	0
BTetCA 100 mg/kg	n	12	0	0	12	0	0	0
BTetCA 300 mg/kg	n	12	0	0	12	0	0	0
BTetCA 1000 mg/kg	n	12	0	0	12	0	0	0

Gait) U: No/minimal location, 0: Nomal, 1: Slight, 2: Moderate, 3: Markedly
Posture) N: Normal, F: Flattened, H: Hunched
Grooming) 0: None, 1: Occasional bouts (up to four), 2: Numerous (more than four)
Urination) 0: None, 1: Small amount, 2: Moderate amount, 3: Large/excessive amount
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 106 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Open field observation Period : F0 before mating

Generation : F0 Sex : Female Week : 2 Species : Rat

Test article Dose		Rearing	Defecation count
BTetCA 0 mg/kg	n	12	12
	Mean	7	0
	S.D.	2	0
BTetCA 100 mg/kg	n	12	12
	Mean	8	0
	S.D.	2	0
			EF
BTetCA 300 mg/kg	n	12	12
	Mean	7	0
	S.D.	2	0
			EF
BTetCA 1000 mg/kg	n	12	12
	Mean	7	0
	S.D.	2	0
			EF

Not significantly different from BTetCA 0 mg/kg

EF : The group mean is the same and unbiased variance 0 for all groups. All data of all groups are same.

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 107 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Open field observation Period : F0 gestation

Generation : F0 Sex : Female Day : 1 Species : Rat

Test article		Arousal NC					Convulsion NC			
Dose		-2	-1	0	1	2	0	1	2	3
BTetCA 0 mg/kg	n	0	0	12	0	0	12	0	0	0
BTetCA 100 mg/kg	n	0	0	12	0	0	12	0	0	0
BTetCA 300 mg/kg	n	0	0	12	0	0	12	0	0	0
BTetCA 1000 mg/kg	n	0	0	12	0	0	12	0	0	0

Test article		Abnormal NC behavior				Stereotypy NC			
Dose		0	1	2	3	0	1	2	3
BTetCA 0 mg/kg	n	12	0	0	0	12	0	0	0
BTetCA 100 mg/kg	n	12	0	0	0	12	0	0	0
BTetCA 300 mg/kg	n	12	0	0	0	12	0	0	0
BTetCA 1000 mg/kg	n	12	0	0	0	12	0	0	0

Arousal) -2: Unconscious/semi-conscious, -1: Reduced awareness, 0: Nomal, 1: Increased alertness, 2: Markedly alert
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Stereotypy) 0: None, 1: Minor, 2: Moderate, 3: Sevear
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 108 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Open field observation Period : F0 gestation

Generation : F0 Sex : Female Day : 1 Species : Rat

Test article Dose		Gait NC					Posture NC		
		U	0	1	2	3	N	F	H
BTetCA 0 mg/kg	n	0	12	0	0	0	12	0	0
BTetCA 100 mg/kg	n	0	12	0	0	0	12	0	0
BTetCA 300 mg/kg	n	0	12	0	0	0	12	0	0
BTetCA 1000 mg/kg	n	0	12	0	0	0	12	0	0

Test article Dose		Grooming NC			Urination NC			
		0	1	2	0	1	2	3
BTetCA 0 mg/kg	n	12	0	0	12	0	0	0
BTetCA 100 mg/kg	n	12	0	0	12	0	0	0
BTetCA 300 mg/kg	n	12	0	0	11	1	0	0
BTetCA 1000 mg/kg	n	12	0	0	12	0	0	0

Gait) U: No/minimal location, 0: Nomal, 1: Slight, 2: Moderate, 3: Markedly
Posture) N: Normal, F: Flattened, H: Hunched
Grooming) 0: None, 1: Occasional bouts (up to four), 2: Numerous (more than four)
Urination) 0: None, 1: Small amount, 2: Moderate amount, 3: Large/excessive amount
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 109 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Open field observation Period : F0 gestation

Generation : F0 Sex : Female Day : 1 Species : Rat

Test article Dose		Rearing	Defecation count
BTetCA 0 mg/kg	n	12	12
	Mean	7	0
	S.D.	3	0
BTetCA 100 mg/kg	n	12	12
	Mean	7	0
	S.D.	2	0
			EF
BTetCA 300 mg/kg	n	12	12
	Mean	7	0
	S.D.	2	0
			EF
BTetCA 1000 mg/kg	n	12	12
	Mean	6	0
	S.D.	3	0
			EF

Not significantly different from BTetCA 0 mg/kg

EF : The group mean is the same and unbiased variance 0 for all groups. All data of all groups are same.

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 110 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Open field observation Period : F0 gestation

Generation : F0 Sex : Female Day : 7 Species : Rat

Test article		Arousal NC					Convulsion NC			
Dose		-2	-1	0	1	2	0	1	2	3
BTetCA 0 mg/kg	n	0	0	12	0	0	12	0	0	0
BTetCA 100 mg/kg	n	0	0	12	0	0	12	0	0	0
BTetCA 300 mg/kg	n	0	0	12	0	0	12	0	0	0
BTetCA 1000 mg/kg	n	0	0	12	0	0	12	0	0	0

Test article		Abnormal NC behavior				Stereotypy NC			
Dose		0	1	2	3	0	1	2	3
BTetCA 0 mg/kg	n	12	0	0	0	12	0	0	0
BTetCA 100 mg/kg	n	12	0	0	0	12	0	0	0
BTetCA 300 mg/kg	n	12	0	0	0	12	0	0	0
BTetCA 1000 mg/kg	n	12	0	0	0	12	0	0	0

Arousal) -2: Unconscious/semi-conscious, -1: Reduced awareness, 0: Nomal, 1: Increased alertness, 2: Markedly alert
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Stereotypy) 0: None, 1: Minor, 2: Moderate, 3: Sevear
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 111 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Open field observation Period : F0 gestation

Generation : F0 Sex : Female Day : 7 Species : Rat

Test article Dose		Gait NC					Posture NC		
		U	0	1	2	3	N	F	H
BTetCA 0 mg/kg	n	0	12	0	0	0	12	0	0
BTetCA 100 mg/kg	n	0	12	0	0	0	12	0	0
BTetCA 300 mg/kg	n	0	12	0	0	0	12	0	0
BTetCA 1000 mg/kg	n	0	12	0	0	0	12	0	0

Test article Dose		Grooming NC			Urination NC			
		0	1	2	0	1	2	3
BTetCA 0 mg/kg	n	12	0	0	12	0	0	0
BTetCA 100 mg/kg	n	12	0	0	12	0	0	0
BTetCA 300 mg/kg	n	12	0	0	11	1	0	0
BTetCA 1000 mg/kg	n	12	0	0	11	1	0	0

Gait) U: No/minimal location, 0: Nomal, 1: Slight, 2: Moderate, 3: Markedly
Posture) N: Normal, F: Flattened, H: Hunched
Grooming) 0: None, 1: Occasional bouts (up to four), 2: Numerous (more than four)
Urination) 0: None, 1: Small amount, 2: Moderate amount, 3: Large/excessive amount
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 112 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Open field observation Period : F0 gestation

Generation : F0 Sex : Female Day : 7 Species : Rat

Test article Dose		Rearing	Defecation count
BTetCA 0 mg/kg	n	12	12
	Mean	6	0
	S.D.	3	0
BTetCA 100 mg/kg	n	12	12
	Mean	6	0
	S.D.	2	0
BTetCA 300 mg/kg	n	12	12
	Mean	6	0
	S.D.	2	0
BTetCA 1000 mg/kg	n	12	12
	Mean	6	0
	S.D.	2	0

Not significantly different from BTetCA 0 mg/kg

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 113 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Open field observation Period : F0 gestation

Generation : F0 Sex : Female Day : 14 Species : Rat

Test article		Arousal NC					Convulsion NC			
Dose		-2	-1	0	1	2	0	1	2	3
BTetCA 0 mg/kg	n	0	0	12	0	0	12	0	0	0
BTetCA 100 mg/kg	n	0	0	12	0	0	12	0	0	0
BTetCA 300 mg/kg	n	0	0	12	0	0	12	0	0	0
BTetCA 1000 mg/kg	n	0	0	12	0	0	12	0	0	0

Test article		Abnormal NC behavior				Stereotypy NC			
Dose		0	1	2	3	0	1	2	3
BTetCA 0 mg/kg	n	12	0	0	0	12	0	0	0
BTetCA 100 mg/kg	n	12	0	0	0	12	0	0	0
BTetCA 300 mg/kg	n	12	0	0	0	12	0	0	0
BTetCA 1000 mg/kg	n	12	0	0	0	12	0	0	0

Arousal) -2: Unconscious/semi-conscious, -1: Reduced awareness, 0: Nomal, 1: Increased alertness, 2: Markedly alert
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Stereotypy) 0: None, 1: Minor, 2: Moderate, 3: Sevear
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 114 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Open field observation Period : F0 gestation

Generation : F0 Sex : Female Day : 14 Species : Rat

Test article Dose		Gait NC					Posture NC		
		U	0	1	2	3	N	F	H
BTetCA 0 mg/kg	n	0	12	0	0	0	12	0	0
BTetCA 100 mg/kg	n	0	12	0	0	0	12	0	0
BTetCA 300 mg/kg	n	0	12	0	0	0	12	0	0
BTetCA 1000 mg/kg	n	0	12	0	0	0	12	0	0

Test article Dose		Grooming NC			Urination NC			
		0	1	2	0	1	2	3
BTetCA 0 mg/kg	n	12	0	0	12	0	0	0
BTetCA 100 mg/kg	n	12	0	0	12	0	0	0
BTetCA 300 mg/kg	n	12	0	0	12	0	0	0
BTetCA 1000 mg/kg	n	12	0	0	12	0	0	0

Gait) U: No/minimal location, 0: Nomal, 1: Slight, 2: Moderate, 3: Markedly
Posture) N: Normal, F: Flattened, H: Hunched
Grooming) 0: None, 1: Occasional bouts (up to four), 2: Numerous (more than four)
Urination) 0: None, 1: Small amount, 2: Moderate amount, 3: Large/excessive amount
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 115 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Open field observation Period : F0 gestation

Generation : F0 Sex : Female Day : 14 Species : Rat

Test article Dose		Rearing	Defecation count
BTetCA 0 mg/kg	n	12	12
	Mean	5	0
	S.D.	1	0
BTetCA 100 mg/kg	n	12	12
	Mean	6	0
	S.D.	2	0
			EF
BTetCA 300 mg/kg	n	12	12
	Mean	5	0
	S.D.	2	0
			EF
BTetCA 1000 mg/kg	n	12	12
	Mean	5	0
	S.D.	2	0
			EF

Not significantly different from BTetCA 0 mg/kg

EF : The group mean is the same and unbiased variance 0 for all groups. All data of all groups are same.

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 116 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Open field observation Period : F0 gestation

Generation : F0 Sex : Female Day : 20 Species : Rat

Test article		Arousal NC					Convulsion NC			
Dose		-2	-1	0	1	2	0	1	2	3
BTetCA 0 mg/kg	n	0	0	12	0	0	12	0	0	0
BTetCA 100 mg/kg	n	0	0	12	0	0	12	0	0	0
BTetCA 300 mg/kg	n	0	0	12	0	0	12	0	0	0
BTetCA 1000 mg/kg	n	0	0	12	0	0	12	0	0	0

Test article		Abnormal NC behavior				Stereotypy NC			
Dose		0	1	2	3	0	1	2	3
BTetCA 0 mg/kg	n	12	0	0	0	12	0	0	0
BTetCA 100 mg/kg	n	12	0	0	0	12	0	0	0
BTetCA 300 mg/kg	n	12	0	0	0	12	0	0	0
BTetCA 1000 mg/kg	n	12	0	0	0	12	0	0	0

Arousal) -2: Unconscious/semi-conscious, -1: Reduced awareness, 0: Nomal, 1: Increased alertness, 2: Markedly alert
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Stereotypy) 0: None, 1: Minor, 2: Moderate, 3: Sevear
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 117 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Open field observation Period : F0 gestation

Generation : F0 Sex : Female Day : 20 Species : Rat

Test article Dose		Gait NC					Posture NC		
		U	0	1	2	3	N	F	H
BTetCA 0 mg/kg	n	0	12	0	0	0	12	0	0
BTetCA 100 mg/kg	n	0	12	0	0	0	12	0	0
BTetCA 300 mg/kg	n	0	12	0	0	0	12	0	0
BTetCA 1000 mg/kg	n	0	12	0	0	0	12	0	0

Test article Dose		Grooming NC			Urination NC			
		0	1	2	0	1	2	3
BTetCA 0 mg/kg	n	12	0	0	11	1	0	0
BTetCA 100 mg/kg	n	12	0	0	12	0	0	0
BTetCA 300 mg/kg	n	12	0	0	11	1	0	0
BTetCA 1000 mg/kg	n	12	0	0	11	1	0	0

Gait) U: No/minimal location, 0: Nomal, 1: Slight, 2: Moderate, 3: Markedly
Posture) N: Normal, F: Flattened, H: Hunched
Grooming) 0: None, 1: Occasional bouts (up to four), 2: Numerous (more than four)
Urination) 0: None, 1: Small amount, 2: Moderate amount, 3: Large/excessive amount
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 118 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Open field observation Period : F0 gestation

Generation : F0 Sex : Female Day : 20 Species : Rat

Test article Dose		Rearing	Defecation count
BTetCA 0 mg/kg	n	12	12
	Mean	4	0
	S.D.	2	0
BTetCA 100 mg/kg	n	12	12
	Mean	4	0
	S.D.	2	0
BTetCA 300 mg/kg	n	12	12
	Mean	3	0
	S.D.	2	0
BTetCA 1000 mg/kg	n	12	12
	Mean	4	0
	S.D.	1	1

Not significantly different from BTetCA 0 mg/kg

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 119 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Open field observation Period : F0 lactation

Generation : F0 Sex : Female Day : 4 Species : Rat

Test article		Arousal NC					Convulsion NC			
Dose		-2	-1	0	1	2	0	1	2	3
BTetCA 0 mg/kg	n	0	0	12	0	0	12	0	0	0
BTetCA 100 mg/kg	n	0	0	12	0	0	12	0	0	0
BTetCA 300 mg/kg	n	0	0	12	0	0	12	0	0	0
BTetCA 1000 mg/kg	n	0	0	12	0	0	12	0	0	0

Test article		Abnormal NC behavior				Stereotypy NC			
Dose		0	1	2	3	0	1	2	3
BTetCA 0 mg/kg	n	12	0	0	0	12	0	0	0
BTetCA 100 mg/kg	n	12	0	0	0	12	0	0	0
BTetCA 300 mg/kg	n	12	0	0	0	12	0	0	0
BTetCA 1000 mg/kg	n	12	0	0	0	12	0	0	0

Arousal) -2: Unconscious/semi-conscious, -1: Reduced awareness, 0: Nomal, 1: Increased alertness, 2: Markedly alert
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Stereotypy) 0: None, 1: Minor, 2: Moderate, 3: Sevear
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 120 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Open field observation Period : F0 lactation

Generation : F0 Sex : Female Day : 4 Species : Rat

Test article Dose		Gait NC					Posture NC		
		U	0	1	2	3	N	F	H
BTetCA 0 mg/kg	n	0	12	0	0	0	12	0	0
BTetCA 100 mg/kg	n	0	12	0	0	0	12	0	0
BTetCA 300 mg/kg	n	0	12	0	0	0	12	0	0
BTetCA 1000 mg/kg	n	0	12	0	0	0	12	0	0

Test article Dose		Grooming NC			Urination NC			
		0	1	2	0	1	2	3
BTetCA 0 mg/kg	n	12	0	0	11	1	0	0
BTetCA 100 mg/kg	n	12	0	0	12	0	0	0
BTetCA 300 mg/kg	n	12	0	0	12	0	0	0
BTetCA 1000 mg/kg	n	12	0	0	12	0	0	0

Gait) U: No/minimal location, 0: Nomal, 1: Slight, 2: Moderate, 3: Markedly
Posture) N: Normal, F: Flattened, H: Hunched
Grooming) 0: None, 1: Occasional bouts (up to four), 2: Numerous (more than four)
Urination) 0: None, 1: Small amount, 2: Moderate amount, 3: Large/excessive amount
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 121 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Open field observation Period : F0 lactation

Generation : F0 Sex : Female Day : 4 Species : Rat

Test article Dose		Rearing	Defecation count
BTetCA 0 mg/kg	n	12	12
	Mean	5	0
	S.D.	2	0
BTetCA 100 mg/kg	n	12	12
	Mean	5	0
	S.D.	2	0
			EF
BTetCA 300 mg/kg	n	12	12
	Mean	5	0
	S.D.	3	0
			EF
BTetCA 1000 mg/kg	n	12	12
	Mean	6	0
	S.D.	2	0
			EF

Not significantly different from BTetCA 0 mg/kg

EF : The group mean is the same and unbiased variance 0 for all groups. All data of all groups are same.

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 122 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Open field observation Period : Administration

Generation : F0 Sex : Female Week : 1 Species : Rat

Test article		Arousal NC					Convulsion NC			
Dose		-2	-1	0	1	2	0	1	2	3
BTetCA 0 mg/kg	n	0	0	10	0	0	10	0	0	0
BTetCA 1000 mg/kg	n	0	0	10	0	0	10	0	0	0

Test article		Abnormal NC behavior				Stereotypy NC			
Dose		0	1	2	3	0	1	2	3
BTetCA 0 mg/kg	n	10	0	0	0	10	0	0	0
BTetCA 1000 mg/kg	n	10	0	0	0	10	0	0	0

Test article		Gait NC					Posture NC		
Dose		U	0	1	2	3	N	F	H
BTetCA 0 mg/kg	n	0	10	0	0	0	10	0	0
BTetCA 1000 mg/kg	n	0	10	0	0	0	10	0	0

Arousal) -2: Unconscious/semi-conscious, -1: Reduced awareness, 0: Nomal, 1: Increased alertness, 2: Markedly alert
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Stereotypy) 0: None, 1: Minor, 2: Moderate, 3: Sevear
Gait) U: No/minimal location, 0: Nomal, 1: Slight, 2: Moderate, 3: Markedly
Posture) N: Normal, F: Flattened, H: Hunched
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 123 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Open field observation Period : Administration

Generation : F0 Sex : Female Week : 1 Species : Rat

Test article		Grooming NC			Urination NC			
Dose		0	1	2	0	1	2	3
BTetCA 0 mg/kg	n	10	0	0	10	0	0	0
BTetCA 1000 mg/kg	n	10	0	0	10	0	0	0

Grooming) 0: None, 1: Occasional bouts (up to four), 2: Numerous (more than four)
Urination) 0: None, 1: Small amount, 2: Moderate amount, 3: Large/excessive amount
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 124 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Open field observation Period : Administration

Generation : F0 Sex : Female Week : 1 Species : Rat

Test article Dose		Rearing	Defecation count
BTetCA 0 mg/kg	n	10	10
	Mean	7	0
	S.D.	2	0
BTetCA 1000 mg/kg	n	10	10
	Mean	6	0
	S.D.	2	0
			EF

Not significantly different from BTetCA 0 mg/kg

EF : The group mean is the same and unbiased variance 0 for all groups. All data of all groups are same.

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 125 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Open field observation Period : Administration

Generation : F0 Sex : Female Week : 2 Species : Rat

Test article		Arousal NC					Convulsion NC			
Dose		-2	-1	0	1	2	0	1	2	3
BTetCA 0 mg/kg	n	0	0	10	0	0	10	0	0	0
BTetCA 1000 mg/kg	n	0	0	10	0	0	10	0	0	0

Test article		Abnormal NC behavior				Stereotypy NC			
Dose		0	1	2	3	0	1	2	3
BTetCA 0 mg/kg	n	10	0	0	0	10	0	0	0
BTetCA 1000 mg/kg	n	10	0	0	0	10	0	0	0

Test article		Gait NC					Posture NC		
Dose		U	0	1	2	3	N	F	H
BTetCA 0 mg/kg	n	0	10	0	0	0	10	0	0
BTetCA 1000 mg/kg	n	0	10	0	0	0	10	0	0

Arousal) -2: Unconscious/semi-conscious, -1: Reduced awareness, 0: Nomal, 1: Increased alertness, 2: Markedly alert
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Stereotypy) 0: None, 1: Minor, 2: Moderate, 3: Sevear
Gait) U: No/minimal location, 0: Nomal, 1: Slight, 2: Moderate, 3: Markedly
Posture) N: Normal, F: Flattened, H: Hunched
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 126 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Open field observation Period : Administration

Generation : F0 Sex : Female Week : 2 Species : Rat

Test article		Grooming NC			Urination NC			
Dose		0	1	2	0	1	2	3
BTetCA 0 mg/kg	n	10	0	0	10	0	0	0
BTetCA 1000 mg/kg	n	10	0	0	9	1	0	0

Grooming) 0: None, 1: Occasional bouts (up to four), 2: Numerous (more than four)
Urination) 0: None, 1: Small amount, 2: Moderate amount, 3: Large/excessive amount
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 127 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Open field observation Period : Administration

Generation : F0 Sex : Female Week : 2 Species : Rat

Test article Dose		Rearing	Defecation count
BTetCA 0 mg/kg	n	10	10
	Mean	7	0
	S.D.	1	0
BTetCA 1000 mg/kg	n	10	10
	Mean	7	0
	S.D.	2	0
			EF

Not significantly different from BTetCA 0 mg/kg

EF : The group mean is the same and unbiased variance 0 for all groups. All data of all groups are same.

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 128 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Open field observation Period : Administration

Generation : F0 Sex : Female Week : 3 Species : Rat

Test article		Arousal NC					Convulsion NC			
Dose		-2	-1	0	1	2	0	1	2	3
BTetCA 0 mg/kg	n	0	0	10	0	0	10	0	0	0
BTetCA 1000 mg/kg	n	0	0	10	0	0	10	0	0	0

Test article		Abnormal NC behavior				Stereotypy NC			
Dose		0	1	2	3	0	1	2	3
BTetCA 0 mg/kg	n	10	0	0	0	10	0	0	0
BTetCA 1000 mg/kg	n	10	0	0	0	10	0	0	0

Test article		Gait NC					Posture NC		
Dose		U	0	1	2	3	N	F	H
BTetCA 0 mg/kg	n	0	10	0	0	0	10	0	0
BTetCA 1000 mg/kg	n	0	10	0	0	0	10	0	0

Arousal) -2: Unconscious/semi-conscious, -1: Reduced awareness, 0: Nomal, 1: Increased alertness, 2: Markedly alert
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Stereotypy) 0: None, 1: Minor, 2: Moderate, 3: Sevear
Gait) U: No/minimal location, 0: Nomal, 1: Slight, 2: Moderate, 3: Markedly
Posture) N: Normal, F: Flattened, H: Hunched
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 129 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Open field observation Period : Administration

Generation : F0 Sex : Female Week : 3 Species : Rat

Test article		Grooming NC			Urination NC			
Dose		0	1	2	0	1	2	3
BTetCA 0 mg/kg	n	10	0	0	9	1	0	0
BTetCA 1000 mg/kg	n	10	0	0	10	0	0	0

Grooming) 0: None, 1: Occasional bouts (up to four), 2: Numerous (more than four)
Urination) 0: None, 1: Small amount, 2: Moderate amount, 3: Large/excessive amount
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 130 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Open field observation Period : Administration

Generation : F0 Sex : Female Week : 3 Species : Rat

Test article Dose		Rearing	Defecation count
BTetCA 0 mg/kg	n	10	10
	Mean	8	0
	S.D.	3	0
BTetCA 1000 mg/kg	n	10	10
	Mean	7	0
	S.D.	2	0
			EF

Not significantly different from BTetCA 0 mg/kg

EF : The group mean is the same and unbiased variance 0 for all groups. All data of all groups are same.

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 131 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Open field observation Period : Administration

Generation : F0 Sex : Female Week : 4 Species : Rat

Test article		Arousal NC					Convulsion NC			
Dose		-2	-1	0	1	2	0	1	2	3
BTetCA 0 mg/kg	n	0	0	10	0	0	10	0	0	0
BTetCA 1000 mg/kg	n	0	0	10	0	0	10	0	0	0

Test article		Abnormal NC behavior				Stereotypy NC			
Dose		0	1	2	3	0	1	2	3
BTetCA 0 mg/kg	n	10	0	0	0	10	0	0	0
BTetCA 1000 mg/kg	n	10	0	0	0	10	0	0	0

Test article		Gait NC					Posture NC		
Dose		U	0	1	2	3	N	F	H
BTetCA 0 mg/kg	n	0	10	0	0	0	10	0	0
BTetCA 1000 mg/kg	n	0	10	0	0	0	10	0	0

Arousal) -2: Unconscious/semi-conscious, -1: Reduced awareness, 0: Nomal, 1: Increased alertness, 2: Markedly alert
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Stereotypy) 0: None, 1: Minor, 2: Moderate, 3: Sevear
Gait) U: No/minimal location, 0: Nomal, 1: Slight, 2: Moderate, 3: Markedly
Posture) N: Normal, F: Flattened, H: Hunched
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 132 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Open field observation Period : Administration

Generation : F0 Sex : Female Week : 4 Species : Rat

Test article		Grooming NC			Urination NC			
Dose		0	1	2	0	1	2	3
BTetCA 0 mg/kg	n	10	0	0	10	0	0	0
BTetCA 1000 mg/kg	n	10	0	0	10	0	0	0

Grooming) 0: None, 1: Occasional bouts (up to four), 2: Numerous (more than four)
Urination) 0: None, 1: Small amount, 2: Moderate amount, 3: Large/excessive amount
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 133 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Open field observation Period : Administration

Generation : F0 Sex : Female Week : 4 Species : Rat

Test article Dose		Rearing	Defecation count
BTetCA 0 mg/kg	n	10	10
	Mean	8	0
	S.D.	3	0
BTetCA 1000 mg/kg	n	10	10
	Mean	8	0
	S.D.	2	0
			EF

Not significantly different from BTetCA 0 mg/kg

EF : The group mean is the same and unbiased variance 0 for all groups. All data of all groups are same.

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 134 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Open field observation Period : Administration

Generation : F0 Sex : Female Week : 5 Species : Rat

Test article		Arousal NC					Convulsion NC			
Dose		-2	-1	0	1	2	0	1	2	3
BTetCA 0 mg/kg	n	0	0	10	0	0	10	0	0	0
BTetCA 1000 mg/kg	n	0	0	10	0	0	10	0	0	0

Test article		Abnormal NC behavior				Stereotypy NC			
Dose		0	1	2	3	0	1	2	3
BTetCA 0 mg/kg	n	10	0	0	0	10	0	0	0
BTetCA 1000 mg/kg	n	10	0	0	0	10	0	0	0

Test article		Gait NC					Posture NC		
Dose		U	0	1	2	3	N	F	H
BTetCA 0 mg/kg	n	0	10	0	0	0	10	0	0
BTetCA 1000 mg/kg	n	0	10	0	0	0	10	0	0

Arousal) -2: Unconscious/semi-conscious, -1: Reduced awareness, 0: Nomal, 1: Increased alertness, 2: Markedly alert
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Stereotypy) 0: None, 1: Minor, 2: Moderate, 3: Sevear
Gait) U: No/minimal location, 0: Nomal, 1: Slight, 2: Moderate, 3: Markedly
Posture) N: Normal, F: Flattened, H: Hunched
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 135 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Open field observation Period : Administration

Generation : F0 Sex : Female Week : 5 Species : Rat

Test article		Grooming NC			Urination NC			
Dose		0	1	2	0	1	2	3
BTetCA 0 mg/kg	n	10	0	0	10	0	0	0
BTetCA 1000 mg/kg	n	10	0	0	10	0	0	0

Grooming) 0: None, 1: Occasional bouts (up to four), 2: Numerous (more than four)
Urination) 0: None, 1: Small amount, 2: Moderate amount, 3: Large/excessive amount
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 136 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Open field observation Period : Administration

Generation : F0 Sex : Female Week : 5 Species : Rat

Test article Dose		Rearing	Defecation count
BTetCA 0 mg/kg	n	10	10
	Mean	8	0
	S.D.	2	0
BTetCA 1000 mg/kg	n	10	10
	Mean	8	0
	S.D.	2	0
			EF

Not significantly different from BTetCA 0 mg/kg

EF : The group mean is the same and unbiased variance 0 for all groups. All data of all groups are same.

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 137 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Open field observation Period : Administration

Generation : F0 Sex : Female Week : 6 Species : Rat

Test article		Arousal NC					Convulsion NC			
Dose		-2	-1	0	1	2	0	1	2	3
BTetCA 0 mg/kg	n	0	0	10	0	0	10	0	0	0
BTetCA 1000 mg/kg	n	0	0	10	0	0	10	0	0	0

Test article		Abnormal NC behavior				Stereotypy NC			
Dose		0	1	2	3	0	1	2	3
BTetCA 0 mg/kg	n	10	0	0	0	10	0	0	0
BTetCA 1000 mg/kg	n	10	0	0	0	10	0	0	0

Test article		Gait NC					Posture NC		
Dose		U	0	1	2	3	N	F	H
BTetCA 0 mg/kg	n	0	10	0	0	0	10	0	0
BTetCA 1000 mg/kg	n	0	10	0	0	0	10	0	0

Arousal) -2: Unconscious/semi-conscious, -1: Reduced awareness, 0: Nomal, 1: Increased alertness, 2: Markedly alert
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Stereotypy) 0: None, 1: Minor, 2: Moderate, 3: Sevear
Gait) U: No/minimal location, 0: Nomal, 1: Slight, 2: Moderate, 3: Markedly
Posture) N: Normal, F: Flattened, H: Hunched
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 138 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Open field observation Period : Administration

Generation : F0 Sex : Female Week : 6 Species : Rat

Test article		Grooming NC			Urination NC			
Dose		0	1	2	0	1	2	3
BTetCA 0 mg/kg	n	10	0	0	10	0	0	0
BTetCA 1000 mg/kg	n	10	0	0	10	0	0	0

Grooming) 0: None, 1: Occasional bouts (up to four), 2: Numerous (more than four)
Urination) 0: None, 1: Small amount, 2: Moderate amount, 3: Large/excessive amount
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 139 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Open field observation Period : Administration

Generation : F0 Sex : Female Week : 6 Species : Rat

Test article Dose		Rearing	Defecation count
BTetCA 0 mg/kg	n	10	10
	Mean	9	0
	S.D.	3	0
BTetCA 1000 mg/kg	n	10	10
	Mean	8	0
	S.D.	2	0
			EF

Not significantly different from BTetCA 0 mg/kg

EF : The group mean is the same and unbiased variance 0 for all groups. All data of all groups are same.

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 140 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Open field observation Period : Recovery

Generation : F0 Sex : Male Week : 1 Species : Rat

Test article		Arousal NC					Convulsion NC			
Dose		-2	-1	0	1	2	0	1	2	3
BTetCA 0 mg/kg	n	0	0	5	0	0	5	0	0	0
BTetCA 1000 mg/kg	n	0	0	5	0	0	5	0	0	0

Test article		Abnormal NC behavior				Stereotypy NC			
Dose		0	1	2	3	0	1	2	3
BTetCA 0 mg/kg	n	5	0	0	0	5	0	0	0
BTetCA 1000 mg/kg	n	5	0	0	0	5	0	0	0

Test article		Gait NC					Posture NC		
Dose		U	0	1	2	3	N	F	H
BTetCA 0 mg/kg	n	0	5	0	0	0	5	0	0
BTetCA 1000 mg/kg	n	0	5	0	0	0	5	0	0

Arousal) -2: Unconscious/semi-conscious, -1: Reduced awareness, 0: Nomal, 1: Increased alertness, 2: Markedly alert
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Stereotypy) 0: None, 1: Minor, 2: Moderate, 3: Sevear
Gait) U: No/minimal location, 0: Nomal, 1: Slight, 2: Moderate, 3: Markedly
Posture) N: Normal, F: Flattened, H: Hunched
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 141 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Open field observation Period : Recovery

Generation : F0 Sex : Male Week : 1 Species : Rat

Test article		Grooming NC			Urination NC			
Dose		0	1	2	0	1	2	3
BTetCA 0 mg/kg	n	5	0	0	4	1	0	0
BTetCA 1000 mg/kg	n	5	0	0	5	0	0	0

Grooming) 0: None, 1: Occasional bouts (up to four), 2: Numerous (more than four)
Urination) 0: None, 1: Small amount, 2: Moderate amount, 3: Large/excessive amount
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 142 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Open field observation Period : Recovery

Generation : F0 Sex : Male Week : 1 Species : Rat

Test article Dose		Rearing	Defecation count
BTetCA 0 mg/kg	n	5	5
	Mean	5	0
	S.D.	1	0
BTetCA 1000 mg/kg	n	5	5
	Mean	4	0
	S.D.	2	0
			EF

Not significantly different from BTetCA 0 mg/kg

EF : The group mean is the same and unbiased variance 0 for all groups. All data of all groups are same.

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 143 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Open field observation Period : Recovery

Generation : F0 Sex : Male Week : 2 Species : Rat

Test article		Arousal NC					Convulsion NC			
Dose		-2	-1	0	1	2	0	1	2	3
BTetCA 0 mg/kg	n	0	0	5	0	0	5	0	0	0
BTetCA 1000 mg/kg	n	0	0	5	0	0	5	0	0	0

Test article		Abnormal NC behavior				Stereotypy NC			
Dose		0	1	2	3	0	1	2	3
BTetCA 0 mg/kg	n	5	0	0	0	5	0	0	0
BTetCA 1000 mg/kg	n	5	0	0	0	5	0	0	0

Test article		Gait NC					Posture NC		
Dose		U	0	1	2	3	N	F	H
BTetCA 0 mg/kg	n	0	5	0	0	0	5	0	0
BTetCA 1000 mg/kg	n	0	5	0	0	0	5	0	0

Arousal) -2: Unconscious/semi-conscious, -1: Reduced awareness, 0: Nomal, 1: Increased alertness, 2: Markedly alert
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Stereotypy) 0: None, 1: Minor, 2: Moderate, 3: Sevear
Gait) U: No/minimal location, 0: Nomal, 1: Slight, 2: Moderate, 3: Markedly
Posture) N: Normal, F: Flattened, H: Hunched
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 144 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Open field observation Period : Recovery

Generation : F0 Sex : Male Week : 2 Species : Rat

Test article		Grooming NC			Urination NC			
Dose		0	1	2	0	1	2	3
BTetCA 0 mg/kg	n	5	0	0	4	1	0	0
BTetCA 1000 mg/kg	n	5	0	0	4	1	0	0

Grooming) 0: None, 1: Occasional bouts (up to four), 2: Numerous (more than four)
Urination) 0: None, 1: Small amount, 2: Moderate amount, 3: Large/excessive amount
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 145 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Open field observation Period : Recovery

Generation : F0 Sex : Male Week : 2 Species : Rat

Test article Dose		Rearing	Defecation count
BTetCA 0 mg/kg	n	5	5
	Mean	5	0
	S.D.	1	0
BTetCA 1000 mg/kg	n	5	5
	Mean	5	0
	S.D.	2	0
			EF

Not significantly different from BTetCA 0 mg/kg

EF : The group mean is the same and unbiased variance 0 for all groups. All data of all groups are same.

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 146 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Open field observation Period : Recovery

Generation : F0 Sex : Female Week : 1 Species : Rat

Test article		Arousal NC					Convulsion NC			
Dose		-2	-1	0	1	2	0	1	2	3
BTetCA 0 mg/kg	n	0	0	5	0	0	5	0	0	0
BTetCA 1000 mg/kg	n	0	0	5	0	0	5	0	0	0

Test article		Abnormal NC behavior				Stereotypy NC			
Dose		0	1	2	3	0	1	2	3
BTetCA 0 mg/kg	n	5	0	0	0	5	0	0	0
BTetCA 1000 mg/kg	n	5	0	0	0	5	0	0	0

Test article		Gait NC					Posture NC		
Dose		U	0	1	2	3	N	F	H
BTetCA 0 mg/kg	n	0	5	0	0	0	5	0	0
BTetCA 1000 mg/kg	n	0	5	0	0	0	5	0	0

Arousal) -2: Unconscious/semi-conscious, -1: Reduced awareness, 0: Nomal, 1: Increased alertness, 2: Markedly alert
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Stereotypy) 0: None, 1: Minor, 2: Moderate, 3: Sevear
Gait) U: No/minimal location, 0: Nomal, 1: Slight, 2: Moderate, 3: Markedly
Posture) N: Normal, F: Flattened, H: Hunched
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 147 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Open field observation Period : Recovery

Generation : F0 Sex : Female Week : 1 Species : Rat

Test article		Grooming NC			Urination NC			
Dose		0	1	2	0	1	2	3
BTetCA 0 mg/kg	n	5	0	0	5	0	0	0
BTetCA 1000 mg/kg	n	5	0	0	5	0	0	0

Grooming) 0: None, 1: Occasional bouts (up to four), 2: Numerous (more than four)
Urination) 0: None, 1: Small amount, 2: Moderate amount, 3: Large/excessive amount
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 148 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Open field observation Period : Recovery

Generation : F0 Sex : Female Week : 1 Species : Rat

Test article Dose		Rearing	Defecation count
BTetCA	n	5	5
0 mg/kg	Mean	7	0
	S.D.	2	0
BTetCA	n	5	5
1000 mg/kg	Mean	8	0
	S.D.	2	0
			EF

Not significantly different from BTetCA 0 mg/kg

EF : The group mean is the same and unbiased variance 0 for all groups. All data of all groups are same.

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 149 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Open field observation Period : Recovery

Generation : F0 Sex : Female Week : 2 Species : Rat

Test article		Arousal NC					Convulsion NC			
Dose		-2	-1	0	1	2	0	1	2	3
BTetCA 0 mg/kg	n	0	0	5	0	0	5	0	0	0
BTetCA 1000 mg/kg	n	0	0	5	0	0	5	0	0	0

Test article		Abnormal NC behavior				Stereotypy NC			
Dose		0	1	2	3	0	1	2	3
BTetCA 0 mg/kg	n	5	0	0	0	5	0	0	0
BTetCA 1000 mg/kg	n	5	0	0	0	5	0	0	0

Test article		Gait NC					Posture NC		
Dose		U	0	1	2	3	N	F	H
BTetCA 0 mg/kg	n	0	5	0	0	0	5	0	0
BTetCA 1000 mg/kg	n	0	5	0	0	0	5	0	0

Arousal) -2: Unconscious/semi-conscious, -1: Reduced awareness, 0: Nomal, 1: Increased alertness, 2: Markedly alert
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Stereotypy) 0: None, 1: Minor, 2: Moderate, 3: Sevear
Gait) U: No/minimal location, 0: Nomal, 1: Slight, 2: Moderate, 3: Markedly
Posture) N: Normal, F: Flattened, H: Hunched
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 150 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Open field observation Period : Recovery

Generation : F0 Sex : Female Week : 2 Species : Rat

Test article		Grooming NC			Urination NC			
Dose		0	1	2	0	1	2	3
BTetCA 0 mg/kg	n	5	0	0	5	0	0	0
BTetCA 1000 mg/kg	n	5	0	0	5	0	0	0

Grooming) 0: None, 1: Occasional bouts (up to four), 2: Numerous (more than four)
Urination) 0: None, 1: Small amount, 2: Moderate amount, 3: Large/excessive amount
Not calculated : NC
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 151 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Open field observation Period : Recovery

Generation : F0 Sex : Female Week : 2 Species : Rat

Test article Dose		Rearing	Defecation count
BTetCA 0 mg/kg	n	5	5
	Mean	7	0
	S.D.	4	0
BTetCA 1000 mg/kg	n	5	5
	Mean	7	0
	S.D.	2	0
			EF

Not significantly different from BTetCA 0 mg/kg

EF : The group mean is the same and unbiased variance 0 for all groups. All data of all groups are same.

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 152 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Manipulative test Period : F0 mating

Generation : F0 Sex : Male Week : 6 Species : Rat

Test article		Auditory response				Approach response			Touch response		
Dose		-2	-1	0	1	-1	0	1	-1	0	1
BTetCA 0 mg/kg	n	0	0	5	0	0	5	0	0	5	0
BTetCA 100 mg/kg	n	0	0	5	0	0	5	0	0	5	0
		EF	EF	EF	EF	EF	EF	EF	EF	EF	EF
BTetCA 300 mg/kg	n	0	0	5	0	0	5	0	0	5	0
		EF	EF	EF	EF	EF	EF	EF	EF	EF	EF
BTetCA 1000 mg/kg	n	0	0	5	0	0	5	0	0	5	0
		EF	EF	EF	EF	EF	EF	EF	EF	EF	EF

Test article		Tail pinch response				Pupillary reflex			
Dose		-2	-1	0	1	P	F	L	R
BTetCA 0 mg/kg	n	0	0	5	0	5	0	0	0
BTetCA 100 mg/kg	n	0	0	5	0	5	0	0	0
		EF	EF	EF	EF	EF	EF	EF	EF
BTetCA 300 mg/kg	n	0	0	5	0	5	0	0	0
		EF	EF	EF	EF	EF	EF	EF	EF
BTetCA 1000 mg/kg	n	0	0	5	0	5	0	0	0
		EF	EF	EF	EF	EF	EF	EF	EF

Auditory response) -2: None, -1: Weak, 0: Normal, 1: Exaggerate
Approach response) -1: No reaction/ignores, 0: Normal, 1: Abnormality fearful/aggressive reaction
Touch response) -1: No reaction/ignores, 0: Normal, 1: Abnormality fearful/aggressive reaction
Tail pinch response) -2: None, -1: Weak, 0: Normal, 1: Exaggerate
Pupillary reflex) P: Pass, both, F: Failed, neither, L: Left pupil responds, R: Right pupil responds
Not significantly different from BTetCA 0 mg/kg
EF : The group mean is the same and unbiased variance 0 for all groups. All data of all groups are same.
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 153 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Manipulative test Period : F0 mating

Generation : F0 Sex : Male Week : 6 Species : Rat

Test article Dose		Aerial righting reflex	Landing foot splay mm
BTetCA 0 mg/kg	n	5	5
	Mean	0	96
	S.D.	0	21
BTetCA 100 mg/kg	n	5	5
	Mean	0	91
	S.D.	0	19
		EF	
BTetCA 300 mg/kg	n	5	5
	Mean	0	96
	S.D.	0	13
		EF	
BTetCA 1000 mg/kg	n	5	5
	Mean	0	85
	S.D.	0	11
		EF	

Aerial righting reflex) Total score
Not significantly different from BTetCA 0 mg/kg
EF : The group mean is the same and unbiased variance 0 for all groups. All data of all groups are same.
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 154 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Manipulative test Period : F0 lactation

Generation : F0 Sex : Female Day : 4 Species : Rat

Test article		Auditory response				Approach response			Touch response		
Dose		-2	-1	0	1	-1	0	1	-1	0	1
BTetCA 0 mg/kg	n	0	0	5	0	0	5	0	0	5	0
BTetCA 100 mg/kg	n	0	0	5	0	0	5	0	0	5	0
		EF	EF	EF	EF	EF	EF	EF	EF	EF	EF
BTetCA 300 mg/kg	n	0	0	5	0	0	5	0	0	5	0
		EF	EF	EF	EF	EF	EF	EF	EF	EF	EF
BTetCA 1000 mg/kg	n	0	0	5	0	0	5	0	0	5	0
		EF	EF	EF	EF	EF	EF	EF	EF	EF	EF

Test article		Tail pinch response				Pupillary reflex			
Dose		-2	-1	0	1	P	F	L	R
BTetCA 0 mg/kg	n	0	0	5	0	5	0	0	0
BTetCA 100 mg/kg	n	0	0	5	0	5	0	0	0
		EF	EF	EF	EF	EF	EF	EF	EF
BTetCA 300 mg/kg	n	0	0	5	0	5	0	0	0
		EF	EF	EF	EF	EF	EF	EF	EF
BTetCA 1000 mg/kg	n	0	0	5	0	5	0	0	0
		EF	EF	EF	EF	EF	EF	EF	EF

Auditory response) -2: None, -1: Weak, 0: Normal, 1: Exaggerate
Approach response) -1: No reaction/ignores, 0: Normal, 1: Abnormality fearful/aggressive reaction
Touch response) -1: No reaction/ignores, 0: Normal, 1: Abnormality fearful/aggressive reaction
Tail pinch response) -2: None, -1: Weak, 0: Normal, 1: Exaggerate
Pupillary reflex) P: Pass, both, F: Failed, neither, L: Left pupil responds, R: Right pupil responds
Not significantly different from BTetCA 0 mg/kg
EF : The group mean is the same and unbiased variance 0 for all groups. All data of all groups are same.
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 155 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Manipulative test Period : F0 lactation

Generation : F0 Sex : Female Day : 4 Species : Rat

Test article Dose		Aerial righting reflex	Landing foot splay mm
BTetCA 0 mg/kg	n	5	5
	Mean	0	68
	S.D.	0	23
BTetCA 100 mg/kg	n	5	5
	Mean	0	63
	S.D.	0	10
		EF	
BTetCA 300 mg/kg	n	5	5
	Mean	0	56
	S.D.	0	16
		EF	
BTetCA 1000 mg/kg	n	5	5
	Mean	0	66
	S.D.	0	18
		EF	

Aerial righting reflex) Total score
Not significantly different from BTetCA 0 mg/kg
EF : The group mean is the same and unbiased variance 0 for all groups. All data of all groups are same.
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 156 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Manipulative test Period : Administration

Generation : F0 Sex : Female Week : 6 Species : Rat

Test article		Auditory response				Approach response			Touch response		
Dose		-2	-1	0	1	-1	0	1	-1	0	1
BTetCA 0 mg/kg	n	0	0	5	0	0	5	0	0	5	0
BTetCA 1000 mg/kg	n	0	0	5	0	0	5	0	0	5	0
		EF	EF	EF	EF	EF	EF	EF	EF	EF	EF

Test article		Tail pinch response				Pupillary reflex			
Dose		-2	-1	0	1	P	F	L	R
BTetCA 0 mg/kg	n	0	0	5	0	5	0	0	0
BTetCA 1000 mg/kg	n	0	0	5	0	5	0	0	0
		EF	EF	EF	EF	EF	EF	EF	EF

Auditory response) -2: None, -1: Weak, 0: Normal, 1: Exaggerate
Approach response) -1: No reaction/ignores, 0: Normal, 1: Abnormality fearful/aggressive reaction
Touch response) -1: No reaction/ignores, 0: Normal, 1: Abnormality fearful/aggressive reaction
Tail pinch response) -2: None, -1: Weak, 0: Normal, 1: Exaggerate
Pupillary reflex) P: Pass, both, F: Failed, neither, L: Left pupil responds, R: Right pupil responds
Not significantly different from BTetCA 0 mg/kg
EF : The group mean is the same and unbiased variance 0 for all groups. All data of all groups are same.
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 157 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Manipulative test Period : Administration

Generation : F0 Sex : Female Week : 6 Species : Rat

Test article Dose		Aerial righting reflex	Landing foot splay mm
BTetCA 0 mg/kg	n	5	5
	Mean	0	70
	S.D.	0	19
BTetCA 1000 mg/kg	n	5	5
	Mean	0	69
	S.D.	0	25
		EF	

Aerial righting reflex) Total score

Not significantly different from BTetCA 0 mg/kg

EF : The group mean is the same and unbiased variance 0 for all groups. All data of all groups are same.

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 158 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Manipulative test Period : Recovery

Generation : F0 Sex : Male Week : 2 Species : Rat

Test article		Auditory response				Approach response			Touch response		
Dose		-2	-1	0	1	-1	0	1	-1	0	1
BTetCA 0 mg/kg	n	0	0	5	0	0	5	0	0	5	0
BTetCA 1000 mg/kg	n	0	0	5	0	0	5	0	0	5	0
		EF	EF	EF	EF	EF	EF	EF	EF	EF	EF

Test article		Tail pinch response				Pupillary reflex			
Dose		-2	-1	0	1	P	F	L	R
BTetCA 0 mg/kg	n	0	0	5	0	5	0	0	0
BTetCA 1000 mg/kg	n	0	0	5	0	5	0	0	0
		EF	EF	EF	EF	EF	EF	EF	EF

Auditory response) -2: None, -1: Weak, 0: Normal, 1: Exaggerate
Approach response) -1: No reaction/ignores, 0: Normal, 1: Abnormality fearful/aggressive reaction
Touch response) -1: No reaction/ignores, 0: Normal, 1: Abnormality fearful/aggressive reaction
Tail pinch response) -2: None, -1: Weak, 0: Normal, 1: Exaggerate
Pupillary reflex) P: Pass, both, F: Failed, neither, L: Left pupil responds, R: Right pupil responds
Not significantly different from BTetCA 0 mg/kg
EF : The group mean is the same and unbiased variance 0 for all groups. All data of all groups are same.
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 159 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Manipulative test Period : Recovery

Generation : F0 Sex : Male Week : 2 Species : Rat

Test article Dose		Aerial righting reflex	Landing foot splay mm
BTetCA 0 mg/kg	n	5	5
	Mean	0	93
	S.D.	0	25
BTetCA 1000 mg/kg	n	5	5
	Mean	0	69
	S.D.	0	10
		EF	

Aerial righting reflex) Total score

Not significantly different from BTetCA 0 mg/kg

EF : The group mean is the same and unbiased variance 0 for all groups. All data of all groups are same.

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 160 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Manipulative test Period : Recovery

Generation : F0 Sex : Female Week : 2 Species : Rat

Test article		Auditory response				Approach response			Touch response		
Dose		-2	-1	0	1	-1	0	1	-1	0	1
BTetCA 0 mg/kg	n	0	0	5	0	0	5	0	0	5	0
BTetCA 1000 mg/kg	n	0	0	5	0	0	5	0	0	5	0
		EF	EF	EF	EF	EF	EF	EF	EF	EF	EF

Test article		Tail pinch response				Pupillary reflex			
Dose		-2	-1	0	1	P	F	L	R
BTetCA 0 mg/kg	n	0	0	5	0	5	0	0	0
BTetCA 1000 mg/kg	n	0	0	5	0	5	0	0	0
		EF	EF	EF	EF	EF	EF	EF	EF

Auditory response) -2: None, -1: Weak, 0: Normal, 1: Exaggerate
Approach response) -1: No reaction/ignores, 0: Normal, 1: Abnormality fearful/aggressive reaction
Touch response) -1: No reaction/ignores, 0: Normal, 1: Abnormality fearful/aggressive reaction
Tail pinch response) -2: None, -1: Weak, 0: Normal, 1: Exaggerate
Pupillary reflex) P: Pass, both, F: Failed, neither, L: Left pupil responds, R: Right pupil responds
Not significantly different from BTetCA 0 mg/kg
EF : The group mean is the same and unbiased variance 0 for all groups. All data of all groups are same.
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 161 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Manipulative test Period : Recovery

Generation : F0 Sex : Female Week : 2 Species : Rat

Test article Dose		Aerial righting reflex	Landing foot splay mm
BTetCA 0 mg/kg	n	5	5
	Mean	0	64
	S.D.	0	9
BTetCA 1000 mg/kg	n	5	5
	Mean	0	57
	S.D.	0	24
		EF	

Aerial righting reflex) Total score

Not significantly different from BTetCA 0 mg/kg

EF : The group mean is the same and unbiased variance 0 for all groups. All data of all groups are same.

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 162 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Grip strength Period : F0 mating

Generation : F0 Sex : Male Week : 6 Species : Rat

Test article Dose		Grip strength of fore limb g	Grip strength of hind limb g
BTetCA 0 mg/kg	n	5	5
	Mean	1663	1019
	S.D.	336	184
BTetCA 100 mg/kg	n	5	5
	Mean	1852	1360
	S.D.	138	193
BTetCA 300 mg/kg	n	5	5
	Mean	1793	1162
	S.D.	125	283
BTetCA 1000 mg/kg	n	5	5
	Mean	1585	1058
	S.D.	269	272

Not significantly different from BTetCA 0 mg/kg
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 163 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Grip strength Period : F0 lactation

Generation : F0 Sex : Female Day : 4 Species : Rat

Test article Dose		Grip strength of fore limb g	Grip strength of hind limb g
BTetCA 0 mg/kg	n	5	5
	Mean	1258	914
	S.D.	161	203
BTetCA 100 mg/kg	n	5	5
	Mean	1268	909
	S.D.	148	122
BTetCA 300 mg/kg	n	5	5
	Mean	1395	898
	S.D.	218	274
BTetCA 1000 mg/kg	n	5	5
	Mean	1219	950
	S.D.	175	62

Not significantly different from BTetCA 0 mg/kg
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 164 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Grip strength Period : Administration

Generation : F0 Sex : Female Week : 6 Species : Rat

Test article Dose		Grip strength of fore limb g	Grip strength of hind limb g
BTetCA	n	5	5
0 mg/kg	Mean	1190	886
	S.D.	27	144
BTetCA	n	5	5
1000 mg/kg	Mean	1291	1008
	S.D.	169	194

Not significantly different from BTetCA 0 mg/kg

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 165 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Grip strength Period : Recovery

Generation : F0 Sex : Male Week : 2 Species : Rat

Test article Dose		Grip strength of fore limb g	Grip strength of hind limb g
BTetCA	n	5	5
0 mg/kg	Mean	1780	933
	S.D.	503	170
BTetCA	n	5	5
1000 mg/kg	Mean	1678	870
	S.D.	271	140

Not significantly different from BTetCA 0 mg/kg

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 166 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Grip strength Period : Recovery

Generation : F0 Sex : Female Week : 2 Species : Rat

Test article Dose		Grip strength of fore limb g	Grip strength of hind limb g
BTetCA	n	5	5
0 mg/kg	Mean	1145	743
	S.D.	84	61
BTetCA	n	5	5
1000 mg/kg	Mean	1163	664
	S.D.	205	183

Not significantly different from BTetCA 0 mg/kg

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 167 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Motor activity Period : F0 mating

Generation : F0 Sex : Male Week : 6 Species : Rat

Test article Dose		0'-10' Count	10'-20' Count	20'-30' Count	30'-40' Count	40'-50' Count	50'-60' Count	Total(0'-60') Count
BTetCA	n	5	5	5	5	5	5	5
0 mg/kg	Mean	421	342	290	244	171	173	1641
	S.D.	30	77	90	56	128	132	369
BTetCA	n	5	5	5	5	5	5	5
100 mg/kg	Mean	291	226	140	251	225	183	1316
	S.D.	145	138	105	68	173	100	590
BTetCA	n	5	5	5	5	5	5	5
300 mg/kg	Mean	356	275	211	231	141	68	1282
	S.D.	82	63	142	117	117	101	476
BTetCA	n	5	5	5	5	5	5	5
1000 mg/kg	Mean	385	307	168	286	281	143	1571
	S.D.	39	114	132	51	50	84	214

Not significantly different from BTetCA 0 mg/kg
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 168 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Motor activity Period : F0 lactation

Generation : F0 Sex : Female Day : 4 Species : Rat

Test article Dose		0'-10' Count	10'-20' Count	20'-30' Count	30'-40' Count	40'-50' Count	50'-60' Count	Total(0'-60') Count
BTetCA	n	5	5	5	5	5	5	5
0 mg/kg	Mean	297	216	195	220	136	100	1164
	S.D.	113	161	102	163	79	116	504
BTetCA	n	5	5	5	5	5	5	5
100 mg/kg	Mean	308	180	187	174	166	143	1157
	S.D.	71	144	114	112	91	118	610
BTetCA	n	5	5	5	5	5	5	5
300 mg/kg	Mean	271	158	157	130	108	112	936
	S.D.	68	92	105	97	92	102	460
BTetCA	n	5	5	5	5	5	5	5
1000 mg/kg	Mean	265	139	139	119	95	78	834
	S.D.	77	99	98	107	119	105	443

Not significantly different from BTetCA 0 mg/kg
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 169 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Motor activity Period : Administration

Generation : F0 Sex : Female Week : 6 Species : Rat

Test article Dose		0'-10' Count	10'-20' Count	20'-30' Count	30'-40' Count	40'-50' Count	50'-60' Count	Total(0'-60') Count
BTetCA	n	5	5	5	5	5	5	5
0 mg/kg	Mean	430	305	236	352	262	159	1743
	S.D.	50	58	142	109	137	105	353
BTetCA	n	5	5	5	5	5	5	5
1000 mg/kg	Mean	382	239	196	84	151	56	1108
	S.D.	51	53	127	77	130	72	208
					T2 **			T2 **

Significantly different from BTetCA 0 mg/kg : ** P<0.01
T2 : Student t-test (two-side)
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 170 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Motor activity Period : Recovery

Generation : F0 Sex : Male Week : 2 Species : Rat

Test article Dose		0'-10' Count	10'-20' Count	20'-30' Count	30'-40' Count	40'-50' Count	50'-60' Count	Total(0'-60') Count
BTetCA	n	5	5	5	5	5	5	5
0 mg/kg	Mean	407	339	305	239	205	177	1671
	S.D.	53	33	91	103	136	150	494
BTetCA	n	5	5	5	5	5	5	5
1000 mg/kg	Mean	394	269	254	190	254	192	1553
	S.D.	49	64	93	65	37	90	237

Not significantly different from BTetCA 0 mg/kg

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 2 - 171 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Motor activity Period : Recovery

Generation : F0 Sex : Female Week : 2 Species : Rat

Test article Dose		0'-10' Count	10'-20' Count	20'-30' Count	30'-40' Count	40'-50' Count	50'-60' Count	Total(0'-60') Count
BTetCA	n	5	5	5	5	5	5	5
0 mg/kg	Mean	358	265	139	204	182	214	1362
	S.D.	32	81	86	39	89	107	241
BTetCA	n	5	5	5	5	5	5	5
1000 mg/kg	Mean	371	289	227	161	185	196	1429
	S.D.	44	67	130	64	79	139	390

Not significantly different from BTetCA 0 mg/kg

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 3 - 1 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Body weight Period : F0 before mating Day 1-15, F0 mating Day 15-43

Sex : Male Unit : g Species : Rat

Test article		/Day							Body weight
Dose		1	8	15	22	29	36	42	gain
BTetCA	n	12	12	12	12	12	12	12	12
0 mg/kg	Mean	406	440	463	485	507	527	536	130
	S.D.	14	15	17	22	24	26	29	24
BTetCA	n	12	12	12	12	12	12	12	12
100 mg/kg	Mean	406	439	462	481	507	527	539	133
	S.D.	14	18	21	25	28	31	37	27
BTetCA	n	12	12	12	12	12	12	12	12
300 mg/kg	Mean	409	443	466	475	502	522	534	125
	S.D.	13	14	14	23	24	26	25	22
BTetCA	n	12	12	12	12	12	12	12	12
1000 mg/kg	Mean	406	432	444	455	479	493	500	94
	S.D.	14	22	24	32	34	37	38	30
					DT *		DT *	DT *	DT **

Significantly different from BTetCA 0 mg/kg : * P<0.05, ** P<0.01

DT : Dunnett test (two-side)

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 3 - 2 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Body weight Period : F0 before mating Day 1-15

Sex : Female Unit : g Species : Rat

Test article		/Day			Body weight
Dose		1	8	15	gain
BTetCA	n	12	12	12	12
0 mg/kg	Mean	225	239	247	23
	S.D.	11	10	12	7
BTetCA	n	12	12	12	12
100 mg/kg	Mean	224	235	244	21
	S.D.	13	16	20	11
BTetCA	n	12	12	12	12
300 mg/kg	Mean	222	235	241	19
	S.D.	15	15	14	7
BTetCA	n	12	12	12	12
1000 mg/kg	Mean	226	236	247	21
	S.D.	13	15	14	7

Not significantly different from BTetCA 0 mg/kg

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 3 - 3 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Body weight Period : F0 gestation Day 0-25

Sex : Female Unit : g Species : Rat

Test article		/Day				Body weight
Dose		0	7	14	20	gain
BTetCA	n	12	12	12	12	12
0 mg/kg	Mean	254	291	325	406	152
	S.D.	12	15	18	21	14
BTetCA	n	12	12	12	12	12
100 mg/kg	Mean	254	286	321	401	147
	S.D.	19	19	22	23	12
BTetCA	n	12	12	12	12	12
300 mg/kg	Mean	248	287	325	402	154
	S.D.	15	16	19	25	20
BTetCA	n	12	12	12	12	12
1000 mg/kg	Mean	251	287	322	394	143
	S.D.	14	14	18	23	18

Not significantly different from BTetCA 0 mg/kg

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 3 - 4 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Body weight Period : F0 lactation Day 0-5

Sex : Female Unit : g Species : Rat

Test article		/Day		Body weight
Dose		0	4	gain
BTetCA	n	12	12	12
0 mg/kg	Mean	315	317	2
	S.D.	21	20	15
BTetCA	n	12	12	12
100 mg/kg	Mean	315	314	-1
	S.D.	21	26	13
BTetCA	n	12	12	12
300 mg/kg	Mean	319	322	2
	S.D.	27	21	17
BTetCA	n	12	12	12
1000 mg/kg	Mean	316	320	4
	S.D.	25	19	14

Not significantly different from BTetCA 0 mg/kg

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 3 - 5 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Body weight Period : Administration

Sex : Female Unit : g Species : Rat

Test article		/Day							Body weight
Dose		1	8	15	22	29	36	42	gain
BTetCA	n	10	10	10	10	10	10	10	10
0 mg/kg	Mean	218	233	242	248	258	264	270	52
	S.D.	9	10	13	16	13	16	18	11
BTetCA	n	10	10	10	10	10	10	10	10
1000 mg/kg	Mean	218	235	242	253	262	268	271	53
	S.D.	12	14	18	17	18	19	21	16

Not significantly different from BTetCA 0 mg/kg

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 3 - 6 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Body weight Period : Recovery Day 1-15

Sex : Male Unit : g Species : Rat

Test article		/Day			Body weight
Dose		1	8	14	gain
BTetCA	n	5	5	5	5
0 mg/kg	Mean	533	550	551	17
	S.D.	22	23	18	7
BTetCA	n	5	5	5	5
1000 mg/kg	Mean	485	519	531	46
	S.D.	52	47	45	16
					T2 **

Significantly different from BTetCA 0 mg/kg : ** P<0.01

T2 : Student t-test (two-side)

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 3 - 7 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Body weight Period : Recovery Day 1-15

Sex : Female Unit : g Species : Rat

Test article		/Day			Body weight
Dose		1	8	14	gain
BTetCA	n	5	5	5	5
0 mg/kg	Mean	267	272	271	5
	S.D.	14	11	10	10
BTetCA	n	5	5	5	5
1000 mg/kg	Mean	269	275	277	8
	S.D.	18	17	16	7

Not significantly different from BTetCA 0 mg/kg

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 4 - 1 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Food consumption Period : F0 before mating Day 1-15, F0 mating Day 15-43

Sex : Male Unit : g Species : Rat

Test article		/Day						Total food
Dose		2	8	15	30	36	42	consumption
BTetCA	n	12	12	12	12	12	12	12
0 mg/kg	Mean	21	21	21	20	20	19	121
	S.D.	2	1	2	3	2	1	6
BTetCA	n	12	12	12	12	12	12	12
100 mg/kg	Mean	20	22	20	21	21	21	125
	S.D.	2	2	2	2	2	3	11
							ST *	
BTetCA	n	12	12	12	12	12	12	12
300 mg/kg	Mean	21	24	23	21	21	20	131
	S.D.	2	2	2	2	2	2	8
			DT **					DT *
BTetCA	n	12	12	12	12	12	12	12
1000 mg/kg	Mean	19	23	23	21	22	20	127
	S.D.	2	2	3	3	2	4	10
			DT *			DT *		

Significantly different from BTetCA 0 mg/kg : * P<0.05, ** P<0.01

DT : Dunnett test (two-side), ST : Steel test (two-side)

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 4 - 2 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Food consumption Period : F0 before mating Day 1-15

Sex : Female Unit : g Species : Rat

Test article		/Day			Total food
Dose		2	8	15	consumption
BTetCA	n	12	12	12	12
0 mg/kg	Mean	13	15	15	43
	S.D.	2	2	2	4
BTetCA	n	12	12	12	12
100 mg/kg	Mean	12	13	15	41
	S.D.	2	1	3	5
BTetCA	n	12	12	12	12
300 mg/kg	Mean	13	14	14	41
	S.D.	2	2	2	4
BTetCA	n	12	12	12	12
1000 mg/kg	Mean	12	15	16	42
	S.D.	2	2	2	3

Not significantly different from BTetCA 0 mg/kg

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 4 - 3 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Food consumption Period : F0 gestation Day 0-25

Sex : Female Unit : g Species : Rat

Test article		/Day				Total food
Dose		1	7	14	20	consumption
BTetCA	n	12	12	12	12	12
0 mg/kg	Mean	16	20	19	21	76
	S.D.	2	3	2	3	8
BTetCA	n	12	12	12	12	12
100 mg/kg	Mean	15	19	19	20	74
	S.D.	3	3	3	2	8
BTetCA	n	12	12	12	12	12
300 mg/kg	Mean	16	20	20	20	76
	S.D.	2	2	2	4	6
BTetCA	n	12	12	12	12	12
1000 mg/kg	Mean	16	19	20	21	76
	S.D.	4	3	3	4	7

Not significantly different from BTetCA 0 mg/kg

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 4 - 4 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Food consumption Period : F0 lactation Day 0-5

Sex : Female Unit : g Species : Rat

Test article Dose		/Day 2	4	Total food consumption
BTetCA 0 mg/kg	n	12	12	12
	Mean	23	35	58
	S.D.	5	8	12
BTetCA 100 mg/kg	n	12	12	12
	Mean	21	34	55
	S.D.	3	5	7
BTetCA 300 mg/kg	n	12	12	12
	Mean	25	36	61
	S.D.	4	4	8
BTetCA 1000 mg/kg	n	12	12	12
	Mean	23	35	57
	S.D.	6	6	12

Not significantly different from BTetCA 0 mg/kg

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 4 - 5 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Food consumption Period : Administration

Sex : Female Unit : g Species : Rat

Test article		/Day						Total food
Dose		2	8	15	30	36	42	consumption
BTetCA	n	10	10	10	10	10	10	10
0 mg/kg	Mean	12	14	16	14	14	13	83
	S.D.	3	2	2	2	2	2	10
BTetCA	n	10	10	10	10	10	10	10
1000 mg/kg	Mean	11	15	14	14	14	15	84
	S.D.	1	1	2	2	2	4	7

Not significantly different from BTetCA 0 mg/kg

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 4 - 6 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Food consumption Period : Recovery Day 1-15

Sex : Male Unit : g Species : Rat

Test article		/Day			Total food
Dose		2	8	14	consumption
BTetCA	n	5	5	5	5
0 mg/kg	Mean	22	25	24	71
	S.D.	2	1	1	3
BTetCA	n	5	5	5	5
1000 mg/kg	Mean	26	29	25	80
	S.D.	3	1	4	8
		T2 *	T2 **		T2 *

Significantly different from BTetCA 0 mg/kg : * P<0.05, ** P<0.01

T2 : Student t-test (two-side)

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 4 - 7 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Food consumption Period : Recovery Day 1-15

Sex : Female Unit : g Species : Rat

Test article		/Day			Total food
Dose		2	8	14	consumption
BTetCA	n	5	5	5	5
0 mg/kg	Mean	16	20	16	52
	S.D.	2	5	3	7
BTetCA	n	5	5	5	5
1000 mg/kg	Mean	15	18	17	50
	S.D.	2	2	1	3

Not significantly different from BTetCA 0 mg/kg

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 5 - 1 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Urinalysis Stage : Week 6 of administration

Sex : Male Species : Rat

Test article / Dose		pH								
		5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	>=9.0
BTetCA 0 mg/kg	n	0	0	0	0	2	1	2	0	0
BTetCA 100 mg/kg	n	0	0	0	1	0	1	1	2	0
BTetCA 300 mg/kg	n	0	0	2	1	0	0	1	0	1
BTetCA 1000 mg/kg	n	0	0	0	4	1	0	0	0	0

Test article / Dose		Protein					Ketones				
		-	+/-	1+	2+	3+	-	+/-	1+	2+	3+
BTetCA 0 mg/kg	n	1	2	2	0	0	0	2	3	0	0
BTetCA 100 mg/kg	n	2	2	1	0	0	0	1	3	1	0
BTetCA 300 mg/kg	n	0	3	1	1	0	0	2	2	1	0
BTetCA 1000 mg/kg	n	3	1	1	0	0	4	1	0	0	0

Protein) -:Negative , +/-:15 , 1+:30 , 2+:100 , 3+:≥300 mg/dL
Ketones) -:Negative , +/-:5 , 1+:15 , 2+:40 , 3+:80 mg/dL
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 5 - 2 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Urinalysis Stage : Week 6 of administration

Sex : Male Species : Rat

Test article Dose		Glucose -	Glucose 1+	Glucose 2+	Glucose 3+	Glucose 4+	Occult Blood -	Occult Blood +/-	Occult Blood 1+	Occult Blood 2+	Occult Blood 3+
BTetCA 0 mg/kg	n	5	0	0	0	0	0	5	0	0	0
BTetCA 100 mg/kg	n	5	0	0	0	0	1	4	0	0	0
BTetCA 300 mg/kg	n	4	1	0	0	0	3	1	0	1	0
BTetCA 1000 mg/kg	n	5	0	0	0	0	0	5	0	0	0

Test article Dose		Bilirubin -	Bilirubin 1+	Bilirubin 2+	Bilirubin 3+	Urobilinogen +/-	Urobilinogen 1+	Urobilinogen 2+	Urobilinogen 3+
BTetCA 0 mg/kg	n	4	1	0	0	5	0	0	0
BTetCA 100 mg/kg	n	5	0	0	0	5	0	0	0
BTetCA 300 mg/kg	n	2	3	0	0	5	0	0	0
BTetCA 1000 mg/kg	n	5	0	0	0	5	0	0	0

Glucose) -:Negative , 1+:100 , 2+:250 , 3+:500 , 4+:≥1000 mg/dL
Occult Blood) -:Negative , +/-:0.015 , 1+:0.062 , 2+:0.135 , 3+:0.405 mg/dL
Bilirubin) -:Negative , 1+:0.8 , 2+:1.6 , 3+:3.2 mg/dL
Urobilinogen) +/-:0.1 - 1.0 , 1+:2.0 , 2+:4.0 , 3+:≥8.0 Ehrlich U/dL
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 5 - 3 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Urinalysis Stage : Week 6 of administration

Sex : Male Species : Rat

Test article Dose		Color									
		LY	Y	DY	BR	RE	RB	WH	BL	CL	OT
BTetCA 0 mg/kg	n	0	5	0	0	0	0	0	0	0	0
BTetCA 100 mg/kg	n	0	5	0	0	0	0	0	0	0	0
BTetCA 300 mg/kg	n	0	5	0	0	0	0	0	0	0	0
BTetCA 1000 mg/kg	n	0	5	0	0	0	0	0	0	0	0

Color LY: Light Yellow Y: Yellow DY: Dark Yellow BR: Brown RE: Red RB: Reddish brown WH: White BL: Blue CL: Colorless OT: Other
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 5 - 4

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Study No. : R-1193

Urinalysis

Stage : Week 6 of administration

Sex : Male

Species : Rat

Test article Dose		RBC -	RBC +/-	RBC 1+	RBC 2+	RBC 3+	WBC -	WBC +/-	WBC 1+	WBC 2+	WBC 3+
BTetCA 0 mg/kg	n	5	0	0	0	0	4	1	0	0	0
BTetCA 100 mg/kg	n	5	0	0	0	0	5	0	0	0	0
BTetCA 300 mg/kg	n	5	0	0	0	0	4	1	0	0	0
BTetCA 1000 mg/kg	n	5	0	0	0	0	5	0	0	0	0

Test article Dose		Squamous epithelial cells -	Squamous epithelial cells +/-	Squamous epithelial cells 1+	Squamous epithelial cells 2+	Squamous epithelial cells 3+	Small round epithelial cells -	Small round epithelial cells +/-	Small round epithelial cells 1+	Small round epithelial cells 2+	Small round epithelial cells 3+
BTetCA 0 mg/kg	n	0	5	0	0	0	5	0	0	0	0
BTetCA 100 mg/kg	n	0	5	0	0	0	5	0	0	0	0
BTetCA 300 mg/kg	n	0	5	0	0	0	5	0	0	0	0
BTetCA 1000 mg/kg	n	0	5	0	0	0	5	0	0	0	0

RBC) -:Negative , +/-:Slight , 1+:Mild , 2+:Moderate , 3+:Severe
WBC) -:Negative , +/-:Slight , 1+:Mild , 2+:Moderate , 3+:Severe
Squamous epithelial cells) -:Negative , +/-:Slight , 1+:Mild , 2+:Moderate , 3+:Severe
Small round epithelial cells) -:Negative , +/-:Slight , 1+:Mild , 2+:Moderate , 3+:Severe
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 5 - 5

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Study No. : R-1193

Urinalysis

Stage : Week 6 of administration

Sex : Male

Species : Rat

Test article Dose		Cast					Crystal phosphate salts				
		-	+/-	1+	2+	3+	-	+/-	1+	2+	3+
BTetCA 0 mg/kg	n	5	0	0	0	0	4	1	0	0	0
BTetCA 100 mg/kg	n	5	0	0	0	0	1	4	0	0	0
BTetCA 300 mg/kg	n	5	0	0	0	0	0	5	0	0	0
BTetCA 1000 mg/kg	n	5	0	0	0	0	4	1	0	0	0

Test article Dose		Crystal calcium oxalate				
		-	+/-	1+	2+	3+
BTetCA 0 mg/kg	n	5	0	0	0	0
BTetCA 100 mg/kg	n	5	0	0	0	0
BTetCA 300 mg/kg	n	5	0	0	0	0
BTetCA 1000 mg/kg	n	5	0	0	0	0

Cast) -:Negative , +/-:Slight , 1+:Mild , 2+:Moderate , 3+:Severe
Crystal phosphate salts) -:Negative , +/-:Slight , 1+:Mild , 2+:Moderate , 3+:Severe
Crystal calcium oxalate) -:Negative , +/-:Slight , 1+:Mild , 2+:Moderate , 3+:Severe
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 5 - 6 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Urinalysis Stage : Week 6 of administration

Sex : Male Species : Rat

Test article Dose		Urine volume mL/24h	Osmotic pressure mOsm/kg	U-Na mmol/24h	U-K mmol/24h	U-Cl mmol/24h
BTetCA	n	5	5	5	5	5
0 mg/kg	Mean	10.5	1649	1.0	2.5	1.6
	S.D.	4.0	304	0.3	0.4	0.3
BTetCA	n	5	5	5	5	5
100 mg/kg	Mean	10.6	2009	1.3	3.2	2.3
	S.D.	2.5	342	0.3	0.7	0.4
BTetCA	n	5	5	5	5	5
300 mg/kg	Mean	8.5	2148	0.6	2.7	1.8
	S.D.	3.1	558	0.4	0.6	0.5
BTetCA	n	5	5	5	5	5
1000 mg/kg	Mean	14.3	1427	0.4	1.5	2.0
	S.D.	5.7	432	0.3	0.7	0.7
				DT *	DT *	

Significantly different from BTetCA 0 mg/kg : * P<0.05
DT : Dunnett test (two-side)
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 5 - 7 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Urinalysis Stage : Week 6 of administration

Sex : Female Species : Rat

Test article		pH								
Dose		5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	>=9.0
BTetCA 0 mg/kg	n	0	0	0	2	1	1	0	1	0
BTetCA 1000 mg/kg	n	0	0	3	2	0	0	0	0	0

Test article		Protein					Ketones				
Dose		-	+/-	1+	2+	3+	-	+/-	1+	2+	3+
BTetCA 0 mg/kg	n	5	0	0	0	0	4	1	0	0	0
BTetCA 1000 mg/kg	n	5	0	0	0	0	5	0	0	0	0

Protein) -:Negative , +/-:15 , 1+:30 , 2+:100 , 3+:≥300 mg/dL
Ketones) -:Negative , +/-:5 , 1+:15 , 2+:40 , 3+:80 mg/dL
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 5 - 8 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Urinalysis Stage : Week 6 of administration

Sex : Female Species : Rat

Test article		Glucose					Occult Blood				
Dose		-	1+	2+	3+	4+	-	+/-	1+	2+	3+
BTetCA 0 mg/kg	n	5	0	0	0	0	5	0	0	0	0
BTetCA 1000 mg/kg	n	5	0	0	0	0	5	0	0	0	0

Test article		Bilirubin				Urobilinogen			
Dose		-	1+	2+	3+	+/-	1+	2+	3+
BTetCA 0 mg/kg	n	5	0	0	0	5	0	0	0
BTetCA 1000 mg/kg	n	5	0	0	0	5	0	0	0

Glucose) -:Negative , 1+:100 , 2+:250 , 3+:500 , 4+:≥1000 mg/dL
Occult Blood) -:Negative , +/-:0.015 , 1+:0.062 , 2+:0.135 , 3+:0.405 mg/dL
Bilirubin) -:Negative , 1+:0.8 , 2+:1.6 , 3+:3.2 mg/dL
Urobilinogen) +/-:0.1 - 1.0 , 1+:2.0 , 2+:4.0 , 3+:≥8.0 Ehrlich U/dL
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 5 - 9 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Urinalysis Stage : Week 6 of administration

Sex : Female Species : Rat

Test article Dose		Color									
		LY	Y	DY	BR	RE	RB	WH	BL	CL	OT
BTetCA 0 mg/kg	n	0	5	0	0	0	0	0	0	0	0
BTetCA 1000 mg/kg	n	0	5	0	0	0	0	0	0	0	0

Color LY: Light Yellow Y: Yellow DY: Dark Yellow BR: Brown RE: Red RB: Reddish brown WH: White BL: Blue CL: Colorless OT: Other

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 5 - 10 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Urinalysis Stage : Week 6 of administration

Sex : Female Species : Rat

Test article		RBC					WBC				
Dose		-	+/-	1+	2+	3+	-	+/-	1+	2+	3+
BTetCA 0 mg/kg	n	5	0	0	0	0	5	0	0	0	0
BTetCA 1000 mg/kg	n	5	0	0	0	0	5	0	0	0	0

Test article		Squamous epithelial cells					Small round epithelial cells				
Dose		-	+/-	1+	2+	3+	-	+/-	1+	2+	3+
BTetCA 0 mg/kg	n	0	5	0	0	0	5	0	0	0	0
BTetCA 1000 mg/kg	n	0	5	0	0	0	5	0	0	0	0

RBC) -:Negative , +/-:Slight , 1+:Mild , 2+:Moderate , 3+:Severe
WBC) -:Negative , +/-:Slight , 1+:Mild , 2+:Moderate , 3+:Severe
Squamous epithelial cells) -:Negative , +/-:Slight , 1+:Mild , 2+:Moderate , 3+:Severe
Small round epithelial cells) -:Negative , +/-:Slight , 1+:Mild , 2+:Moderate , 3+:Severe
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 5 - 11 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Urinalysis Stage : Week 6 of administration

Sex : Female Species : Rat

Test article		Cast					Crystal phosphate salts				
Dose		-	+/-	1+	2+	3+	-	+/-	1+	2+	3+
BTetCA 0 mg/kg	n	5	0	0	0	0	5	0	0	0	0
BTetCA 1000 mg/kg	n	5	0	0	0	0	3	2	0	0	0

Test article		Crystal calcium oxalate				
Dose		-	+/-	1+	2+	3+
BTetCA 0 mg/kg	n	5	0	0	0	0
BTetCA 1000 mg/kg	n	5	0	0	0	0

Cast) -:Negative , +/-:Slight , 1+:Mild , 2+:Moderate , 3+:Severe
Crystal phosphate salts) -:Negative , +/-:Slight , 1+:Mild , 2+:Moderate , 3+:Severe
Crystal calcium oxalate) -:Negative , +/-:Slight , 1+:Mild , 2+:Moderate , 3+:Severe
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 5 - 12 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Urinalysis Stage : Week 6 of administration

Sex : Female Species : Rat

Test article Dose		Urine volume mL/24h	Osmotic pressure mOsm/kg	U-Na mmol/24h	U-K mmol/24h	U-Cl mmol/24h
BTetCA	n	5	5	5	5	5
0 mg/kg	Mean	8.2	1787	0.9	1.7	1.2
	S.D.	5.2	826	0.4	0.6	0.5
BTetCA	n	5	5	5	5	5
1000 mg/kg	Mean	5.8	2254	0.3	1.0	1.0
	S.D.	5.0	1022	0.6	0.8	0.8

Not significantly different from BTetCA 0 mg/kg

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 5 - 13 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Urinalysis Stage : Week 2 of recovery

Sex : Male Species : Rat

Test article		pH								
Dose		5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	>=9.0
BTetCA 0 mg/kg	n	0	0	0	0	1	1	1	0	2
BTetCA 1000 mg/kg	n	0	0	0	0	0	0	0	5	0

Test article		Protein					Ketones				
Dose		-	+/-	1+	2+	3+	-	+/-	1+	2+	3+
BTetCA 0 mg/kg	n	1	4	0	0	0	3	1	1	0	0
BTetCA 1000 mg/kg	n	3	2	0	0	0	1	2	2	0	0

Protein) -:Negative , +/-:15 , 1+:30 , 2+:100 , 3+:≥300 mg/dL
Ketones) -:Negative , +/-:5 , 1+:15 , 2+:40 , 3+:80 mg/dL
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 5 - 14 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Urinalysis Stage : Week 2 of recovery

Sex : Male Species : Rat

Test article		Glucose					Occult Blood				
Dose		-	1+	2+	3+	4+	-	+/-	1+	2+	3+
BTetCA 0 mg/kg	n	5	0	0	0	0	0	5	0	0	0
BTetCA 1000 mg/kg	n	5	0	0	0	0	0	4	1	0	0

Test article		Bilirubin				Urobilinogen			
Dose		-	1+	2+	3+	+/-	1+	2+	3+
BTetCA 0 mg/kg	n	5	0	0	0	5	0	0	0
BTetCA 1000 mg/kg	n	5	0	0	0	5	0	0	0

Glucose) -:Negative , 1+:100 , 2+:250 , 3+:500 , 4+:≥1000 mg/dL
Occult Blood) -:Negative , +/-:0.015 , 1+:0.062 , 2+:0.135 , 3+:0.405 mg/dL
Bilirubin) -:Negative , 1+:0.8 , 2+:1.6 , 3+:3.2 mg/dL
Urobilinogen) +/-:0.1 - 1.0 , 1+:2.0 , 2+:4.0 , 3+:≥8.0 Ehrlich U/dL
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 5 - 15 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Urinalysis Stage : Week 2 of recovery

Sex : Male Species : Rat

Test article Dose		Color									
		LY	Y	DY	BR	RE	RB	WH	BL	CL	OT
BTetCA 0 mg/kg	n	0	5	0	0	0	0	0	0	0	0
BTetCA 1000 mg/kg	n	0	5	0	0	0	0	0	0	0	0

Color LY: Light Yellow Y: Yellow DY: Dark Yellow BR: Brown RE: Red RB: Reddish brown WH: White BL: Blue CL: Colorless OT: Other

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 5 - 16 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Urinalysis Stage : Week 2 of recovery

Sex : Male Species : Rat

Test article		RBC					WBC				
Dose		-	+/-	1+	2+	3+	-	+/-	1+	2+	3+
BTetCA 0 mg/kg	n	5	0	0	0	0	5	0	0	0	0
BTetCA 1000 mg/kg	n	5	0	0	0	0	5	0	0	0	0

Test article		Squamous epithelial cells					Small round epithelial cells				
Dose		-	+/-	1+	2+	3+	-	+/-	1+	2+	3+
BTetCA 0 mg/kg	n	0	5	0	0	0	5	0	0	0	0
BTetCA 1000 mg/kg	n	0	5	0	0	0	5	0	0	0	0

RBC) -:Negative , +/-:Slight , 1+:Mild , 2+:Moderate , 3+:Severe
WBC) -:Negative , +/-:Slight , 1+:Mild , 2+:Moderate , 3+:Severe
Squamous epithelial cells) -:Negative , +/-:Slight , 1+:Mild , 2+:Moderate , 3+:Severe
Small round epithelial cells) -:Negative , +/-:Slight , 1+:Mild , 2+:Moderate , 3+:Severe
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 5 - 17 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Urinalysis Stage : Week 2 of recovery

Sex : Male Species : Rat

Test article		Cast					Crystal phosphate salts				
Dose		-	+/-	1+	2+	3+	-	+/-	1+	2+	3+
BTetCA 0 mg/kg	n	5	0	0	0	0	4	1	0	0	0
BTetCA 1000 mg/kg	n	5	0	0	0	0	3	2	0	0	0

Test article		Crystal calcium oxalate				
Dose		-	+/-	1+	2+	3+
BTetCA 0 mg/kg	n	5	0	0	0	0
BTetCA 1000 mg/kg	n	5	0	0	0	0

Cast) -:Negative , +/-:Slight , 1+:Mild , 2+:Moderate , 3+:Severe
Crystal phosphate salts) -:Negative , +/-:Slight , 1+:Mild , 2+:Moderate , 3+:Severe
Crystal calcium oxalate) -:Negative , +/-:Slight , 1+:Mild , 2+:Moderate , 3+:Severe
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 5 - 18 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Urinalysis Stage : Week 2 of recovery

Sex : Male Species : Rat

Test article Dose		Urine volume mL/24h	Osmotic pressure mOsm/kg	U-Na mmol/24h	U-K mmol/24h	U-Cl mmol/24h
BTetCA	n	5	5	5	5	5
0 mg/kg	Mean	16.5	1826	2.0	4.2	2.8
	S.D.	5.8	528	0.3	0.9	0.4
BTetCA	n	5	5	5	5	5
1000 mg/kg	Mean	18.0	1826	2.2	4.7	3.1
	S.D.	7.1	382	0.4	0.6	0.4

Not significantly different from BTetCA 0 mg/kg
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 5 - 19 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Urinalysis Stage : Week 2 of recovery

Sex : Female Species : Rat

Test article		pH								
Dose		5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	>=9.0
BTetCA 0 mg/kg	n	0	0	0	1	0	1	1	0	2
BTetCA 1000 mg/kg	n	0	0	0	1	0	0	1	2	1

Test article		Protein					Ketones				
Dose		-	+/-	1+	2+	3+	-	+/-	1+	2+	3+
BTetCA 0 mg/kg	n	5	0	0	0	0	5	0	0	0	0
BTetCA 1000 mg/kg	n	2	2	1	0	0	1	3	1	0	0

Protein) -:Negative , +/-:15 , 1+:30 , 2+:100 , 3+:≥300 mg/dL
Ketones) -:Negative , +/-:5 , 1+:15 , 2+:40 , 3+:80 mg/dL
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 5 - 20 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Urinalysis Stage : Week 2 of recovery

Sex : Female Species : Rat

Test article		Glucose					Occult Blood				
Dose		-	1+	2+	3+	4+	-	+/-	1+	2+	3+
BTetCA 0 mg/kg	n	5	0	0	0	0	4	0	1	0	0
BTetCA 1000 mg/kg	n	5	0	0	0	0	5	0	0	0	0

Test article		Bilirubin				Urobilinogen			
Dose		-	1+	2+	3+	+/-	1+	2+	3+
BTetCA 0 mg/kg	n	5	0	0	0	5	0	0	0
BTetCA 1000 mg/kg	n	4	1	0	0	5	0	0	0

Glucose) -:Negative , 1+:100 , 2+:250 , 3+:500 , 4+:≥1000 mg/dL
Occult Blood) -:Negative , +/-:0.015 , 1+:0.062 , 2+:0.135 , 3+:0.405 mg/dL
Bilirubin) -:Negative , 1+:0.8 , 2+:1.6 , 3+:3.2 mg/dL
Urobilinogen) +/-:0.1 - 1.0 , 1+:2.0 , 2+:4.0 , 3+:≥8.0 Ehrlich U/dL
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 5 - 21 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Urinalysis Stage : Week 2 of recovery

Sex : Female Species : Rat

Test article Dose		Color									
		LY	Y	DY	BR	RE	RB	WH	BL	CL	OT
BTetCA 0 mg/kg	n	0	5	0	0	0	0	0	0	0	0
BTetCA 1000 mg/kg	n	0	5	0	0	0	0	0	0	0	0

Color LY: Light Yellow Y: Yellow DY: Dark Yellow BR: Brown RE: Red RB: Reddish brown WH: White BL: Blue CL: Colorless OT: Other

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 5 - 22 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Urinalysis Stage : Week 2 of recovery

Sex : Female Species : Rat

Test article		RBC					WBC				
Dose		-	+/-	1+	2+	3+	-	+/-	1+	2+	3+
BTetCA 0 mg/kg	n	5	0	0	0	0	5	0	0	0	0
BTetCA 1000 mg/kg	n	5	0	0	0	0	5	0	0	0	0

Test article		Squamous epithelial cells					Small round epithelial cells				
Dose		-	+/-	1+	2+	3+	-	+/-	1+	2+	3+
BTetCA 0 mg/kg	n	0	5	0	0	0	5	0	0	0	0
BTetCA 1000 mg/kg	n	0	5	0	0	0	5	0	0	0	0

RBC) -:Negative , +/-:Slight , 1+:Mild , 2+:Moderate , 3+:Severe
WBC) -:Negative , +/-:Slight , 1+:Mild , 2+:Moderate , 3+:Severe
Squamous epithelial cells) -:Negative , +/-:Slight , 1+:Mild , 2+:Moderate , 3+:Severe
Small round epithelial cells) -:Negative , +/-:Slight , 1+:Mild , 2+:Moderate , 3+:Severe
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 5 - 23 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Urinalysis Stage : Week 2 of recovery

Sex : Female Species : Rat

Test article		Cast					Crystal phosphate salts				
Dose		-	+/-	1+	2+	3+	-	+/-	1+	2+	3+
BTetCA 0 mg/kg	n	5	0	0	0	0	4	1	0	0	0
BTetCA 1000 mg/kg	n	5	0	0	0	0	4	1	0	0	0

Test article		Crystal calcium oxalate				
Dose		-	+/-	1+	2+	3+
BTetCA 0 mg/kg	n	4	1	0	0	0
BTetCA 1000 mg/kg	n	5	0	0	0	0

Cast) -:Negative , +/-:Slight , 1+:Mild , 2+:Moderate , 3+:Severe
Crystal phosphate salts) -:Negative , +/-:Slight , 1+:Mild , 2+:Moderate , 3+:Severe
Crystal calcium oxalate) -:Negative , +/-:Slight , 1+:Mild , 2+:Moderate , 3+:Severe
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 5 - 24 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Urinalysis Stage : Week 2 of recovery

Sex : Female Species : Rat

Test article Dose		Urine volume mL/24h	Osmotic pressure mOsm/kg	U-Na mmol/24h	U-K mmol/24h	U-Cl mmol/24h
BTetCA	n	5	5	5	5	5
0 mg/kg	Mean	7.7	1965	1.1	1.9	1.3
	S.D.	5.1	543	0.5	0.7	0.6
BTetCA	n	5	5	5	5	5
1000 mg/kg	Mean	6.3	2382	1.1	2.0	1.4
	S.D.	3.1	337	0.4	0.8	0.5

Not significantly different from BTetCA 0 mg/kg
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 6 - 1 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Hematology Stage : End of administration

Sex : Male Species : Rat

Test article Dose		RBC 10^4/μL	HGB g/dL	HCT %	MCV fL	MCH pg	MCHC g/dL	RETIC %	PLT 10^4/μL	WBC 10^2/μL	LYMP %
BTetCA	n	5	5	5	5	5	5	5	5	5	5
0 mg/kg	Mean	838	15.1	44.3	52.9	18.1	34.2	2.0	102.0	75.5	74.2
	S.D.	22	0.5	1.6	1.5	0.5	0.6	0.2	14.2	31.0	5.1
BTetCA	n	5	5	5	5	5	5	5	5	5	5
100 mg/kg	Mean	833	15.0	44.2	53.1	18.0	34.0	2.0	101.5	80.3	77.3
	S.D.	19	0.2	0.9	1.6	0.4	0.5	0.3	11.4	11.6	5.7
BTetCA	n	5	5	5	5	5	5	5	5	5	5
300 mg/kg	Mean	831	15.3	45.3	54.6	18.5	33.8	2.3	101.0	87.9	73.7
	S.D.	49	0.6	1.6	2.0	0.6	0.3	0.4	6.8	10.0	8.0
BTetCA	n	5	5	5	5	5	5	5	5	5	5
1000 mg/kg	Mean	836	15.2	44.6	53.3	18.2	34.1	2.2	90.5	74.8	73.3
	S.D.	13	0.6	1.7	2.2	0.8	0.4	0.6	12.1	5.1	3.6

Test article Dose		NEUT %	EOS %	BASO %	MONO %	LUC %	#LYMP 10^2/μL	#NEUT 10^2/μL	#EOS 10^2/μL	#BASO 10^2/μL	#MONO 10^2/μL
BTetCA	n	5	5	5	5	5	5	5	5	5	5
0 mg/kg	Mean	20.8	1.1	0.3	3.2	0.6	56.1	15.8	0.8	0.2	2.2
	S.D.	5.2	0.3	0.1	0.7	0.1	22.5	8.5	0.3	0.1	0.5
BTetCA	n	5	5	5	5	5	5	5	5	5	5
100 mg/kg	Mean	16.5	2.5	0.3	2.9	0.6	61.8	13.4	2.0	0.2	2.4
	S.D.	4.6	1.1	0.1	1.0	0.2	7.1	4.8	1.1	0.1	1.0
			DT *						DT *		
BTetCA	n	5	5	5	5	5	5	5	5	5	5
300 mg/kg	Mean	20.4	2.2	0.3	2.8	0.7	64.9	17.8	1.9	0.2	2.4
	S.D.	7.2	0.9	0.1	0.5	0.1	11.4	6.3	0.8	0.1	0.4
BTetCA	n	5	5	5	5	5	5	5	5	5	5
1000 mg/kg	Mean	21.5	1.5	0.2	3.0	0.5	54.8	16.1	1.1	0.1	2.2
	S.D.	4.1	0.7	0.1	0.9	0.3	4.0	3.6	0.5	0.1	0.5

Significantly different from BTetCA 0 mg/kg : * P<0.05
DT : Dunnett test (two-side)
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 6 - 2 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Hematology Stage : End of administration

Sex : Male Species : Rat

Test article Dose		#LUC 10^2/μL	PT s	APTT s	FIB mg/dL
BTetCA	n	5	5	5	5
0 mg/kg	Mean	0.4	12.6	16.8	270
	S.D.	0.1	0.7	1.9	23
BTetCA	n	5	5	5	5
100 mg/kg	Mean	0.5	12.3	15.6	285
	S.D.	0.3	0.5	0.7	62
BTetCA	n	5	5	5	5
300 mg/kg	Mean	0.6	12.3	17.7	265
	S.D.	0.1	0.9	1.3	17
BTetCA	n	5	5	5	5
1000 mg/kg	Mean	0.4	13.1	17.7	301
	S.D.	0.2	1.4	2.0	33

Not significantly different from BTetCA 0 mg/kg

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 6 - 3 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Hematology Stage : Lactation day 5

Sex : Female Species : Rat

Test article Dose		RBC 10^4/μL	HGB g/dL	HCT %	MCV fL	MCH pg	MCHC g/dL	RETIC %	PLT 10^4/μL	WBC 10^2/μL	LYMP %
BTetCA	n	5	5	5	5	5	5	5	5	5	5
0 mg/kg	Mean	646	13.0	38.0	58.9	20.2	34.1	6.8	135.1	110.6	65.6
	S.D.	49	0.6	1.8	2.5	0.7	0.4	2.6	27.9	22.2	7.1
BTetCA	n	5	5	5	5	5	5	5	5	5	5
100 mg/kg	Mean	656	12.7	37.8	57.6	19.4	33.7	6.9	138.5	107.6	59.9
	S.D.	43	0.6	1.5	2.2	0.8	0.5	1.8	9.4	25.9	4.2
BTetCA	n	5	5	5	5	5	5	5	5	5	5
300 mg/kg	Mean	666	13.1	39.7	59.6	19.7	33.0	6.8	136.4	109.7	62.7
	S.D.	34	0.6	2.2	1.5	0.5	0.5	1.5	14.4	23.9	4.8
							DT **				
BTetCA	n	5	5	5	5	5	5	5	5	5	5
1000 mg/kg	Mean	681	13.4	39.5	58.1	19.7	33.9	6.7	123.2	121.9	63.5
	S.D.	19	0.6	1.9	2.7	0.8	0.5	2.3	24.6	20.7	4.4

Test article Dose		NEUT %	EOS %	BASO %	MONO %	LUC %	#LYMP 10^2/μL	#NEUT 10^2/μL	#EOS 10^2/μL	#BASO 10^2/μL	#MONO 10^2/μL
BTetCA	n	5	5	5	5	5	5	5	5	5	5
0 mg/kg	Mean	29.5	0.6	0.2	3.6	0.6	72.3	32.8	0.6	0.3	3.9
	S.D.	7.3	0.2	0.1	0.3	0.2	15.3	12.0	0.3	0.1	0.6
BTetCA	n	5	5	5	5	5	5	5	5	5	5
100 mg/kg	Mean	34.9	0.8	0.2	3.6	0.7	63.9	37.9	0.8	0.2	3.9
	S.D.	4.9	0.4	0.1	1.0	0.3	13.4	11.8	0.4	0.1	1.8
BTetCA	n	5	5	5	5	5	5	5	5	5	5
300 mg/kg	Mean	31.8	0.9	0.3	3.4	1.0	69.2	34.2	0.9	0.3	3.9
	S.D.	5.3	0.2	0.1	1.4	0.5	17.8	6.5	0.3	0.1	1.9
BTetCA	n	5	5	5	5	5	5	5	5	5	5
1000 mg/kg	Mean	32.0	0.5	0.2	3.1	0.7	76.7	39.7	0.7	0.3	3.7
	S.D.	5.0	0.2	0.0	0.9	0.4	8.6	11.6	0.2	0.1	1.3

Significantly different from BTetCA 0 mg/kg : ** P<0.01
DT : Dunnett test (two-side)
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 6 - 4 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Hematology Stage : Lactation day 5

Sex : Female Species : Rat

Test article Dose		#LUC 10^2/μL	PT s	APTT s	FIB mg/dL
BTetCA	n	5	5	5	5
0 mg/kg	Mean	0.6	11.4	12.9	271
	S.D.	0.2	1.7	2.8	19
BTetCA	n	5	5	5	5
100 mg/kg	Mean	0.8	11.7	13.1	276
	S.D.	0.5	1.4	1.3	36
BTetCA	n	5	5	5	5
300 mg/kg	Mean	1.2	11.7	13.4	290
	S.D.	0.8	1.3	2.0	28
BTetCA	n	5	5	5	5
1000 mg/kg	Mean	0.9	12.9	13.7	342
	S.D.	0.6	1.0	1.8	57
					DT *

Significantly different from BTetCA 0 mg/kg : * P<0.05

DT : Dunnett test (two-side)

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 6 - 5 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Hematology Stage : End of administration

Sex : Female Species : Rat

Test article / Dose		RBC	HGB	HCT	MCV	MCH	MCHC	RETIC	PLT	WBC	LYMP
		10^4/μL	g/dL	%	fL	pg	g/dL	%	10^4/μL	10^2/μL	%
BTetCA	n	5	5	5	5	5	5	5	5	5	5
0 mg/kg	Mean	771	14.3	41.5	53.9	18.6	34.4	2.0	103.6	43.1	79.4
	S.D.	37	0.3	1.3	1.4	0.5	0.4	0.4	9.3	9.7	5.8
BTetCA	n	5	5	5	5	5	5	5	5	5	5
1000 mg/kg	Mean	778	14.6	42.1	54.1	18.7	34.5	1.9	105.3	49.2	79.1
	S.D.	26	0.3	0.9	1.7	0.5	0.2	0.4	12.5	12.3	7.0

Test article / Dose		NEUT	EOS	BASO	MONO	LUC	#LYMP	#NEUT	#EOS	#BASO	#MONO
		%	%	%	%	%	10^2/μL	10^2/μL	10^2/μL	10^2/μL	10^2/μL
BTetCA	n	5	5	5	5	5	5	5	5	5	5
0 mg/kg	Mean	15.8	1.5	0.2	2.6	0.5	34.4	6.5	0.6	0.1	1.2
	S.D.	6.7	0.3	0.1	1.0	0.3	8.9	1.8	0.1	0.0	0.6
BTetCA	n	5	5	5	5	5	5	5	5	5	5
1000 mg/kg	Mean	15.5	1.9	0.2	2.6	0.6	38.2	8.2	1.0	0.1	1.4
	S.D.	6.2	0.9	0.0	0.8	0.3	5.6	5.5	0.8	0.0	0.8

Test article / Dose		#LUC	PT	APTT	FIB
		10^2/μL	s	s	mg/dL
BTetCA	n	5	5	5	5
0 mg/kg	Mean	0.2	12.7	14.6	211
	S.D.	0.2	0.5	1.3	23
BTetCA	n	5	5	5	5
1000 mg/kg	Mean	0.3	12.5	14.4	203
	S.D.	0.1	0.6	1.4	26

Not significantly different from BTetCA 0 mg/kg

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 6 - 6 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Hematology Stage : End of recovery

Sex : Male Species : Rat

Test article Dose		RBC	HGB	HCT	MCV	MCH	MCHC	RETIC	PLT	WBC	LYMP
		10^4/μL	g/dL	%	fL	pg	g/dL	%	10^4/μL	10^2/μL	%
BTetCA	n	5	5	5	5	5	5	5	5	5	5
0 mg/kg	Mean	842	15.3	44.3	52.7	18.1	34.4	1.5	87.5	81.7	78.6
	S.D.	54	1.0	1.9	1.9	0.5	0.8	0.5	39.0	24.1	5.2
BTetCA	n	5	5	5	5	5	5	5	5	5	5
1000 mg/kg	Mean	889	16.0	46.5	52.3	18.0	34.4	1.4	98.4	61.2	69.4
	S.D.	19	0.2	1.1	1.2	0.4	0.4	0.2	11.8	9.6	7.0
											T2 *

Test article Dose		NEUT	EOS	BASO	MONO	LUC	#LYMP	#NEUT	#EOS	#BASO	#MONO
		%	%	%	%	%	10^2/μL	10^2/μL	10^2/μL	10^2/μL	10^2/μL
BTetCA	n	5	5	5	5	5	5	5	5	5	5
0 mg/kg	Mean	16.7	1.4	0.2	2.3	0.8	63.8	14.1	1.2	0.2	1.8
	S.D.	5.4	0.5	0.1	0.4	0.4	16.4	7.7	0.7	0.1	0.6
BTetCA	n	5	5	5	5	5	5	5	5	5	5
1000 mg/kg	Mean	25.0	2.0	0.2	2.7	0.5	42.8	15.0	1.2	0.1	1.7
	S.D.	7.3	0.4	0.1	1.0	0.3	9.7	3.8	0.3	0.1	0.6
							T2 *				

Test article Dose		#LUC	PT	APTT	FIB
		10^2/μL	s	s	mg/dL
BTetCA	n	5	5	5	5
0 mg/kg	Mean	0.6	12.7	19.0	288
	S.D.	0.4	0.7	3.3	24
BTetCA	n	5	5	5	5
1000 mg/kg	Mean	0.3	12.7	16.5	266
	S.D.	0.2	0.6	1.5	24

Significantly different from BTetCA 0 mg/kg : * P<0.05

T2 : Student t-test (two-side)

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 6 - 7 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Hematology Stage : End of recovery

Sex : Female Species : Rat

Test article / Dose		RBC	HGB	HCT	MCV	MCH	MCHC	RETIC	PLT	WBC	LYMP
		10^4/μL	g/dL	%	fL	pg	g/dL	%	10^4/μL	10^2/μL	%
BTetCA	n	5	5	5	5	5	5	5	5	5	5
0 mg/kg	Mean	796	15.1	43.1	54.2	19.0	35.1	1.8	118.9	41.4	78.0
	S.D.	23	0.4	1.4	1.4	0.5	0.3	0.5	24.1	11.7	4.6
BTetCA	n	5	5	5	5	5	5	5	5	5	5
1000 mg/kg	Mean	806	15.4	43.7	54.3	19.2	35.3	1.7	113.8	55.8	82.7
	S.D.	42	0.5	2.0	0.7	0.4	0.6	0.3	8.5	11.1	1.9

Test article / Dose		NEUT	EOS	BASO	MONO	LUC	#LYMP	#NEUT	#EOS	#BASO	#MONO
		%	%	%	%	%	10^2/μL	10^2/μL	10^2/μL	10^2/μL	10^2/μL
BTetCA	n	5	5	5	5	5	5	5	5	5	5
0 mg/kg	Mean	16.1	1.7	0.2	3.3	0.7	32.6	6.3	0.7	0.1	1.3
	S.D.	5.0	0.7	0.1	0.9	0.2	11.0	1.1	0.4	0.1	0.4
BTetCA	n	5	5	5	5	5	5	5	5	5	5
1000 mg/kg	Mean	11.7	1.5	0.2	3.0	0.8	46.3	6.3	0.8	0.1	1.8
	S.D.	2.2	0.4	0.1	1.1	0.5	9.9	0.7	0.2	0.1	0.9

Test article / Dose		#LUC	PT	APTT	FIB
		10^2/μL	s	s	mg/dL
BTetCA	n	5	5	5	5
0 mg/kg	Mean	0.3	12.3	14.5	186
	S.D.	0.2	1.0	1.4	9
BTetCA	n	5	5	5	5
1000 mg/kg	Mean	0.5	11.7	14.3	196
	S.D.	0.3	0.2	3.9	15

Not significantly different from BTetCA 0 mg/kg

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 7 - 1 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Blood chemistry Stage : End of administration

Sex : Male Species : Rat

Test article Dose		AST IU/L	ALT IU/L	LDH IU/L	γ-GTP IU/L	ALP IU/L	T-BA μmol/L	T-CHO mg/dL	TG mg/dL	PL mg/dL	T-BIL mg/dL
BTetCA	n	5	5	5	5	5	5	5	5	5	5
0 mg/kg	Mean	69	45	69	1	446	26.5	55	60	93	0.1
	S.D.	14	8	29	0	130	16.1	3	17	4	0.0
BTetCA	n	5	5	5	5	5	5	5	5	5	5
100 mg/kg	Mean	59	39	54	1	497	15.4	64	64	98	0.1
	S.D.	4	1	7	0	127	9.2	15	35	19	0.0
											EF
BTetCA	n	5	5	5	5	5	5	5	5	5	5
300 mg/kg	Mean	76	51	64	1	628	19.6	66	53	106	0.1
	S.D.	27	13	43	0	303	14.2	10	14	9	0.0
											EF
BTetCA	n	5	5	5	5	5	5	5	5	5	5
1000 mg/kg	Mean	79	48	75	1	485	19.3	66	69	112	0.1
	S.D.	46	24	76	0	69	14.0	11	41	23	0.0
											EF

Test article Dose		GLU mg/dL	BUN mg/dL	CRNN mg/dL	Na mmol/L	K mmol/L	Cl mmol/L	Ca mg/dL	P mg/dL	TP g/dL	ALB g/dL
BTetCA	n	5	5	5	5	5	5	5	5	5	5
0 mg/kg	Mean	136	13	0.26	144	4.5	106	10.1	6.0	5.8	3.1
	S.D.	13	2	0.04	1	0.3	2	0.2	0.4	0.2	0.1
BTetCA	n	5	5	5	5	5	5	5	5	5	5
100 mg/kg	Mean	135	12	0.27	144	4.6	106	10.1	5.9	5.7	3.0
	S.D.	11	2	0.03	1	0.1	2	0.2	0.3	0.2	0.0
BTetCA	n	5	5	5	5	5	5	5	5	5	5
300 mg/kg	Mean	132	14	0.28	144	4.5	107	10.0	5.5	5.7	3.0
	S.D.	3	1	0.02	1	0.1	1	0.1	0.3	0.1	0.1
BTetCA	n	5	5	5	5	5	5	5	5	5	5
1000 mg/kg	Mean	137	12	0.28	142	4.2	108	9.8	5.1	5.7	3.1
	S.D.	13	3	0.02	1	0.2	3	0.3	0.2	0.3	0.2
									DT **		

Significantly different from BTetCA 0 mg/kg : ** P<0.01
DT : Dunnett test (two-side)
EF : The group mean is the same and unbiased variance 0 for all groups. All data of all groups are same.
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 7 - 2 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Blood chemistry Stage : End of administration

Sex : Male Species : Rat

Test article Dose		A/G
BTetCA 0 mg/kg	n	5
	Mean	1.1
	S.D.	0.1
BTetCA 100 mg/kg	n	5
	Mean	1.1
	S.D.	0.1
BTetCA 300 mg/kg	n	5
	Mean	1.1
	S.D.	0.0
BTetCA 1000 mg/kg	n	5
	Mean	1.2
	S.D.	0.1

Not significantly different from BTetCA 0 mg/kg

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 7 - 3 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Blood chemistry Stage : Lactation day 5

Sex : Female Species : Rat

Test article Dose		AST IU/L	ALT IU/L	LDH IU/L	γ-GTP IU/L	ALP IU/L	T-BA μmol/L	T-CHO mg/dL	TG mg/dL	PL mg/dL	T-BIL mg/dL
BTetCA	n	5	5	5	5	5	5	5	5	5	5
0 mg/kg	Mean	78	46	48	1	405	31.6	61	65	116	0.1
	S.D.	17	9	12	0	167	18.4	9	29	21	0.0
BTetCA	n	5	5	5	5	5	5	5	5	5	5
100 mg/kg	Mean	76	50	50	1	216	20.7	58	97	124	0.1
	S.D.	26	7	18	0	75	7.5	11	76	27	0.0
						DT *					
BTetCA	n	5	5	5	5	5	5	5	5	5	5
300 mg/kg	Mean	74	55	51	1	298	19.7	66	92	127	0.1
	S.D.	7	9	12	1	82	5.8	8	30	14	0.1
BTetCA	n	5	5	5	5	5	5	5	5	5	5
1000 mg/kg	Mean	77	73	41	1	329	27.3	70	82	131	0.1
	S.D.	9	23	7	0	81	11.5	8	24	11	0.0
			DT *								

Test article Dose		GLU mg/dL	BUN mg/dL	CRNN mg/dL	Na mmol/L	K mmol/L	Cl mmol/L	Ca mg/dL	P mg/dL	TP g/dL	ALB g/dL
BTetCA	n	5	5	5	5	5	5	5	5	5	5
0 mg/kg	Mean	128	16	0.29	142	4.5	103	11.1	9.0	5.7	3.2
	S.D.	8	2	0.03	2	0.4	1	0.6	1.4	0.4	0.3
BTetCA	n	5	5	5	5	5	5	5	5	5	5
100 mg/kg	Mean	115	16	0.29	142	4.2	105	11.0	7.6	6.0	3.5
	S.D.	11	3	0.02	1	0.3	3	0.2	0.7	0.3	0.2
BTetCA	n	5	5	5	5	5	5	5	5	5	5
300 mg/kg	Mean	122	19	0.30	142	4.2	106	10.8	7.6	6.0	3.3
	S.D.	12	3	0.05	1	0.4	2	0.3	1.1	0.3	0.1
							DT *				
BTetCA	n	5	5	5	5	5	5	5	5	5	5
1000 mg/kg	Mean	122	18	0.31	140	4.4	106	10.7	6.7	5.7	3.1
	S.D.	19	6	0.05	1	0.4	2	0.3	0.5	0.2	0.2
							DT *		DT **		

Significantly different from BTetCA 0 mg/kg : * P<0.05, ** P<0.01

DT : Dunnett test (two-side)

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 7 - 4 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Blood chemistry Stage : Lactation day 5

Sex : Female Species : Rat

Test article Dose		A/G
BTetCA 0 mg/kg	n	5
	Mean	1.3
	S.D.	0.1
BTetCA 100 mg/kg	n	5
	Mean	1.3
	S.D.	0.1
BTetCA 300 mg/kg	n	5
	Mean	1.2
	S.D.	0.1
BTetCA 1000 mg/kg	n	5
	Mean	1.2
	S.D.	0.1

Not significantly different from BTetCA 0 mg/kg

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 7 - 5 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Blood chemistry Stage : End of administration

Sex : Female Species : Rat

Test article Dose		AST IU/L	ALT IU/L	LDH IU/L	γ-GTP IU/L	ALP IU/L	T-BA μmol/L	T-CHO mg/dL	TG mg/dL	PL mg/dL	T-BIL mg/dL
BTetCA	n	5	5	5	5	5	5	5	5	5	5
0 mg/kg	Mean	57	33	42	1	250	29.3	68	33	133	0.1
	S.D.	7	4	5	1	72	19.9	16	22	24	0.0
BTetCA	n	5	5	5	5	5	5	5	5	5	5
1000 mg/kg	Mean	55	32	41	0	199	17.0	57	30	114	0.1
	S.D.	9	4	8	1	43	6.9	8	15	17	0.0
											EF

Test article Dose		GLU mg/dL	BUN mg/dL	CRNN mg/dL	Na mmol/L	K mmol/L	Cl mmol/L	Ca mg/dL	P mg/dL	TP g/dL	ALB g/dL
BTetCA	n	5	5	5	5	5	5	5	5	5	5
0 mg/kg	Mean	133	17	0.33	141	4.0	107	10.0	4.0	6.1	3.5
	S.D.	18	3	0.05	2	0.2	2	0.5	0.6	0.4	0.2
BTetCA	n	5	5	5	5	5	5	5	5	5	5
1000 mg/kg	Mean	139	13	0.31	141	3.9	107	9.9	4.1	5.8	3.3
	S.D.	15	2	0.03	2	0.2	2	0.4	0.4	0.3	0.3
			T2 *								

Test article Dose		A/G
BTetCA	n	5
0 mg/kg	Mean	1.3
	S.D.	0.0
BTetCA	n	5
1000 mg/kg	Mean	1.4
	S.D.	0.1

Significantly different from BTetCA 0 mg/kg : * P<0.05

T2 : Student t-test (two-side)

EF : The group mean is the same and unbiased variance 0 for all groups. All data of all groups are same.

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 7 - 6 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Blood chemistry Stage : End of recovery

Sex : Male Species : Rat

Test article Dose		AST IU/L	ALT IU/L	LDH IU/L	γ-GTP IU/L	ALP IU/L	T-BA μmol/L	T-CHO mg/dL	TG mg/dL	PL mg/dL	T-BIL mg/dL
BTetCA	n	5	5	5	5	5	5	5	5	5	5
0 mg/kg	Mean	65	37	38	1	309	12.6	60	39	91	0.1
	S.D.	12	2	7	0	39	6.5	5	14	2	0.0
BTetCA	n	5	5	5	5	5	5	5	5	5	5
1000 mg/kg	Mean	59	37	31	1	315	11.0	59	46	90	0.1
	S.D.	9	9	4	1	39	10.1	18	44	24	0.0
											EF

Test article Dose		GLU mg/dL	BUN mg/dL	CRNN mg/dL	Na mmol/L	K mmol/L	Cl mmol/L	Ca mg/dL	P mg/dL	TP g/dL	ALB g/dL
BTetCA	n	5	5	5	5	5	5	5	5	5	5
0 mg/kg	Mean	145	16	0.24	144	4.2	107	10.1	5.3	6.0	3.1
	S.D.	8	2	0.03	1	0.4	1	0.3	0.4	0.2	0.2
BTetCA	n	5	5	5	5	5	5	5	5	5	5
1000 mg/kg	Mean	128	18	0.26	143	4.0	107	9.8	5.1	5.9	3.1
	S.D.	16	3	0.04	2	0.3	1	0.3	0.5	0.4	0.2

Test article Dose		A/G
BTetCA	n	5
0 mg/kg	Mean	1.1
	S.D.	0.1
BTetCA	n	5
1000 mg/kg	Mean	1.1
	S.D.	0.1

Not significantly different from BTetCA 0 mg/kg

EF : The group mean is the same and unbiased variance 0 for all groups. All data of all groups are same.

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 7 - 7 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Blood chemistry Stage : End of recovery

Sex : Female Species : Rat

Test article Dose		AST IU/L	ALT IU/L	LDH IU/L	γ-GTP IU/L	ALP IU/L	T-BA μmol/L	T-CHO mg/dL	TG mg/dL	PL mg/dL	T-BIL mg/dL
BTetCA	n	5	5	5	5	5	5	5	5	5	5
0 mg/kg	Mean	62	30	42	0	175	16.8	78	23	144	0.1
	S.D.	8	3	11	0	43	5.8	17	4	27	0.0
BTetCA	n	5	5	5	5	5	5	5	5	5	5
1000 mg/kg	Mean	61	36	46	1	206	16.6	75	31	142	0.1
	S.D.	5	9	11	1	86	7.7	20	9	27	0.0
											EF

Test article Dose		GLU mg/dL	BUN mg/dL	CRNN mg/dL	Na mmol/L	K mmol/L	Cl mmol/L	Ca mg/dL	P mg/dL	TP g/dL	ALB g/dL
BTetCA	n	5	5	5	5	5	5	5	5	5	5
0 mg/kg	Mean	127	17	0.31	142	4.2	108	10.2	3.9	6.4	3.6
	S.D.	17	4	0.05	1	0.4	1	0.3	0.8	0.4	0.3
BTetCA	n	5	5	5	5	5	5	5	5	5	5
1000 mg/kg	Mean	145	16	0.30	142	4.0	107	10.1	3.6	6.5	3.7
	S.D.	8	1	0.02	1	0.4	1	0.5	0.5	0.6	0.4

Test article Dose		A/G
BTetCA	n	5
0 mg/kg	Mean	1.3
	S.D.	0.1
BTetCA	n	5
1000 mg/kg	Mean	1.3
	S.D.	0.1

Not significantly different from BTetCA 0 mg/kg

EF : The group mean is the same and unbiased variance 0 for all groups. All data of all groups are same.

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 8 - 1 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Organ weight Stage : End of administration

Sex : Male Species : Rat

Test article		Body weight	Brain		Pituitary		Thyroid-RL		Thymus	
			AB	RE	AB	RE	AB	RE	AB	RE
Dose		g	g	g/100g	mg	mg/100g	mg	mg/100g	mg	mg/100g
BTetCA	n	7	7	7	7	7	7	7	7	7
0 mg/kg	Mean	526	2.15	0.41	14.0	2.7	23.8	4.5	357	67
	S.D.	32	0.07	0.03	1.4	0.2	4.0	0.9	155	28
BTetCA	n	12	12	12	12	12	12	12	12	12
100 mg/kg	Mean	524	2.16	0.41	13.2	2.5	20.6	3.9	296	56
	S.D.	34	0.06	0.03	1.3	0.3	3.3	0.6	47	9
BTetCA	n	12	12	12	12	12	12	12	12	12
300 mg/kg	Mean	518	2.13	0.41	13.3	2.6	20.1	3.9	347	67
	S.D.	23	0.11	0.02	1.8	0.3	3.4	0.7	84	16
BTetCA	n	7	7	7	7	7	7	7	7	7
1000 mg/kg	Mean	490	2.09	0.43	13.1	2.7	22.1	4.5	275	56
	S.D.	31	0.11	0.03	1.0	0.1	4.5	0.7	62	14

Test article		Heart		Liver		Spleen		Kidney-RL		Adrenal-RL	
		AB	RE	AB	RE	AB	RE	AB	RE	AB	RE
Dose		g	g/100g	g	g/100g	g	g/100g	g	g/100g	mg	mg/100g
BTetCA	n	7	7	7	7	7	7	7	7	7	7
0 mg/kg	Mean	1.44	0.27	13.81	2.62	0.70	0.13	3.35	0.64	66	12
	S.D.	0.11	0.02	1.38	0.18	0.16	0.02	0.14	0.03	7	1
BTetCA	n	12	12	12	12	12	12	12	12	12	12
100 mg/kg	Mean	1.55	0.30	14.64	2.79	0.78	0.15	3.48	0.67	57	11
	S.D.	0.19	0.03	1.51	0.16	0.08	0.02	0.33	0.06	9	2
BTetCA	n	12	12	12	12	12	12	12	12	12	12
300 mg/kg	Mean	1.54	0.30	14.49	2.80	0.75	0.15	3.48	0.67	62	12
	S.D.	0.10	0.02	1.63	0.25	0.13	0.02	0.26	0.03	9	2
BTetCA	n	7	7	7	7	7	7	7	7	7	7
1000 mg/kg	Mean	1.33	0.27	13.46	2.74	0.67	0.14	3.39	0.69	63	13
	S.D.	0.09	0.02	1.30	0.16	0.05	0.00	0.17	0.05	6	1

AB : Absolute weight, RE : Relative weight by body weight
Not significantly different from BTetCA 0 mg/kg
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 8 - 2 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Organ weight Stage : End of administration

Sex : Male Species : Rat

Test article		Testis-RL		Epididymis-RL		Prostate		Seminalvesicle	
		AB	RE	AB	RE	AB	RE	AB	RE
Dose		g	g/100g	mg	mg/100g	g	g/100g	g	g/100g
BTetCA	n	7	7	7	7	7	7	7	7
0 mg/kg	Mean	3.32	0.63	1324	252	1.28	0.24	1.87	0.36
	S.D.	0.27	0.06	92	15	0.22	0.04	0.22	0.04
BTetCA	n	12	12	12	12	12	12	12	12
100 mg/kg	Mean	3.22	0.62	1305	250	1.31	0.25	1.81	0.35
	S.D.	0.28	0.06	121	28	0.22	0.04	0.19	0.04
BTetCA	n	12	12	12	12	12	12	12	12
300 mg/kg	Mean	3.47	0.67	1356	262	1.24	0.24	1.81	0.35
	S.D.	0.32	0.05	135	22	0.21	0.04	0.28	0.06
BTetCA	n	7	7	7	7	7	7	7	7
1000 mg/kg	Mean	3.30	0.68	1297	265	1.13	0.23	1.80	0.37
	S.D.	0.18	0.06	104	22	0.26	0.04	0.16	0.04

AB : Absolute weight, RE : Relative weight by body weight
Not significantly different from BTetCA 0 mg/kg
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 8 - 3 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Organ weight Stage : Lactation day 5

Sex : Female Species : Rat

Test article		Body weight	Brain		Pituitary		Thyroid-RL		Thymus	
			AB	RE	AB	RE	AB	RE	AB	RE
Dose		g	g	g/100g	mg	mg/100g	mg	mg/100g	mg	mg/100g
BTetCA	n	12	12	12	12	12	12	12	12	12
0 mg/kg	Mean	300	1.94	0.65	15.6	5.2	17.0	5.7	198	66
	S.D.	19	0.05	0.04	2.1	0.8	2.6	1.1	47	14
BTetCA	n	12	12	12	12	12	12	12	12	12
100 mg/kg	Mean	298	1.93	0.65	16.7	5.6	17.3	5.8	202	67
	S.D.	24	0.08	0.04	1.7	0.4	3.2	0.7	57	15
BTetCA	n	12	12	12	12	12	12	12	12	12
300 mg/kg	Mean	306	1.96	0.64	17.6	5.7	15.8	5.2	219	72
	S.D.	19	0.07	0.02	2.6	0.8	2.3	0.7	40	12
BTetCA	n	12	12	12	12	12	12	12	12	12
1000 mg/kg	Mean	303	1.94	0.64	16.8	5.5	16.3	5.4	226	74
	S.D.	19	0.08	0.03	2.0	0.7	4.5	1.4	73	22

Test article		Heart		Liver		Spleen		Kidney-RL		Adrenal-RL	
		AB	RE	AB	RE	AB	RE	AB	RE	AB	RE
Dose		g	g/100g	g	g/100g	g	g/100g	g	g/100g	mg	mg/100g
BTetCA	n	12	12	12	12	12	12	12	12	12	12
0 mg/kg	Mean	0.99	0.33	9.82	3.28	0.59	0.20	2.02	0.68	72	24
	S.D.	0.08	0.03	0.63	0.17	0.09	0.03	0.16	0.04	11	4
BTetCA	n	12	12	12	12	12	12	12	12	12	12
100 mg/kg	Mean	1.00	0.33	9.85	3.31	0.60	0.20	2.02	0.68	68	23
	S.D.	0.09	0.02	0.97	0.21	0.07	0.02	0.14	0.04	8	3
BTetCA	n	12	12	12	12	12	12	12	12	12	12
300 mg/kg	Mean	1.03	0.34	10.07	3.30	0.64	0.21	2.01	0.66	69	23
	S.D.	0.07	0.02	0.80	0.21	0.10	0.03	0.16	0.05	5	2
BTetCA	n	12	12	12	12	12	12	12	12	12	12
1000 mg/kg	Mean	0.97	0.32	9.61	3.18	0.60	0.20	2.01	0.66	68	23
	S.D.	0.06	0.02	0.44	0.21	0.13	0.04	0.15	0.04	7	3

AB : Absolute weight, RE : Relative weight by body weight
Not significantly different from BTetCA 0 mg/kg
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 8 - 4 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Organ weight Stage : Lactation day 5

Sex : Female Species : Rat

Test article		Ovary-RL		Uterus	
		AB	RE	AB	RE
Dose		mg	mg/100g	mg	mg/100g
BTetCA	n	12	12	12	12
0 mg/kg	Mean	99.6	33.3	718	240
	S.D.	10.6	3.0	121	44
BTetCA	n	12	12	12	12
100 mg/kg	Mean	104.6	35.2	717	242
	S.D.	8.0	2.8	84	31
BTetCA	n	12	12	12	12
300 mg/kg	Mean	108.3	35.6	714	235
	S.D.	12.6	5.1	60	30
BTetCA	n	12	12	12	12
1000 mg/kg	Mean	96.1	31.9	690	228
	S.D.	10.5	4.4	122	35

AB : Absolute weight, RE : Relative weight by body weight
Not significantly different from BTetCA 0 mg/kg
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 8 - 5 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Organ weight Stage : End of administration

Sex : Female Species : Rat

Test article		Body weight	Brain		Pituitary		Thyroid-RL		Thymus	
			AB	RE	AB	RE	AB	RE	AB	RE
Dose		g	g	g/100g	mg	mg/100g	mg	mg/100g	mg	mg/100g
BTetCA	n	5	5	5	5	5	5	5	5	5
0 mg/kg	Mean	265	1.90	0.72	15.1	5.7	17.3	6.6	268	100
	S.D.	23	0.06	0.06	3.7	1.5	3.4	1.7	61	15
BTetCA	n	5	5	5	5	5	5	5	5	5
1000 mg/kg	Mean	258	1.91	0.75	14.7	5.7	16.1	6.2	258	99
	S.D.	26	0.03	0.07	1.8	0.6	3.0	0.6	91	28

Test article		Heart		Liver		Spleen		Kidney-RL		Adrenal-RL	
		AB	RE	AB	RE	AB	RE	AB	RE	AB	RE
Dose		g	g/100g	g	g/100g	g	g/100g	g	g/100g	mg	mg/100g
BTetCA	n	5	5	5	5	5	5	5	5	5	5
0 mg/kg	Mean	0.84	0.32	6.91	2.60	0.44	0.17	1.68	0.63	63	24
	S.D.	0.08	0.04	0.97	0.25	0.04	0.02	0.16	0.04	8	3
BTetCA	n	5	5	5	5	5	5	5	5	5	5
1000 mg/kg	Mean	0.85	0.33	6.90	2.69	0.46	0.18	1.71	0.67	67	26
	S.D.	0.08	0.03	0.33	0.16	0.05	0.02	0.09	0.06	8	3

Test article		Ovary-RL		Uterus	
		AB	RE	AB	RE
Dose		mg	mg/100g	mg	mg/100g
BTetCA	n	5	5	5	5
0 mg/kg	Mean	78.4	29.4	518	198
	S.D.	18.2	5.2	126	59
BTetCA	n	5	5	5	5
1000 mg/kg	Mean	70.1	27.2	479	187
	S.D.	14.0	5.3	63	29

AB : Absolute weight, RE : Relative weight by body weight
Not significantly different from BTetCA 0 mg/kg
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 8 - 6 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Organ weight Stage : End of recovery

Sex : Male Species : Rat

Test article		Body weight	Brain		Pituitary		Thyroid-RL		Thymus	
			AB	RE	AB	RE	AB	RE	AB	RE
Dose		g	g	g/100g	mg	mg/100g	mg	mg/100g	mg	mg/100g
BTetCA	n	5	5	5	5	5	5	5	5	5
0 mg/kg	Mean	534	2.21	0.42	14.0	2.6	22.1	4.1	315	59
	S.D.	20	0.06	0.02	1.5	0.2	2.6	0.4	92	18
BTetCA	n	5	5	5	5	5	5	5	5	5
1000 mg/kg	Mean	507	2.18	0.43	12.6	2.5	23.7	4.7	306	60
	S.D.	46	0.05	0.03	2.3	0.5	3.7	0.8	106	19

Test article		Heart		Liver		Spleen		Kidney-RL		Adrenal-RL	
		AB	RE	AB	RE	AB	RE	AB	RE	AB	RE
Dose		g	g/100g	g	g/100g	g	g/100g	g	g/100g	mg	mg/100g
BTetCA	n	5	5	5	5	5	5	5	5	5	5
0 mg/kg	Mean	1.55	0.29	13.01	2.44	0.74	0.14	3.56	0.67	57	10
	S.D.	0.23	0.03	0.67	0.17	0.13	0.02	0.41	0.07	11	2
BTetCA	n	5	5	5	5	5	5	5	5	5	5
1000 mg/kg	Mean	1.40	0.28	11.76	2.31	0.67	0.13	3.13	0.62	61	12
	S.D.	0.09	0.02	2.11	0.20	0.11	0.01	0.19	0.04	15	4

Test article		Testis-RL		Epididymis-RL		Prostate		Seminalvesicle	
		AB	RE	AB	RE	AB	RE	AB	RE
Dose		g	g/100g	mg	mg/100g	g	g/100g	g	g/100g
BTetCA	n	5	5	5	5	5	5	5	5
0 mg/kg	Mean	3.50	0.66	1369	257	1.35	0.25	1.94	0.37
	S.D.	0.28	0.06	45	12	0.17	0.04	0.15	0.03
BTetCA	n	5	5	5	5	5	5	5	5
1000 mg/kg	Mean	3.31	0.66	1292	256	1.29	0.26	1.81	0.36
	S.D.	0.23	0.06	72	15	0.14	0.05	0.30	0.07

AB : Absolute weight, RE : Relative weight by body weight
Not significantly different from BTetCA 0 mg/kg
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 8 - 7 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Organ weight Stage : End of recovery

Sex : Female Species : Rat

Test article		Body weight	Brain		Pituitary		Thyroid-RL		Thymus	
			AB	RE	AB	RE	AB	RE	AB	RE
Dose		g	g	g/100g	mg	mg/100g	mg	mg/100g	mg	mg/100g
BTetCA	n	5	5	5	5	5	5	5	5	5
0 mg/kg	Mean	256	1.96	0.77	18.6	7.3	15.2	5.9	198	77
	S.D.	7	0.07	0.01	4.3	1.6	2.9	1.0	37	13
BTetCA	n	5	5	5	5	5	5	5	5	5
1000 mg/kg	Mean	266	1.92	0.73	17.2	6.5	14.9	5.6	243	91
	S.D.	14	0.10	0.05	2.9	1.2	2.3	0.9	58	22

Test article		Heart		Liver		Spleen		Kidney-RL		Adrenal-RL	
		AB	RE	AB	RE	AB	RE	AB	RE	AB	RE
Dose		g	g/100g	g	g/100g	g	g/100g	g	g/100g	mg	mg/100g
BTetCA	n	5	5	5	5	5	5	5	5	5	5
0 mg/kg	Mean	0.89	0.35	6.48	2.53	0.45	0.18	1.71	0.67	62	24
	S.D.	0.15	0.05	0.56	0.16	0.03	0.01	0.15	0.04	18	7
BTetCA	n	5	5	5	5	5	5	5	5	5	5
1000 mg/kg	Mean	0.89	0.34	6.62	2.50	0.40	0.15	1.81	0.68	66	25
	S.D.	0.07	0.03	0.43	0.20	0.02	0.01	0.03	0.03	10	3
						T2 *	T2 *				

Test article		Ovary-RL		Uterus	
		AB	RE	AB	RE
Dose		mg	mg/100g	mg	mg/100g
BTetCA	n	5	5	5	5
0 mg/kg	Mean	70.7	27.6	632	248
	S.D.	15.3	5.3	141	57
BTetCA	n	5	5	5	5
1000 mg/kg	Mean	82.8	31.2	582	218
	S.D.	21.3	7.7	141	47

AB : Absolute weight, RE : Relative weight by body weight
Significantly different from BTetCA 0 mg/kg : * P<0.05
T2 : Student t-test (two-side)
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Study No. : R-1193

Table 9-1 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats
Gross pathological findings (End of administration period (D42))

Species : Rat

Organs	Sex:	M	M	M	M
	Dose(mg/kg):	0	100	300	1000
Findings	Number:	7	12	12	7
Kidney					
Nodule		0	0	0	1
Stomach					
Focus,dark red,glandular stomach		1	0	0	0
Skin+Subcutis					
Nodule		0	0	1	0

M : Male

Study No. : R-1193

Table 9-2 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats
Gross pathological findings (End of administration period (D42))

Species : Rat

Organs	Sex:	F	F
	Dose(mg/kg):	0	1000
Findings	Number:	5	5
All tissues			
Not remarkable		5	5

F : Female

Study No. : R-1193

Table 9-3 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats
Gross pathological findings (End of administration period (L4))

Species : Rat

Organs	Sex:	F	F	F	F
	Dose(mg/kg):	0	100	300	1000
Findings	Number:	12	12	12	12
Liver					
Focus,white		0	0	1	0
Stomach					
Focus,dark red,glandular stomach		2	1	1	1

F : Female

Study No. : R-1193

Table 9-4 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats
Gross pathological findings (End of recovery period)

Species : Rat

Organs	Sex:	M	M
	Dose(mg/kg):	0	1000
Findings	Number:	5	5
Stomach			
Focus,dark red,glandular stomach		1	1

M : Male

Study No. : R-1193

Table 9-5 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats
Gross pathological findings (End of recovery period)

Species : Rat

Organs	Sex:	F	F
	Dose(mg/kg):	0	1000
Findings	Number:	5	5
All tissues			
Not remarkable		5	5

F : Female

Study No. : R-1193

Table 10-1 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats
Histopathological findings (End of administration period (D42))

Species : Rat

Organs	Sex:	M	M	M	M
	Dose(mg/kg):	0	100	300	1000
Findings	Number:	7	12	12	7
Adrenal					
Number examined		5	0	0	5
Not remarkable		5	0	0	5
Bone+Bone marrow,femoral					
Number examined		5	0	0	5
Not remarkable		5	0	0	5
Cerebellum(pons)					
Number examined		5	0	0	5
Not remarkable		5	0	0	5
Cerebrum					
Number examined		5	0	0	5
Not remarkable		5	0	0	5
Epididymis					
Number examined		5	5	5	5
Not remarkable		5	4	5	4
Cell debris,luminal		0	1	0	1
minimal		0	1	0	1
Eye					
Number examined		5	0	0	5
Not remarkable		5	0	0	5
Heart					
Number examined		5	0	0	5
Not remarkable		4	0	0	5
Cell infiltration,focal		1	0	0	0
minimal		1	0	0	0
Intestine,duodenum					
Number examined		5	0	0	5
Not remarkable		5	0	0	5
Intestine,jejunum					
Number examined		5	0	0	5
Not remarkable		5	0	0	5
Intestine,ileum(Peyer's patch)					
Number examined		5	0	0	5
Not remarkable		5	0	0	5
Intestine,cecum					
Number examined		5	0	0	5
Not remarkable		5	0	0	5
Intestine,colon					
Number examined		5	0	0	5
Not remarkable		5	0	0	5
Intestine,rectum					
Number examined		5	0	0	5
Not remarkable		5	0	0	5
Kidney					
Number examined		5	0	0	5
Not remarkable		5	0	0	1
Basophilia,tubular		0	0	0	2
minimal		0	0	0	2
Urinary cast,hyaline		0	0	0	1
minimal		0	0	0	1
NEPHROBLASTOMA		0	0	0	1
Present		0	0	0	1

M : Male

Study No. : R-1193

Table 10-2 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats
Histopathological findings (End of administration period (D42))

Species : Rat

Organs	Sex:	M	M	M	M
	Dose(mg/kg):	0	100	300	1000
Findings	Number:	7	12	12	7
Liver					
Number examined		5	0	0	5
Not remarkable		4	0	0	5
Microgranuloma		1	0	0	0
minimal		1	0	0	0
Lung(bronchus)					
Number examined		5	0	0	5
Not remarkable		5	0	0	5
Lymph node,mesenteric					
Number examined		5	0	0	5
Not remarkable		5	0	0	5
Lymph node,submandibular					
Number examined		5	0	0	5
Not remarkable		5	0	0	5
Mammary gland,inguinal					
Number examined		5	0	0	5
Not remarkable		5	0	0	5
Optic nerve					
Number examined		5	0	0	5
Not remarkable		5	0	0	5
Pancreas					
Number examined		5	0	0	5
Not remarkable		5	0	0	5
Parathyroid					
Number examined		5	0	0	5
Not remarkable		5	0	0	5
Pituitary					
Number examined		5	0	0	5
Not remarkable		5	0	0	4
Cyst,pars distalis		0	0	0	1
minimal		0	0	0	1
Prostate					
Number examined		5	0	0	5
Not remarkable		0	0	0	2
Cell infiltration		5	0	0	3
minimal		5	0	0	3
Salivary gland,sublingual					
Number examined		5	0	0	5
Not remarkable		5	0	0	5
Salivary gland,submandibular					
Number examined		5	0	0	5
Not remarkable		5	0	0	5
Sciatic nerve					
Number examined		5	0	0	5
Not remarkable		5	0	0	5

M : Male

Study No. : R-1193

Table 10-3 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats
Histopathological findings (End of administration period (D42))

Species : Rat

Organs	Sex:	M	M	M	M
	Dose(mg/kg):	0	100	300	1000
Findings	Number:	7	12	12	7
Seminal vesicle(coagulating gland)					
Number examined		5	0	0	5
Not remarkable		5	0	0	5
Skeletal muscle,femoral					
Number examined		5	0	0	5
Not remarkable		5	0	0	5
Skin,inguinal					
Number examined		5	0	0	5
Not remarkable		5	0	0	5
Spinal cord,thoracic					
Number examined		5	0	0	5
Not remarkable		5	0	0	5
Spleen					
Number examined		5	0	0	5
Not remarkable		5	0	0	5
Stomach					
Number examined		5	5	5	5
Not remarkable		5	0	0	1
Cell infiltration,submucosal,glandular		0	5	5	3
minimal		0	2	2	1
mild		0	3	3	2
Erosion/Ulcer,glandular stomach		0	1	1	1
minimal		0	1	1	1
Hyperplasia,squamous cell,limiting ridge		0	5	5	4
minimal		0	2	1	1
mild		0	3	4	3
Testis					
Number examined		5	5	5	5
Not remarkable		5	4	5	3
Atrophy,seminiferous tubular		0	1	0	2
minimal		0	0	0	2
mild		0	1	0	0
Thymus					
Number examined		5	0	0	5
Not remarkable		5	0	0	5
Thyroid					
Number examined		5	0	0	5
Not remarkable		5	0	0	5
Trachea					
Number examined		5	0	0	5
Not remarkable		5	0	0	5
Urinary bladder					
Number examined		5	0	0	5
Not remarkable		5	0	0	5

M : Male

Study No. : R-1193

Table 10-4 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats
Histopathological findings (End of administration period (D42))

Species : Rat

Organs	Sex:	F	F
	Dose(mg/kg):	0	1000
Findings	Number:	5	5
Adrenal			
Number examined		5	5
Not remarkable		5	5
Bone+Bone marrow,femoral			
Number examined		5	5
Not remarkable		5	5
Cerebellum(pons)			
Number examined		5	5
Not remarkable		5	5
Cerebrum			
Number examined		5	5
Not remarkable		5	5
Eye			
Number examined		5	5
Not remarkable		5	5
Heart			
Number examined		5	5
Not remarkable		4	5
Cell infiltration,focal		1	0
minimal		1	0
Intestine,duodenum			
Number examined		5	5
Not remarkable		5	5
Intestine,jejunum			
Number examined		5	5
Not remarkable		5	5
Intestine,ileum(Peyer's patch)			
Number examined		5	5
Not remarkable		5	5
Intestine,cecum			
Number examined		5	5
Not remarkable		5	5
Intestine,colon			
Number examined		5	5
Not remarkable		5	5
Intestine,rectum			
Number examined		5	5
Not remarkable		5	5
Kidney			
Number examined		5	5
Not remarkable		4	5
Fibrosis,focal		1	0
minimal		1	0
Liver			
Number examined		5	5
Not remarkable		5	5
Lung(bronchus)			
Number examined		5	5
Not remarkable		5	5

F : Female

Study No. : R-1193

Table 10-5 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats
Histopathological findings (End of administration period (D42))

Species : Rat

Organs	Sex:	F	F
	Dose(mg/kg):	0	1000
Findings	Number:	5	5
Lymph node,mesenteric			
Number examined		5	5
Not remarkable		5	5
Lymph node,submandibular			
Number examined		5	5
Not remarkable		5	5
Mammary gland,inguinal			
Number examined		5	5
Not remarkable		5	5
Optic nerve			
Number examined		5	5
Not remarkable		5	5
Ovary			
Number examined		5	5
Not remarkable		4	3
Atrophy		1	2
minimal		1	2
Pancreas			
Number examined		5	5
Not remarkable		5	5
Parathyroid			
Number examined		5	5
Not remarkable		5	5
Pituitary			
Number examined		5	5
Not remarkable		5	5
Salivary gland,sublingual			
Number examined		5	5
Not remarkable		5	5
Salivary gland,submandibular			
Number examined		5	5
Not remarkable		5	5
Sciatic nerve			
Number examined		5	5
Not remarkable		5	5
Skeletal muscle,femoral			
Number examined		5	5
Not remarkable		5	5
Skin,inguinal			
Number examined		5	5
Not remarkable		5	5
Spinal cord,thoracic			
Number examined		5	5
Not remarkable		5	5
Spleen			
Number examined		5	5
Not remarkable		5	5

F : Female

Study No. : R-1193

Table 10-6 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats
Histopathological findings (End of administration period (D42))

Species : Rat

Organs	Sex:	F	F
	Dose(mg/kg):	0	1000
Findings	Number:	5	5
Stomach			
Number examined		5	5
Not remarkable		5	2
Cell infiltration,submucosal,glandular		0	3
minimal		0	3
Hyperplasia,squamous cell,limiting ridge		0	3
minimal		0	2
mild		0	1
Thymus			
Number examined		5	5
Not remarkable		5	5
Thyroid			
Number examined		5	5
Not remarkable		5	5
Trachea			
Number examined		5	5
Not remarkable		5	5
Urinary bladder			
Number examined		5	5
Not remarkable		5	5
Uterus			
Number examined		5	5
Not remarkable		4	4
Atrophy		1	1
minimal		1	1
Vagina			
Number examined		5	5
Not remarkable		4	4
Atrophy		1	1
minimal		1	1

F : Female

Study No. : R-1193

Table 10-7 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats
Histopathological findings (End of administration period (L4))

Species : Rat

Organs	Sex:	F	F	F	F
	Dose(mg/kg):	0	100	300	1000
Findings	Number:	12	12	12	12
Adrenal					
Number examined		5	0	0	5
Not remarkable		5	0	0	5
Bone+Bone marrow,femoral					
Number examined		5	0	0	5
Not remarkable		5	0	0	5
Cerebellum(pons)					
Number examined		5	0	0	5
Not remarkable		5	0	0	5
Cerebrum					
Number examined		5	0	0	5
Not remarkable		5	0	0	5
Eye					
Number examined		5	0	0	5
Not remarkable		5	0	0	5
Heart					
Number examined		5	0	0	5
Not remarkable		5	0	0	5
Intestine,duodenum					
Number examined		5	0	0	5
Not remarkable		5	0	0	5
Intestine,jejunum					
Number examined		5	0	0	5
Not remarkable		5	0	0	5
Intestine,ileum(Peyer's patch)					
Number examined		5	0	0	5
Not remarkable		5	0	0	5
Intestine,cecum					
Number examined		5	0	0	5
Not remarkable		5	0	0	5
Intestine,colon					
Number examined		5	0	0	5
Not remarkable		5	0	0	5
Intestine,rectum					
Number examined		5	0	0	5
Not remarkable		5	0	0	5
Kidney					
Number examined		5	0	0	5
Not remarkable		5	0	0	5
Liver					
Number examined		5	0	0	5
Not remarkable		5	0	0	5
Lung(bronchus)					
Number examined		5	0	0	5
Not remarkable		5	0	0	5
Lymph node,mesenteric					
Number examined		5	0	0	5
Not remarkable		5	0	0	5

F : Female

Study No. : R-1193

Table 10-8 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats
Histopathological findings (End of administration period (L4))

Species : Rat

Organs	Sex:	F	F	F	F
	Dose(mg/kg):	0	100	300	1000
Findings	Number:	12	12	12	12
Lymph node,submandibular					
Number examined		5	0	0	5
Not remarkable		5	0	0	5
Mammary gland,inguinal					
Number examined		5	0	0	5
Not remarkable		5	0	0	5
Optic nerve					
Number examined		5	0	0	5
Not remarkable		5	0	0	5
Ovary					
Number examined		5	0	0	5
Not remarkable		5	0	0	5
Pancreas					
Number examined		5	0	0	5
Not remarkable		5	0	0	5
Parathyroid					
Number examined		5	0	0	5
Not remarkable		5	0	0	5
Pituitary					
Number examined		5	0	0	5
Not remarkable		5	0	0	5
Salivary gland,sublingual					
Number examined		5	0	0	5
Not remarkable		5	0	0	5
Salivary gland,submandibular					
Number examined		5	0	0	5
Not remarkable		5	0	0	5
Sciatic nerve					
Number examined		5	0	0	5
Not remarkable		5	0	0	5
Skeletal muscle,femoral					
Number examined		5	0	0	5
Not remarkable		5	0	0	5
Skin,inguinal					
Number examined		5	0	0	5
Not remarkable		5	0	0	5
Spinal cord,thoracic					
Number examined		5	0	0	5
Not remarkable		5	0	0	5
Spleen					
Number examined		5	0	0	5
Not remarkable		5	0	0	5
Stomach					
Number examined		5	5	5	5
Not remarkable		3	2	1	2
Cell infiltration,submucosal,glandular		0	2	3	2
minimal		0	1	3	2
mild		0	1	0	0

F : Female

Study No. : R-1193

Table 10-9 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats
Histopathological findings (End of administration period (L4))

Species : Rat

Organs	Sex:	F	F	F	F
	Dose(mg/kg):	0	100	300	1000
Findings	Number:	12	12	12	12
Stomach (continued)					
Erosion/Ulcer,glandular stomach		2	1	1	0
minimal		2	1	1	0
Hyperplasia,squamous cell,limiting ridge		0	3	4	3
minimal		0	2	4	3
mild		0	1	0	0
Thymus					
Number examined		5	0	0	5
Not remarkable		5	0	0	5
Thyroid					
Number examined		5	0	0	5
Not remarkable		5	0	0	5
Trachea					
Number examined		5	0	0	5
Not remarkable		5	0	0	5
Urinary bladder					
Number examined		5	0	0	5
Not remarkable		5	0	0	5
Uterus					
Number examined		5	0	0	5
Not remarkable		5	0	0	5
Vagina					
Number examined		5	0	0	5
Not remarkable		5	0	0	5

F : Female

Study No. : R-1193

Table 10-10 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats
Histopathological findings (End of recovery period)

Species : Rat

Organs	Sex:	M	M
	Dose(mg/kg):	0	1000
Findings	Number:	5	5
Adrenal			
Number examined		5	5
Not remarkable		5	5
Bone+Bone marrow,femoral			
Number examined		5	5
Not remarkable		5	5
Cerebellum(pons)			
Number examined		5	5
Not remarkable		5	5
Cerebrum			
Number examined		5	5
Not remarkable		5	5
Epididymis			
Number examined		5	5
Not remarkable		5	5
Eye			
Number examined		5	5
Not remarkable		5	5
Heart			
Number examined		5	5
Not remarkable		3	5
Cell infiltration,focal		2	0
minimal		2	0
Intestine,duodenum			
Number examined		5	5
Not remarkable		5	5
Intestine,jejunum			
Number examined		5	5
Not remarkable		5	5
Intestine,ileum(Peyer's patch)			
Number examined		5	5
Not remarkable		5	5
Intestine,cecum			
Number examined		5	5
Not remarkable		5	5
Intestine,colon			
Number examined		5	5
Not remarkable		5	5
Intestine,rectum			
Number examined		5	5
Not remarkable		5	5
Kidney			
Number examined		5	5
Not remarkable		4	5
Basophilia,tubular		1	0
minimal		1	0
Urinary cast,hyaline		1	0
minimal		1	0
Fibrosis,focal		1	0
minimal		1	0

M : Male

Study No. : R-1193

Table 10-11 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats
Histopathological findings (End of recovery period)

Species : Rat

Organs	Sex:	M	M
	Dose(mg/kg):	0	1000
Findings	Number:	5	5
Liver			
Number examined		5	5
Not remarkable		4	5
Microgranuloma		1	0
minimal		1	0
Lung(bronchus)			
Number examined		5	5
Not remarkable		5	4
Aggregation,alveolar macrophage		0	1
minimal		0	1
Lymph node,mesenteric			
Number examined		5	5
Not remarkable		5	5
Lymph node,submandibular			
Number examined		5	5
Not remarkable		5	5
Mammary gland,inguinal			
Number examined		5	5
Not remarkable		5	5
Optic nerve			
Number examined		5	5
Not remarkable		5	5
Pancreas			
Number examined		5	5
Not remarkable		5	5
Parathyroid			
Number examined		5	5
Not remarkable		5	5
Pituitary			
Number examined		5	5
Not remarkable		5	5
Prostate			
Number examined		5	5
Not remarkable		4	5
Cell infiltration		1	0
minimal		1	0
Salivary gland,sublingual			
Number examined		5	5
Not remarkable		5	5
Salivary gland,submandibular			
Number examined		5	5
Not remarkable		5	5
Sciatic nerve			
Number examined		5	5
Not remarkable		5	5
Seminal vesicle(coagulating gland)			
Number examined		5	5
Not remarkable		5	5

M : Male

Study No. : R-1193

Table 10-12 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats
Histopathological findings (End of recovery period)

Species : Rat

Organs	Sex:	M	M
	Dose(mg/kg):	0	1000
Findings	Number:	5	5
Skeletal muscle,femoral			
Number examined		5	5
Not remarkable		5	5
Skin,inguinal			
Number examined		5	5
Not remarkable		5	5
Spinal cord,thoracic			
Number examined		5	5
Not remarkable		5	5
Spleen			
Number examined		5	5
Not remarkable		5	5
Stomach			
Number examined		5	5
Not remarkable		4	0
Cell infiltration,submucosal,glandular		0	4
minimal		0	4
Erosion/Ulcer,glandular stomach		1	1
minimal		0	1
mild		1	0
Hyperplasia,squamous cell,limiting ridge		0	5
minimal		0	4
mild		0	1
Testis			
Number examined		5	5
Not remarkable		5	5
Thymus			
Number examined		5	5
Not remarkable		5	5
Thyroid			
Number examined		5	5
Not remarkable		5	5
Trachea			
Number examined		5	5
Not remarkable		5	5
Urinary bladder			
Number examined		5	5
Not remarkable		5	5

M : Male

Study No. : R-1193

Table 10-13 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats
Histopathological findings (End of recovery period)

Species : Rat

Organs	Sex:	F	F
	Dose(mg/kg):	0	1000
Findings	Number:	5	5
Adrenal			
Number examined		5	5
Not remarkable		5	5
Bone+Bone marrow,femoral			
Number examined		5	5
Not remarkable		5	5
Cerebellum(pons)			
Number examined		5	5
Not remarkable		5	5
Cerebrum			
Number examined		5	5
Not remarkable		5	5
Eye			
Number examined		5	5
Not remarkable		5	5
Heart			
Number examined		5	5
Not remarkable		5	5
Intestine,duodenum			
Number examined		5	5
Not remarkable		5	5
Intestine,jejunum			
Number examined		5	5
Not remarkable		5	5
Intestine,ileum(Peyer's patch)			
Number examined		5	5
Not remarkable		5	5
Intestine,cecum			
Number examined		5	5
Not remarkable		5	5
Intestine,colon			
Number examined		5	5
Not remarkable		5	5
Intestine,rectum			
Number examined		5	5
Not remarkable		5	5
Kidney			
Number examined		5	5
Not remarkable		5	5
Liver			
Number examined		5	5
Not remarkable		5	5
Lung(bronchus)			
Number examined		5	5
Not remarkable		5	4
Aggregation,alveolar macrophage		0	1
minimal		0	1

F : Female

Study No. : R-1193

Table 10-14 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats
Histopathological findings (End of recovery period)

Species : Rat

Organs	Sex:	F	F
	Dose(mg/kg):	0	1000
Findings	Number:	5	5
Lymph node,mesenteric			
Number examined		5	5
Not remarkable		5	5
Lymph node,submandibular			
Number examined		5	5
Not remarkable		5	5
Mammary gland,inguinal			
Number examined		5	5
Not remarkable		5	5
Optic nerve			
Number examined		5	5
Not remarkable		5	5
Ovary			
Number examined		5	5
Not remarkable		3	5
Atrophy		2	0
minimal		2	0
Pancreas			
Number examined		5	5
Not remarkable		5	5
Parathyroid			
Number examined		5	5
Not remarkable		5	5
Pituitary			
Number examined		5	5
Not remarkable		5	5
Salivary gland,sublingual			
Number examined		5	5
Not remarkable		5	5
Salivary gland,submandibular			
Number examined		5	5
Not remarkable		5	5
Sciatic nerve			
Number examined		5	5
Not remarkable		5	5
Skeletal muscle,femoral			
Number examined		5	5
Not remarkable		5	5
Skin,inguinal			
Number examined		5	5
Not remarkable		5	5
Spinal cord,thoracic			
Number examined		5	5
Not remarkable		5	5
Spleen			
Number examined		5	5
Not remarkable		5	5

F : Female

Study No. : R-1193

Table 10-15 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats
Histopathological findings (End of recovery period)

Species : Rat

Organs	Sex:	F	F
	Dose(mg/kg):	0	1000
Findings	Number:	5	5
Stomach			
Number examined		5	5
Not remarkable		5	4
Cell infiltration,submucosal,glandular		0	1
mild		0	1
Hyperplasia,squamous cell,limiting ridge		0	1
mild		0	1
Thymus			
Number examined		5	5
Not remarkable		5	5
Thyroid			
Number examined		5	5
Not remarkable		5	5
Trachea			
Number examined		5	5
Not remarkable		5	5
Urinary bladder			
Number examined		5	5
Not remarkable		5	5
Uterus			
Number examined		5	5
Not remarkable		5	5
Vagina			
Number examined		5	5
Not remarkable		5	5

F : Female

Table 11 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Estrus cycles

Generation : F0 Species : Rat

Test article Dose		/Before mating Mean estrous cycle (Days)	Number of estrus	Number of animals with abnormal estrous cycle	Abnormal estrous cycle index (%)
BTetCA	n	12	12	12	
0 mg/kg				(0)	0.0
	Mean	4.1	3.7		
	S.D.	0.3	0.5		
BTetCA	n	12	12	12	
100 mg/kg				(1)	8.3
	Mean	4.3	3.4		
	S.D.	0.5	0.5		
BTetCA	n	12	12	12	
300 mg/kg				(0)	0.0
	Mean	4.1	3.7		
	S.D.	0.3	0.5		
BTetCA	n	12	12	12	
1000 mg/kg				(0)	0.0
	Mean	4.2	3.4		
	S.D.	0.3	0.5		

() : Values in brackets represent number of animals with abnormal estrous cycle.
Abnormal estrous cycle index = (Number of animals with abnormal estrous cycle / Number of animals examined)×100
Not significantly different from BTetCA 0 mg/kg
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 12 - 1 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Reproductive performance

Generation : F0 Sex : Male Species : Rat

Test article Dose		Number of pairs	Elapsed day of conceiving	1st mating Copulation index (%) a)	1st mating Fertility index (%) b)
BTetCA 0 mg/kg	n	12	12	(12/12)	(12/12)
	Mean		2.3	100.0	100.0
	S.D.		1.2		
BTetCA 100 mg/kg	n	12	12	(12/12)	(12/12)
	Mean		2.8	100.0	100.0
	S.D.		1.3		
BTetCA 300 mg/kg	n	12	12	(12/12)	(12/12)
	Mean		2.4	100.0	100.0
	S.D.		1.0		
BTetCA 1000 mg/kg	n	12	12	(12/12)	(12/12)
	Mean		1.8	100.0	100.0
	S.D.		1.3		

Not significantly different from BTetCA 0 mg/kg

a): (Number of copulated animals / Number of mated animals)×100

b): (Number of males which impregnated females / Number of copulated males)×100

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 12 - 2 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Reproductive performance

Generation : F0 Sex : Female Species : Rat

Test article Dose		Number of pairs	Elapsed day of conceiving	1st mating Copulation index (%) a)	1st mating Fertility index (%) b)
BTetCA 0 mg/kg	n	12	12	(12/12)	(12/12)
	Mean		2.3	100.0	100.0
	S.D.		1.2		
BTetCA 100 mg/kg	n	12	12	(12/12)	(12/12)
	Mean		2.8	100.0	100.0
	S.D.		1.3		
BTetCA 300 mg/kg	n	12	12	(12/12)	(12/12)
	Mean		2.4	100.0	100.0
	S.D.		1.0		
BTetCA 1000 mg/kg	n	12	12	(12/12)	(12/12)
	Mean		1.8	100.0	100.0
	S.D.		1.3		

Not significantly different from BTetCA 0 mg/kg

a): (Number of copulated animals / Number of mated animals)×100

b): (Number of pregnant females / Number of copulated females)×100

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 13 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Delivery data

Generation : F0 Species : Rat

Test article Dose		Gestation period (day)	Gestation index (%) a)	Number of corpora lutea	Number of implan-tation	Preimplan-tation loss (%) b)	Implantation index (%) c)	Delivery index (%) d)	Live birth index (%) e)	Number of offspring	Number of live newborns M	F	Total	Sex ratio (%) live-borns f)	delivered pups g)	Number of dead newborns
BTetCA	n	12	12/12	12	12	12	12	12	12	12	12	12	12	87/174	87/174	12
0 mg/kg	Mean	21.9	100.0	15.6	15.5	0.5	99.5	93.6	100.0	14.5	7.3	7.3	14.5	50.0	50.0	0.0
	S.D.	0.4		0.8	0.8	1.8	1.8	6.7	0.0	1.3	2.1	1.9	1.3			0.0
BTetCA	n	12	12/12	12	12	12	12	12	12	12	12	12	12	87/169	87/169	12
100 mg/kg	Mean	22.1	100.0	15.4	15.3	1.1	99.0	92.2	100.0	14.1	7.3	6.8	14.1	51.5	51.5	0.0
	S.D.	0.4		1.3	1.3	2.5	2.4	8.9	0.0	2.0	1.8	2.0	2.0			0.0
			EF						EF							EF
BTetCA	n	12	12/12	12	12	12	12	12	12	12	12	12	12	102/165	102/165	12
300 mg/kg	Mean	22.0	100.0	15.1	14.6	3.0	97.0	94.6	100.0	13.8	8.5	5.3	13.8	61.8	61.8	0.0
	S.D.	0.5		2.1	1.7	4.1	4.0	7.5	0.0	1.7	1.6	0.9	1.7			0.0
			EF						EF			DT *		FT *	FT *	EF
BTetCA	n	12	12/12	12	12	12	12	12	12	12	12	12	12	66/148	66/148	12
1000 mg/kg	Mean	22.0	100.0	14.1	13.6	4.4	95.6	90.0	100.0	12.3	5.5	6.8	12.3	44.6	44.6	0.0
	S.D.	0.4		2.2	2.7	9.6	9.6	9.6	0.0	2.8	2.0	2.4	2.8			0.0
			EF		ST *				EF	DT *			DT *			EF

M : Male, F : Female

Significantly different from BTetCA 0 mg/kg : * P<0.05

DT : Dunnett test (two-side), FT : Fisher's exact test (two-side), ST : Steel test (two-side)

EF : The group mean is the same and unbiased variance 0 for all groups. All data of all groups are same.

a): (Number of females which delivered liveborns / Number of pregnant females)×100

b): [(Number of corpora lutea - Number of implantation) / Number of corpora lutea]×100

c): (Number of implantation / Number of corpora lutea)×100

d): (Number of delivered pups / Number of implantation)×100

e): (Number of live borns / Number of delivered pups)×100

f): (Number of liveborn males / Number of liveborns)×100

g): (Number of delivered males / Number of delivered pups)×100

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 14 - 1 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

External examination of offspring

Generation : F0

Study No. : R-1193

Days after birth : 0

Species : Rat

Test article	BTetCA	BTetCA	BTetCA	BTetCA
Dose	0 mg/kg	100 mg/kg	300 mg/kg	1000 mg/kg
Number of dams	12	12	12	12
Number of offspring	174	169	165	148
Number of offspring with any anomaly (incidence %)a)	0(0.0)	0(0.0)	0(0.0)	0(0.0)
		EF	EF	EF

Not significantly different from BTetCA 0 mg/kg

a) : (Number of offspring with any anomaly / Number of offspring) x 100

EF : The group mean is the same and unbiased variance 0 for all groups. All data of all groups are same.

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 14 - 2 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

External examination of offspring

Generation : F0

Study No. : R-1193

Days after birth : 4

Species : Rat

Test article	BTetCA	BTetCA	BTetCA	BTetCA
Dose	0 mg/kg	100 mg/kg	300 mg/kg	1000 mg/kg
Number of dams	12	12	12	12
Number of offspring	170	168	165	146
Number of offspring with any anomaly	0	0	0	0

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 15 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Viability index and sex ratio of offspring on day 4 after birth

Generation : F0 Species : Rat

Test article Dose		Number of live offspring Day 0	Day 4	Viability index (%)a)	Sex ratio (%)b)
BTetCA	n	12	12	12	84/170
0 mg/kg	Mean	14.5	14.2	97.8	49.4
	S.D.	1.3	1.3	4.5	
BTetCA	n	12	12	12	87/168
100 mg/kg	Mean	14.1	14.0	99.5	51.8
	S.D.	2.0	1.8	1.6	
BTetCA	n	12	12	12	102/165
300 mg/kg	Mean	13.8	13.8	100.0	61.8
	S.D.	1.7	1.7	0.0	
					FT *
BTetCA	n	12	12	12	66/146
1000 mg/kg	Mean	12.3	12.2	98.7	45.2
	S.D.	2.8	2.8	3.0	

a) : (Number of live offspring on day 4 after birth / Number of live newborns) × 100

b) : (Number of live males on day 4 after birth / Number of live offspring on day 4 after birth) × 100

Significantly different from BTetCA 0 mg/kg : * P<0.05

FT : Fisher's exact test (two-side)

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 16 - 1

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Study No. : R-1193

Body weight of offspring

Generation : F0

Unit : g

Species : Rat

Test article Dose			/Days after birth 0	 4/Pre-culled
BTetCA 0 mg/kg	Male	n	12	12
		Mean	6.4	9.9
		S.D.	0.5	0.9
	Female	n	12	12
		Mean	6.2	9.6
		S.D.	0.6	1.0
BTetCA 100 mg/kg	Male	n	12	12
		Mean	6.7	10.3
		S.D.	0.6	1.4
	Female	n	12	12
		Mean	6.3	9.9
		S.D.	0.5	1.1
BTetCA 300 mg/kg	Male	n	12	12
		Mean	6.5	10.4
		S.D.	0.6	1.0
	Female	n	12	12
		Mean	6.1	9.6
		S.D.	0.6	1.1
BTetCA 1000 mg/kg	Male	n	12	12
		Mean	6.5	10.6
		S.D.	0.6	1.0
	Female	n	12	12
		Mean	6.1	10.0
		S.D.	0.5	1.0

Not significantly different from BTetCA 0 mg/kg

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 16 - 2 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Body weight gain of offspring Base : Day 4 after birth

Generation : F0 Unit : g Species : Rat

Test article Dose			/Days after birth /Before culling 0-4
BTetCA 0 mg/kg	Male	n	12
		Mean	3.5
		S.D.	0.5
	Female	n	12
		Mean	3.4
		S.D.	0.6
BTetCA 100 mg/kg	Male	n	12
		Mean	3.6
		S.D.	1.0
	Female	n	12
		Mean	3.6
		S.D.	0.8
BTetCA 300 mg/kg	Male	n	12
		Mean	3.9
		S.D.	0.6
	Female	n	12
		Mean	3.6
		S.D.	0.7
BTetCA 1000 mg/kg	Male	n	12
		Mean	4.1
		S.D.	0.6
	Female	n	12
		Mean	3.9
		S.D.	0.6

Not significantly different from BTetCA 0 mg/kg

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Table 17 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats External examination of dead offspring Study No. : R-1193

Generation : F0 Species : Rat

Test article	BTetCA	BTetCA	BTetCA	BTetCA
Dose	0 mg/kg	100 mg/kg	300 mg/kg	1000 mg/kg
Number of dams	12	12	12	12
Number of offspring	3	1	0	0
Number of offspring with any anomaly	0	0	0	0

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Study No.: R-1193

Appendix 1-1 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Clinical signs Period : F0 before mating Day 1-15, F0 mating Day 15-43

Sex : Male Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	/Day 1	2	3	4	5	6	7	8	9	10	11	12	13	14
1001	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1002	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1003	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1004	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1005	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1006	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1007	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1008	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1009	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1010	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1011	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1012	-	-	-	-	-	-	-	-	-	-	-	-	-	-

- : No abnormal findings

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Study No.: R-1193

Appendix 1-2 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Clinical signs Period : F0 before mating Day 1-15, F0 mating Day 15-43

Sex : Male Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	/Day 15	16	17	18	19	20	21	22	23	24	25	26	27	28
1001	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1002	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1003	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1004	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1005	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1006	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1007	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1008	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1009	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1010	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1011	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1012	-	-	-	-	-	-	-	-	-	-	-	-	-	-

- : No abnormal findings

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Study No.: R-1193

Appendix 1-3 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Clinical signs Period : F0 before mating Day 1-15, F0 mating Day 15-43

Sex : Male Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	/Day 29	30	31	32	33	34	35	36	37	38	39	40	41	42	43a)
1001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1003	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1004	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1005	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1006	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1007	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1008	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1009	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1011	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1012	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

a) : Day of necropsy
- : No abnormal findings
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Study No.: R-1193

Appendix 1-4 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Clinical signs Period : F0 before mating Day 1-15, F0 mating Day 15-43

Sex : Male Dose : BTetCA 100 mg/kg Species : Rat

Animal No.	/Day 1	2	3	4	5	6	7	8	9	10	11	12	13	14
2001	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2002	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2003	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2004	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2005	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2006	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2007	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2008	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2009	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2010	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2011	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2012	-	-	-	-	-	-	-	-	-	-	-	-	-	-

- : No abnormal findings

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Study No.: R-1193

Appendix 1-5 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Clinical signs Period : F0 before mating Day 1-15, F0 mating Day 15-43

Sex : Male Dose : BTetCA 100 mg/kg Species : Rat

Animal No.	/Day 15	16	17	18	19	20	21	22	23	24	25	26	27	28
2001	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2002	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2003	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2004	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2005	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2006	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2007	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2008	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2009	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2010	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2011	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2012	-	-	-	-	-	-	-	-	-	-	-	-	-	-

- : No abnormal findings

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Study No.: R-1193

Appendix 1-6 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Clinical signs Period : F0 before mating Day 1-15, F0 mating Day 15-43

Sex : Male Dose : BTetCA 100 mg/kg Species : Rat

Animal No.	/Day 29	30	31	32	33	34	35	36	37	38	39	40	41	42	43a)
2001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2003	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2004	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2005	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2006	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2007	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2008	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2009	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2011	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2012	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

a) : Day of necropsy
- : No abnormal findings
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Study No.: R-1193

Appendix 1-7 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Clinical signs Period : F0 before mating Day 1-15, F0 mating Day 15-43

Sex : Male Dose : BTetCA 300 mg/kg Species : Rat

Animal No.	/Day 1	2	3	4	5	6	7	8	9	10	11	12	13	14
3001	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3002	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3003	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3004	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3005	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3006	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3007	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3008	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3009	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3010	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3011	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3012	-	-	-	-	-	-	-	-	-	-	-	-	-	-

- : No abnormal findings

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Study No.: R-1193

Appendix 1-8 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Clinical signs Period : F0 before mating Day 1-15, F0 mating Day 15-43

Sex : Male Dose : BTetCA 300 mg/kg Species : Rat

Animal No.	/Day 15	16	17	18	19	20	21	22	23	24	25	26	27	28
3001	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3002	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3003	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3004	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3005	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3006	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3007	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3008	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3009	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3010	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3011	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3012	-	-	-	-	-	-	-	-	-	-	-	-	-	-

- : No abnormal findings

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Study No.: R-1193

Appendix 1-9 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Clinical signs Period : F0 before mating Day 1-15, F0 mating Day 15-43

Sex : Male Dose : BTetCA 300 mg/kg Species : Rat

Animal No.	/Day 29	30	31	32	33	34	35	36	37	38	39	40	41	42	43a)
3001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3003	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3004	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3005	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3006	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3007	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3008	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3009	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3011	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3012	-	-	-	-	-	-	A	A	A	A	A	A	A	A	A

a) : Day of necropsy
- : No abnormal findings
A : Mass, cervical region
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Study No.: R-1193

Appendix 1-10 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Clinical signs Period : F0 before mating Day 1-15, F0 mating Day 15-43

Sex : Male Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	/Day 1	2	3	4	5	6	7	8	9	10	11	12	13	14
4001	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4002	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4003	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4004	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4005	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4006	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4007	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4008	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4009	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4010	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4011	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4012	-	-	-	-	-	-	-	-	-	-	-	-	-	-

- : No abnormal findings

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Study No.: R-1193

Appendix 1-11 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Clinical signs Period : F0 before mating Day 1-15, F0 mating Day 15-43

Sex : Male Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	/Day 15	16	17	18	19	20	21	22	23	24	25	26	27	28
4001	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4002	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4003	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4004	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4005	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4006	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4007	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4008	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4009	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4010	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4011	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4012	-	-	-	-	-	-	-	-	-	-	-	-	-	-

- : No abnormal findings

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Study No.: R-1193

Appendix 1-12 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Clinical signs Period : F0 before mating Day 1-15, F0 mating Day 15-43

Sex : Male Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	/Day 29	30	31	32	33	34	35	36	37	38	39	40	41	42	43a)
4001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4003	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4004	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4005	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4006	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4007	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4008	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
4009	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
4010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
4011	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
4012	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

a) : Day of necropsy
- : No abnormal findings
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Study No.: R-1193

Appendix 1-13 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Clinical signs Period : F0 before mating Day 1-15

Sex : Female Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	/Day 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1101	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1102	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1103	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1104	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1105	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1106	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1107	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1108	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1109	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1110	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1112	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

- : No abnormal findings

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Study No.: R-1193

Appendix 1-14 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Clinical signs Period : F0 before mating Day 1-15

Sex : Female Dose : BTetCA 100 mg/kg Species : Rat

Animal No.	/Day 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
2101	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2102	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2103	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2104	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2105	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2106	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2107	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2108	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2109	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2110	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2112	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

- : No abnormal findings

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Study No.: R-1193

Appendix 1-15 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Clinical signs Period : F0 before mating Day 1-15

Sex : Female Dose : BTetCA 300 mg/kg Species : Rat

Animal No.	/Day 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
3101	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3102	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3103	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3104	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3105	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3106	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3107	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3108	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3109	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3110	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3112	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

- : No abnormal findings

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Study No.: R-1193

Appendix 1-16 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Clinical signs Period : F0 before mating Day 1-15

Sex : Female Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	/Day 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
4101	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4102	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4103	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4104	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4105	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4106	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4107	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4108	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4109	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4110	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4112	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

- : No abnormal findings

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Study No.: R-1193

Appendix 1-17 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Clinical signs Period : F0 gestation Day 0-25

Sex : Female Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	/Day 0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1101	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-/d		
1102	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	d	
1103	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-/d		
1104	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-/d		
1105	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	d	
1106	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-/d	
1107	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-/d		
1108	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-/d		
1109	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	d	
1110	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	d	
1111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	d	
1112	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	d	

- : No abnormal findings
d : Delivery
/d : Found delivery after the observation of general conditions.
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Study No.: R-1193

Appendix 1-18 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Clinical signs Period : F0 gestation Day 0-25

Sex : Female Dose : BTetCA 100 mg/kg Species : Rat

Animal No.	/Day 0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
2101	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-/d	
2102	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-/d		
2103	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	d	
2104	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-/d	
2105	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	d	
2106	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	d	
2107	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	d	
2108	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-/d	
2109	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	d	
2110	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-/d		
2111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	d	
2112	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	d	

- : No abnormal findings
d : Delivery
/d : Found delivery after the observation of general conditions.
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Study No.: R-1193

Appendix 1-19 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Clinical signs Period : F0 gestation Day 0-25

Sex : Female Dose : BTetCA 300 mg/kg Species : Rat

Animal No.	/Day 0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
3101	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	d	
3102	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	d	
3103	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	d	
3104	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	d	
3105	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	d	
3106	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-/d		
3107	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	d
3108	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	d	
3109	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-/d		
3110	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-/d		
3111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-/d		
3112	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	d	

- : No abnormal findings
d : Delivery
/d : Found delivery after the observation of general conditions.
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Study No.: R-1193

Appendix 1-20 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Clinical signs Period : F0 gestation Day 0-25

Sex : Female Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	/Day 0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
4101	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-/d	
4102	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	d	
4103	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	d	
4104	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	d	
4105	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-/d		
4106	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	d	
4107	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	d	
4108	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	d	
4109	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-/d	
4110	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-/d		
4111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-/d		
4112	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-/d		

- : No abnormal findings
d : Delivery
/d : Found delivery after the observation of general conditions.
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 1-21 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Clinical signs Period : F0 lactation Day 0-5

Sex : Female Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	/Day 0	1	2	3	4	5a)
1101	-	-	-	-	-	-
1102	-	-	-	-	-	-
1103	-	-	-	-	-	-
1104	-	-	-	-	-	-
1105	-	-	-	-	-	-
1106	-	-	-	-	-	-
1107	-	-	-	-	-	-
1108	-	-	-	-	-	-
1109	-	-	-	-	-	-
1110	-	-	-	-	-	-
1111	-	-	-	-	-	-
1112	-	-	-	-	-	-

a) : Day of necropsy
- : No abnormal findings
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 1-22 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Clinical signs Period : F0 lactation Day 0-5

Sex : Female Dose : BTetCA 100 mg/kg Species : Rat

Animal No.	/Day 0	1	2	3	4	5a)
2101	-	-	-	-	-	-
2102	-	-	-	-	-	-
2103	-	-	-	-	-	-
2104	-	-	-	-	-	-
2105	-	-	-	-	-	-
2106	-	-	-	-	-	-
2107	-	-	-	-	-	-
2108	-	-	-	-	-	-
2109	-	-	-	-	-	-
2110	-	-	-	-	-	-
2111	-	-	-	-	-	-
2112	-	-	-	-	-	-

a) : Day of necropsy
- : No abnormal findings
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 1-23 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Clinical signs Period : F0 lactation Day 0-5

Sex : Female Dose : BTetCA 300 mg/kg Species : Rat

Animal No.	/Day 0	1	2	3	4	5a)
3101	-	-	-	-	-	-
3102	-	-	-	-	-	-
3103	-	-	-	-	-	-
3104	-	-	-	-	-	-
3105	-	-	-	-	-	-
3106	-	-	-	-	-	-
3107	-	-	-	-	-	-
3108	-	-	-	-	-	-
3109	-	-	-	-	-	-
3110	-	-	-	-	-	-
3111	-	-	-	-	-	-
3112	-	-	-	-	-	-

a) : Day of necropsy
- : No abnormal findings
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 1-24 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Clinical signs Period : F0 lactation Day 0-5

Sex : Female Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	/Day 0	1	2	3	4	5a)
4101	-	-	-	-	-	-
4102	-	-	-	-	-	-
4103	-	-	-	-	-	-
4104	-	-	-	-	-	-
4105	-	-	-	-	-	-
4106	-	-	-	-	-	-
4107	-	-	-	-	-	-
4108	-	-	-	-	-	-
4109	-	-	-	-	-	-
4110	-	-	-	-	-	-
4111	-	-	-	-	-	-
4112	-	-	-	-	-	-

a) : Day of necropsy
- : No abnormal findings
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Study No.: R-1193

Appendix 1-25 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Clinical signs Period : Administration Day 1-43

Sex : Female Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	/Day 1	2	3	4	5	6	7	8	9	10	11	12	13	14
5101	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5102	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5103	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5104	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5105	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5106	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5107	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5108	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5109	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5110	-	-	-	-	-	-	-	-	-	-	-	-	-	-

- : No abnormal findings

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Study No.: R-1193

Appendix 1-26 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Clinical signs Period : Administration Day 1-43

Sex : Female Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	/Day 15	16	17	18	19	20	21	22	23	24	25	26	27	28
5101	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5102	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5103	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5104	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5105	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5106	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5107	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5108	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5109	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5110	-	-	-	-	-	-	-	-	-	-	-	-	-	-

- : No abnormal findings

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Study No.: R-1193

Appendix 1-27 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Clinical signs Period : Administration Day 1-43

Sex : Female Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	/Day 29	30	31	32	33	34	35	36	37	38	39	40	41	42	43a)
5101	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5102	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5103	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5104	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5105	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5106	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
5107	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
5108	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
5109	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
5110	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

a) : Day of necropsy
- : No abnormal findings
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Study No.: R-1193

Appendix 1-28 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Clinical signs Period : Administration Day 1-43

Sex : Female Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	/Day 1	2	3	4	5	6	7	8	9	10	11	12	13	14
6101	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6102	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6103	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6104	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6105	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6106	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6107	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6108	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6109	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6110	-	-	-	-	-	-	-	-	-	-	-	-	-	-

- : No abnormal findings

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Study No.: R-1193

Appendix 1-29 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Clinical signs Period : Administration Day 1-43

Sex : Female Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	/Day 15	16	17	18	19	20	21	22	23	24	25	26	27	28
6101	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6102	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6103	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6104	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6105	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6106	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6107	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6108	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6109	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6110	-	-	-	-	-	-	-	-	-	-	-	-	-	-

- : No abnormal findings

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Study No.: R-1193

Appendix 1-30 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Clinical signs Period : Administration Day 1-43

Sex : Female Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	/Day 29	30	31	32	33	34	35	36	37	38	39	40	41	42	43a)
6101	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6102	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6103	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6104	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6105	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6106	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
6107	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
6108	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
6109	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
6110	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

a) : Day of necropsy
- : No abnormal findings
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Study No.: R-1193

Appendix 1-31 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Clinical signs Period : Recovery Day 1-15

Sex : Male Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	/Day 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15a)
1008	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1009	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1011	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1012	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

a) : Day of necropsy
- : No abnormal findings
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Study No.: R-1193

Appendix 1-32 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Clinical signs Period : Recovery Day 1-15

Sex : Male Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	/Day 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15a)
4008	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4009	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4011	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4012	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

a) : Day of necropsy
- : No abnormal findings
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Study No.: R-1193

Appendix 1-33 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Clinical signs Period : Recovery Day 1-15

Sex : Female Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	/Day 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15a)
5106	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5107	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5108	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5109	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5110	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

a) : Day of necropsy
- : No abnormal findings
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Study No.: R-1193

Appendix 1-34 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Clinical signs Period : Recovery Day 1-15

Sex : Female Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	/Day 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15a)
6106	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6107	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6108	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6109	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6110	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

a) : Day of necropsy
- : No abnormal findings
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 2 - 1 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Home cage observation Period : F0 before mating

Generation : F0 Sex : Male Week : 1 Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Posture	Convulsion	Abnormal behavior
1001	N	0	0
1002	N	0	0
1003	N	0	0
1004	N	0	0
1005	N	0	0
1006	N	0	0
1007	N	0	0
1008	N	0	0
1009	N	0	0
1010	N	0	0
1011	N	0	0
1012	N	0	0
n	12	12	12

Posture) N: Normal, F: Flattened, H: Hunched
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 2 - 2 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Home cage observation Period : F0 before mating

Generation : F0 Sex : Male Week : 1 Dose : BTetCA 100 mg/kg Species : Rat

Animal No.	Posture	Convulsion	Abnormal behavior
2001	N	0	0
2002	N	0	0
2003	N	0	0
2004	N	0	0
2005	N	0	0
2006	N	0	0
2007	N	0	0
2008	N	0	0
2009	N	0	0
2010	N	0	0
2011	N	0	0
2012	N	0	0
n	12	12	12

Posture) N: Normal, F: Flattened, H: Hunched
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 2 - 3 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Home cage observation Period : F0 before mating

Generation : F0 Sex : Male Week : 1 Dose : BTetCA 300 mg/kg Species : Rat

Animal No.	Posture	Convulsion	Abnormal behavior
3001	N	0	0
3002	N	0	0
3003	N	0	0
3004	N	0	0
3005	N	0	0
3006	N	0	0
3007	N	0	0
3008	N	0	0
3009	N	0	0
3010	N	0	0
3011	N	0	0
3012	N	0	0
n	12	12	12

Posture) N: Normal, F: Flattened, H: Hunched
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 2 - 4 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Home cage observation Period : F0 before mating

Generation : F0 Sex : Male Week : 1 Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Posture	Convulsion	Abnormal behavior
4001	N	0	0
4002	N	0	0
4003	N	0	0
4004	N	0	0
4005	N	0	0
4006	N	0	0
4007	N	0	0
4008	N	0	0
4009	N	0	0
4010	N	0	0
4011	N	0	0
4012	N	0	0
n	12	12	12

Posture) N: Normal, F: Flattened, H: Hunched
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 2 - 5 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Home cage observation Period : F0 before mating

Generation : F0 Sex : Male Week : 2 Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Posture	Convulsion	Abnormal behavior
1001	N	0	0
1002	N	0	0
1003	N	0	0
1004	N	0	0
1005	N	0	0
1006	N	0	0
1007	N	0	0
1008	N	0	0
1009	N	0	0
1010	N	0	0
1011	N	0	0
1012	N	0	0
n	12	12	12

Posture) N: Normal, F: Flattened, H: Hunched
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 2 - 6 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Home cage observation Period : F0 before mating

Generation : F0 Sex : Male Week : 2 Dose : BTetCA 100 mg/kg Species : Rat

Animal No.	Posture	Convulsion	Abnormal behavior
2001	N	0	0
2002	N	0	0
2003	N	0	0
2004	N	0	0
2005	N	0	0
2006	N	0	0
2007	N	0	0
2008	N	0	0
2009	N	0	0
2010	N	0	0
2011	N	0	0
2012	N	0	0
n	12	12	12

Posture) N: Normal, F: Flattened, H: Hunched
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 2 - 7 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Home cage observation Period : F0 before mating

Generation : F0 Sex : Male Week : 2 Dose : BTetCA 300 mg/kg Species : Rat

Animal No.	Posture	Convulsion	Abnormal behavior
3001	N	0	0
3002	N	0	0
3003	N	0	0
3004	N	0	0
3005	N	0	0
3006	N	0	0
3007	N	0	0
3008	N	0	0
3009	N	0	0
3010	N	0	0
3011	N	0	0
3012	N	0	0
n	12	12	12

Posture) N: Normal, F: Flattened, H: Hunched
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 2 - 8 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Home cage observation Period : F0 before mating

Generation : F0 Sex : Male Week : 2 Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Posture	Convulsion	Abnormal behavior
4001	N	0	0
4002	N	0	0
4003	N	0	0
4004	N	0	0
4005	N	0	0
4006	N	0	0
4007	N	0	0
4008	N	0	0
4009	N	0	0
4010	N	0	0
4011	N	0	0
4012	N	0	0
n	12	12	12

Posture) N: Normal, F: Flattened, H: Hunched
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 2 - 9 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Home cage observation Period : F0 mating

Generation : F0 Sex : Male Week : 3 Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Posture	Convulsion	Abnormal behavior
1001	N	0	0
1002	N	0	0
1003	N	0	0
1004	N	0	0
1005	N	0	0
1006	N	0	0
1007	N	0	0
1008	N	0	0
1009	N	0	0
1010	N	0	0
1011	N	0	0
1012	N	0	0
n	12	12	12

Posture) N: Normal, F: Flattened, H: Hunched
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 2 - 10 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Home cage observation Period : F0 mating

Generation : F0 Sex : Male Week : 3 Dose : BTetCA 100 mg/kg Species : Rat

Animal No.	Posture	Convulsion	Abnormal behavior
2001	N	0	0
2002	N	0	0
2003	N	0	0
2004	N	0	0
2005	N	0	0
2006	N	0	0
2007	N	0	0
2008	N	0	0
2009	N	0	0
2010	N	0	0
2011	N	0	0
2012	N	0	0
n	12	12	12

Posture) N: Normal, F: Flattened, H: Hunched
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 2 - 11 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Home cage observation Period : F0 mating

Generation : F0 Sex : Male Week : 3 Dose : BTetCA 300 mg/kg Species : Rat

Animal No.	Posture	Convulsion	Abnormal behavior
3001	N	0	0
3002	N	0	0
3003	N	0	0
3004	N	0	0
3005	N	0	0
3006	N	0	0
3007	N	0	0
3008	N	0	0
3009	N	0	0
3010	N	0	0
3011	N	0	0
3012	N	0	0
n	12	12	12

Posture) N: Normal, F: Flattened, H: Hunched
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 2 - 12 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Home cage observation Period : F0 mating

Generation : F0 Sex : Male Week : 3 Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Posture	Convulsion	Abnormal behavior
4001	N	0	0
4002	N	0	0
4003	N	0	0
4004	N	0	0
4005	N	0	0
4006	N	0	0
4007	N	0	0
4008	N	0	0
4009	N	0	0
4010	N	0	0
4011	N	0	0
4012	N	0	0
n	12	12	12

Posture) N: Normal, F: Flattened, H: Hunched
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Home cage observation

Period : F0 mating

Generation : F0 Sex : Male Week : 4 Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Posture	Convulsion	Abnormal behavior
1001	N	0	0
1002	N	0	0
1003	N	0	0
1004	N	0	0
1005	N	0	0
1006	N	0	0
1007	N	0	0
1008	N	0	0
1009	N	0	0
1010	N	0	0
1011	N	0	0
1012	N	0	0
n	12	12	12

Posture) N: Normal, F: Flattened, H: Hunched
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 2 - 14 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Home cage observation Period : F0 mating

Generation : F0 Sex : Male Week : 4 Dose : BTetCA 100 mg/kg Species : Rat

Animal No.	Posture	Convulsion	Abnormal behavior
2001	N	0	0
2002	N	0	0
2003	N	0	0
2004	N	0	0
2005	N	0	0
2006	N	0	0
2007	N	0	0
2008	N	0	0
2009	N	0	0
2010	N	0	0
2011	N	0	0
2012	N	0	0
n	12	12	12

Posture) N: Normal, F: Flattened, H: Hunched
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Home cage observation

Period : F0 mating

Generation : F0 Sex : Male Week : 4 Dose : BTetCA 300 mg/kg Species : Rat

Animal No.	Posture	Convulsion	Abnormal behavior
3001	N	0	0
3002	N	0	0
3003	N	0	0
3004	N	0	0
3005	N	0	0
3006	N	0	0
3007	N	0	0
3008	N	0	0
3009	N	0	0
3010	N	0	0
3011	N	0	0
3012	N	0	0
n	12	12	12

Posture) N: Normal, F: Flattened, H: Hunched
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Home cage observation

Period : F0 mating

Generation : F0 Sex : Male Week : 4 Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Posture	Convulsion	Abnormal behavior
4001	N	0	0
4002	N	0	0
4003	N	0	0
4004	N	0	0
4005	N	0	0
4006	N	0	0
4007	N	0	0
4008	N	0	0
4009	N	0	0
4010	N	0	0
4011	N	0	0
4012	N	0	0
n	12	12	12

Posture) N: Normal, F: Flattened, H: Hunched
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Home cage observation

Period : F0 mating

Generation : F0 Sex : Male Week : 5 Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Posture	Convulsion	Abnormal behavior
1001	N	0	0
1002	N	0	0
1003	N	0	0
1004	N	0	0
1005	N	0	0
1006	N	0	0
1007	N	0	0
1008	N	0	0
1009	N	0	0
1010	N	0	0
1011	N	0	0
1012	N	0	0
n	12	12	12

Posture) N: Normal, F: Flattened, H: Hunched
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Home cage observation

Period : F0 mating

Generation : F0 Sex : Male Week : 5 Dose : BTetCA 100 mg/kg Species : Rat

Animal No.	Posture	Convulsion	Abnormal behavior
2001	N	0	0
2002	N	0	0
2003	N	0	0
2004	N	0	0
2005	N	0	0
2006	N	0	0
2007	N	0	0
2008	N	0	0
2009	N	0	0
2010	N	0	0
2011	N	0	0
2012	N	0	0
n	12	12	12

Posture) N: Normal, F: Flattened, H: Hunched
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Home cage observation

Period : F0 mating

Generation : F0 Sex : Male Week : 5 Dose : BTetCA 300 mg/kg Species : Rat

Animal No.	Posture	Convulsion	Abnormal behavior
3001	N	0	0
3002	N	0	0
3003	N	0	0
3004	N	0	0
3005	N	0	0
3006	N	0	0
3007	N	0	0
3008	N	0	0
3009	N	0	0
3010	N	0	0
3011	N	0	0
3012	N	0	0
n	12	12	12

Posture) N: Normal, F: Flattened, H: Hunched
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Home cage observation

Period : F0 mating

Generation : F0 Sex : Male Week : 5 Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Posture	Convulsion	Abnormal behavior
4001	N	0	0
4002	N	0	0
4003	N	0	0
4004	N	0	0
4005	N	0	0
4006	N	0	0
4007	N	0	0
4008	N	0	0
4009	N	0	0
4010	N	0	0
4011	N	0	0
4012	N	0	0
n	12	12	12

Posture) N: Normal, F: Flattened, H: Hunched
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Home cage observation

Period : F0 mating

Generation : F0 Sex : Male Week : 6 Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Posture	Convulsion	Abnormal behavior
1001	N	0	0
1002	N	0	0
1003	N	0	0
1004	N	0	0
1005	N	0	0
1006	N	0	0
1007	N	0	0
1008	N	0	0
1009	N	0	0
1010	N	0	0
1011	N	0	0
1012	N	0	0
n	12	12	12

Posture) N: Normal, F: Flattened, H: Hunched
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Home cage observation

Period : F0 mating

Generation : F0 Sex : Male Week : 6 Dose : BTetCA 100 mg/kg Species : Rat

Animal No.	Posture	Convulsion	Abnormal behavior
2001	N	0	0
2002	N	0	0
2003	N	0	0
2004	N	0	0
2005	N	0	0
2006	N	0	0
2007	N	0	0
2008	N	0	0
2009	N	0	0
2010	N	0	0
2011	N	0	0
2012	N	0	0
n	12	12	12

Posture) N: Normal, F: Flattened, H: Hunched
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Home cage observation

Period : F0 mating

Generation : F0 Sex : Male Week : 6 Dose : BTetCA 300 mg/kg Species : Rat

Animal No.	Posture	Convulsion	Abnormal behavior
3001	N	0	0
3002	N	0	0
3003	N	0	0
3004	N	0	0
3005	N	0	0
3006	N	0	0
3007	N	0	0
3008	N	0	0
3009	N	0	0
3010	N	0	0
3011	N	0	0
3012	N	0	0
n	12	12	12

Posture) N: Normal, F: Flattened, H: Hunched
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Home cage observation

Period : F0 mating

Generation : F0 Sex : Male Week : 6 Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Posture	Convulsion	Abnormal behavior
4001	N	0	0
4002	N	0	0
4003	N	0	0
4004	N	0	0
4005	N	0	0
4006	N	0	0
4007	N	0	0
4008	N	0	0
4009	N	0	0
4010	N	0	0
4011	N	0	0
4012	N	0	0
n	12	12	12

Posture) N: Normal, F: Flattened, H: Hunched
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Home cage observation

Period : F0 before mating

Generation : F0 Sex : Female Week : 1 Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Posture	Convulsion	Abnormal behavior
1101	N	0	0
1102	N	0	0
1103	N	0	0
1104	N	0	0
1105	N	0	0
1106	N	0	0
1107	N	0	0
1108	N	0	0
1109	N	0	0
1110	N	0	0
1111	N	0	0
1112	N	0	0
n	12	12	12

Posture) N: Normal, F: Flattened, H: Hunched
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Home cage observation

Period : F0 before mating

Generation : F0 Sex : Female Week : 1 Dose : BTetCA 100 mg/kg Species : Rat

Animal No.	Posture	Convulsion	Abnormal behavior
2101	N	0	0
2102	N	0	0
2103	N	0	0
2104	N	0	0
2105	N	0	0
2106	N	0	0
2107	N	0	0
2108	N	0	0
2109	N	0	0
2110	N	0	0
2111	N	0	0
2112	N	0	0
n	12	12	12

Posture) N: Normal, F: Flattened, H: Hunched
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Home cage observation

Period : F0 before mating

Generation : F0 Sex : Female Week : 1 Dose : BTetCA 300 mg/kg Species : Rat

Animal No.	Posture	Convulsion	Abnormal behavior
3101	N	0	0
3102	N	0	0
3103	N	0	0
3104	N	0	0
3105	N	0	0
3106	N	0	0
3107	N	0	0
3108	N	0	0
3109	N	0	0
3110	N	0	0
3111	N	0	0
3112	N	0	0
n	12	12	12

Posture) N: Normal, F: Flattened, H: Hunched
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Home cage observation

Period : F0 before mating

Generation : F0 Sex : Female Week : 1 Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Posture	Convulsion	Abnormal behavior
4101	N	0	0
4102	N	0	0
4103	N	0	0
4104	N	0	0
4105	N	0	0
4106	N	0	0
4107	N	0	0
4108	N	0	0
4109	N	0	0
4110	N	0	0
4111	N	0	0
4112	N	0	0
n	12	12	12

Posture) N: Normal, F: Flattened, H: Hunched
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Home cage observation

Period : F0 before mating

Generation : F0 Sex : Female Week : 2 Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Posture	Convulsion	Abnormal behavior
1101	N	0	0
1102	N	0	0
1103	N	0	0
1104	N	0	0
1105	N	0	0
1106	N	0	0
1107	N	0	0
1108	N	0	0
1109	N	0	0
1110	N	0	0
1111	N	0	0
1112	N	0	0
n	12	12	12

Posture) N: Normal, F: Flattened, H: Hunched
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Home cage observation

Period : F0 before mating

Generation : F0 Sex : Female Week : 2 Dose : BTetCA 100 mg/kg Species : Rat

Animal No.	Posture	Convulsion	Abnormal behavior
2101	N	0	0
2102	N	0	0
2103	N	0	0
2104	N	0	0
2105	N	0	0
2106	N	0	0
2107	N	0	0
2108	N	0	0
2109	N	0	0
2110	N	0	0
2111	N	0	0
2112	N	0	0
n	12	12	12

Posture) N: Normal, F: Flattened, H: Hunched
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Home cage observation

Period : F0 before mating

Generation : F0 Sex : Female Week : 2 Dose : BTetCA 300 mg/kg Species : Rat

Animal No.	Posture	Convulsion	Abnormal behavior
3101	N	0	0
3102	N	0	0
3103	N	0	0
3104	N	0	0
3105	N	0	0
3106	N	0	0
3107	N	0	0
3108	N	0	0
3109	N	0	0
3110	N	0	0
3111	N	0	0
3112	N	0	0
n	12	12	12

Posture) N: Normal, F: Flattened, H: Hunched
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Home cage observation

Period : F0 before mating

Generation : F0 Sex : Female Week : 2 Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Posture	Convulsion	Abnormal behavior
4101	N	0	0
4102	N	0	0
4103	N	0	0
4104	N	0	0
4105	N	0	0
4106	N	0	0
4107	N	0	0
4108	N	0	0
4109	N	0	0
4110	N	0	0
4111	N	0	0
4112	N	0	0
n	12	12	12

Posture) N: Normal, F: Flattened, H: Hunched
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Home cage observation

Period : F0 gestation

Generation : F0 Sex : Female Day : 1 Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Posture	Convulsion	Abnormal behavior
1101	N	0	0
1102	N	0	0
1103	N	0	0
1104	N	0	0
1105	N	0	0
1106	N	0	0
1107	N	0	0
1108	N	0	0
1109	N	0	0
1110	N	0	0
1111	N	0	0
1112	N	0	0
n	12	12	12

Posture) N: Normal, F: Flattened, H: Hunched
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Home cage observation

Period : F0 gestation

Generation : F0 Sex : Female Day : 1 Dose : BTetCA 100 mg/kg Species : Rat

Animal No.	Posture	Convulsion	Abnormal behavior
2101	N	0	0
2102	N	0	0
2103	N	0	0
2104	N	0	0
2105	N	0	0
2106	N	0	0
2107	N	0	0
2108	N	0	0
2109	N	0	0
2110	N	0	0
2111	N	0	0
2112	N	0	0
n	12	12	12

Posture) N: Normal, F: Flattened, H: Hunched
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Home cage observation

Period : F0 gestation

Generation : F0 Sex : Female Day : 1 Dose : BTetCA 300 mg/kg Species : Rat

Animal No.	Posture	Convulsion	Abnormal behavior
3101	N	0	0
3102	N	0	0
3103	N	0	0
3104	N	0	0
3105	N	0	0
3106	N	0	0
3107	N	0	0
3108	N	0	0
3109	N	0	0
3110	N	0	0
3111	N	0	0
3112	N	0	0
n	12	12	12

Posture) N: Normal, F: Flattened, H: Hunched
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Home cage observation

Period : F0 gestation

Generation : F0 Sex : Female Day : 1 Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Posture	Convulsion	Abnormal behavior
4101	N	0	0
4102	N	0	0
4103	N	0	0
4104	N	0	0
4105	N	0	0
4106	N	0	0
4107	N	0	0
4108	N	0	0
4109	N	0	0
4110	N	0	0
4111	N	0	0
4112	N	0	0
n	12	12	12

Posture) N: Normal, F: Flattened, H: Hunched
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Home cage observation

Period : F0 gestation

Generation : F0 Sex : Female Day : 7 Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Posture	Convulsion	Abnormal behavior
1101	N	0	0
1102	N	0	0
1103	N	0	0
1104	N	0	0
1105	N	0	0
1106	N	0	0
1107	N	0	0
1108	N	0	0
1109	N	0	0
1110	N	0	0
1111	N	0	0
1112	N	0	0
n	12	12	12

Posture) N: Normal, F: Flattened, H: Hunched
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Home cage observation

Period : F0 gestation

Generation : F0 Sex : Female Day : 7 Dose : BTetCA 100 mg/kg Species : Rat

Animal No.	Posture	Convulsion	Abnormal behavior
2101	N	0	0
2102	N	0	0
2103	N	0	0
2104	N	0	0
2105	N	0	0
2106	N	0	0
2107	N	0	0
2108	N	0	0
2109	N	0	0
2110	N	0	0
2111	N	0	0
2112	N	0	0
n	12	12	12

Posture) N: Normal, F: Flattened, H: Hunched
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Home cage observation

Period : F0 gestation

Generation : F0 Sex : Female Day : 7 Dose : BTetCA 300 mg/kg Species : Rat

Animal No.	Posture	Convulsion	Abnormal behavior
3101	N	0	0
3102	N	0	0
3103	N	0	0
3104	N	0	0
3105	N	0	0
3106	N	0	0
3107	N	0	0
3108	N	0	0
3109	N	0	0
3110	N	0	0
3111	N	0	0
3112	N	0	0
n	12	12	12

Posture) N: Normal, F: Flattened, H: Hunched
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Home cage observation

Period : F0 gestation

Generation : F0 Sex : Female Day : 7 Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Posture	Convulsion	Abnormal behavior
4101	N	0	0
4102	N	0	0
4103	N	0	0
4104	N	0	0
4105	N	0	0
4106	N	0	0
4107	N	0	0
4108	N	0	0
4109	N	0	0
4110	N	0	0
4111	N	0	0
4112	N	0	0
n	12	12	12

Posture) N: Normal, F: Flattened, H: Hunched
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Home cage observation

Period : F0 gestation

Generation : F0 Sex : Female Day : 14 Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Posture	Convulsion	Abnormal behavior
1101	N	0	0
1102	N	0	0
1103	N	0	0
1104	N	0	0
1105	N	0	0
1106	N	0	0
1107	N	0	0
1108	N	0	0
1109	N	0	0
1110	N	0	0
1111	N	0	0
1112	N	0	0
n	12	12	12

Posture) N: Normal, F: Flattened, H: Hunched
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Home cage observation

Period : F0 gestation

Generation : F0 Sex : Female Day : 14 Dose : BTetCA 100 mg/kg Species : Rat

Animal No.	Posture	Convulsion	Abnormal behavior
2101	N	0	0
2102	N	0	0
2103	N	0	0
2104	N	0	0
2105	N	0	0
2106	N	0	0
2107	N	0	0
2108	N	0	0
2109	N	0	0
2110	N	0	0
2111	N	0	0
2112	N	0	0
n	12	12	12

Posture) N: Normal, F: Flattened, H: Hunched
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Home cage observation

Period : F0 gestation

Generation : F0 Sex : Female Day : 14 Dose : BTetCA 300 mg/kg Species : Rat

Animal No.	Posture	Convulsion	Abnormal behavior
3101	N	0	0
3102	N	0	0
3103	N	0	0
3104	N	0	0
3105	N	0	0
3106	N	0	0
3107	N	0	0
3108	N	0	0
3109	N	0	0
3110	N	0	0
3111	N	0	0
3112	N	0	0
n	12	12	12

Posture) N: Normal, F: Flattened, H: Hunched
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Home cage observation

Period : F0 gestation

Generation : F0 Sex : Female Day : 14 Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Posture	Convulsion	Abnormal behavior
4101	N	0	0
4102	N	0	0
4103	N	0	0
4104	N	0	0
4105	N	0	0
4106	N	0	0
4107	N	0	0
4108	N	0	0
4109	N	0	0
4110	N	0	0
4111	N	0	0
4112	N	0	0
n	12	12	12

Posture) N: Normal, F: Flattened, H: Hunched
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Home cage observation

Period : F0 gestation

Generation : F0 Sex : Female Day : 20 Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Posture	Convulsion	Abnormal behavior
1101	N	0	0
1102	N	0	0
1103	N	0	0
1104	N	0	0
1105	N	0	0
1106	N	0	0
1107	N	0	0
1108	N	0	0
1109	N	0	0
1110	N	0	0
1111	N	0	0
1112	N	0	0
n	12	12	12

Posture) N: Normal, F: Flattened, H: Hunched
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Home cage observation

Period : F0 gestation

Generation : F0 Sex : Female Day : 20 Dose : BTetCA 100 mg/kg Species : Rat

Animal No.	Posture	Convulsion	Abnormal behavior
2101	N	0	0
2102	N	0	0
2103	N	0	0
2104	N	0	0
2105	N	0	0
2106	N	0	0
2107	N	0	0
2108	N	0	0
2109	N	0	0
2110	N	0	0
2111	N	0	0
2112	N	0	0
n	12	12	12

Posture) N: Normal, F: Flattened, H: Hunched
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Home cage observation

Period : F0 gestation

Generation : F0 Sex : Female Day : 20 Dose : BTetCA 300 mg/kg Species : Rat

Animal No.	Posture	Convulsion	Abnormal behavior
3101	N	0	0
3102	N	0	0
3103	N	0	0
3104	N	0	0
3105	N	0	0
3106	N	0	0
3107	N	0	0
3108	N	0	0
3109	N	0	0
3110	N	0	0
3111	N	0	0
3112	N	0	0
n	12	12	12

Posture) N: Normal, F: Flattened, H: Hunched
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Home cage observation

Period : F0 gestation

Generation : F0 Sex : Female Day : 20 Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Posture	Convulsion	Abnormal behavior
4101	N	0	0
4102	N	0	0
4103	N	0	0
4104	N	0	0
4105	N	0	0
4106	N	0	0
4107	N	0	0
4108	N	0	0
4109	N	0	0
4110	N	0	0
4111	N	0	0
4112	N	0	0
n	12	12	12

Posture) N: Normal, F: Flattened, H: Hunched
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Home cage observation

Period : F0 lactation

Generation : F0 Sex : Female Day : 4 Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Posture	Convulsion	Abnormal behavior
1101	N	0	0
1102	N	0	0
1103	N	0	0
1104	N	0	0
1105	N	0	0
1106	N	0	0
1107	N	0	0
1108	N	0	0
1109	N	0	0
1110	N	0	0
1111	N	0	0
1112	N	0	0
n	12	12	12

Posture) N: Normal, F: Flattened, H: Hunched
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Home cage observation

Period : F0 lactation

Generation : F0 Sex : Female Day : 4 Dose : BTetCA 100 mg/kg Species : Rat

Animal No.	Posture	Convulsion	Abnormal behavior
2101	N	0	0
2102	N	0	0
2103	N	0	0
2104	N	0	0
2105	N	0	0
2106	N	0	0
2107	N	0	0
2108	N	0	0
2109	N	0	0
2110	N	0	0
2111	N	0	0
2112	N	0	0
n	12	12	12

Posture) N: Normal, F: Flattened, H: Hunched
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Home cage observation

Period : F0 lactation

Generation : F0 Sex : Female Day : 4 Dose : BTetCA 300 mg/kg Species : Rat

Animal No.	Posture	Convulsion	Abnormal behavior
3101	N	0	0
3102	N	0	0
3103	N	0	0
3104	N	0	0
3105	N	0	0
3106	N	0	0
3107	N	0	0
3108	N	0	0
3109	N	0	0
3110	N	0	0
3111	N	0	0
3112	N	0	0
n	12	12	12

Posture) N: Normal, F: Flattened, H: Hunched
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Home cage observation

Period : F0 lactation

Generation : F0 Sex : Female Day : 4 Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Posture	Convulsion	Abnormal behavior
4101	N	0	0
4102	N	0	0
4103	N	0	0
4104	N	0	0
4105	N	0	0
4106	N	0	0
4107	N	0	0
4108	N	0	0
4109	N	0	0
4110	N	0	0
4111	N	0	0
4112	N	0	0
n	12	12	12

Posture) N: Normal, F: Flattened, H: Hunched
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Home cage observation

Period : Administration

Generation : F0 Sex : Female Week : 1 Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Posture	Convulsion	Abnormal behavior
5101	N	0	0
5102	N	0	0
5103	N	0	0
5104	N	0	0
5105	N	0	0
5106	N	0	0
5107	N	0	0
5108	N	0	0
5109	N	0	0
5110	N	0	0
n	10	10	10

Posture) N: Normal, F: Flattened, H: Hunched
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Home cage observation

Period : Administration

Generation : F0 Sex : Female Week : 1 Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Posture	Convulsion	Abnormal behavior
6101	N	0	0
6102	N	0	0
6103	N	0	0
6104	N	0	0
6105	N	0	0
6106	N	0	0
6107	N	0	0
6108	N	0	0
6109	N	0	0
6110	N	0	0
n	10	10	10

Posture) N: Normal, F: Flattened, H: Hunched
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Home cage observation

Period : Administration

Generation : F0 Sex : Female Week : 2 Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Posture	Convulsion	Abnormal behavior
5101	N	0	0
5102	N	0	0
5103	N	0	0
5104	N	0	0
5105	N	0	0
5106	N	0	0
5107	N	0	0
5108	N	0	0
5109	N	0	0
5110	N	0	0
n	10	10	10

Posture) N: Normal, F: Flattened, H: Hunched
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Home cage observation

Period : Administration

Generation : F0 Sex : Female Week : 2 Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Posture	Convulsion	Abnormal behavior
6101	N	0	0
6102	N	0	0
6103	N	0	0
6104	N	0	0
6105	N	0	0
6106	N	0	0
6107	N	0	0
6108	N	0	0
6109	N	0	0
6110	N	0	0
n	10	10	10

Posture) N: Normal, F: Flattened, H: Hunched
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Home cage observation

Period : Administration

Generation : F0 Sex : Female Week : 3 Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Posture	Convulsion	Abnormal behavior
5101	N	0	0
5102	N	0	0
5103	N	0	0
5104	N	0	0
5105	N	0	0
5106	N	0	0
5107	N	0	0
5108	N	0	0
5109	N	0	0
5110	N	0	0
n	10	10	10

Posture) N: Normal, F: Flattened, H: Hunched
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Home cage observation

Period : Administration

Generation : F0 Sex : Female Week : 3 Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Posture	Convulsion	Abnormal behavior
6101	N	0	0
6102	N	0	0
6103	N	0	0
6104	N	0	0
6105	N	0	0
6106	N	0	0
6107	N	0	0
6108	N	0	0
6109	N	0	0
6110	N	0	0
n	10	10	10

Posture) N: Normal, F: Flattened, H: Hunched
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Home cage observation

Period : Administration

Generation : F0 Sex : Female Week : 4 Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Posture	Convulsion	Abnormal behavior
5101	N	0	0
5102	N	0	0
5103	N	0	0
5104	N	0	0
5105	N	0	0
5106	N	0	0
5107	N	0	0
5108	N	0	0
5109	N	0	0
5110	N	0	0
n	10	10	10

Posture) N: Normal, F: Flattened, H: Hunched
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Home cage observation

Period : Administration

Generation : F0 Sex : Female Week : 4 Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Posture	Convulsion	Abnormal behavior
6101	N	0	0
6102	N	0	0
6103	N	0	0
6104	N	0	0
6105	N	0	0
6106	N	0	0
6107	N	0	0
6108	N	0	0
6109	N	0	0
6110	N	0	0
n	10	10	10

Posture) N: Normal, F: Flattened, H: Hunched
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Home cage observation

Period : Administration

Generation : F0 Sex : Female Week : 5 Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Posture	Convulsion	Abnormal behavior
5101	N	0	0
5102	N	0	0
5103	N	0	0
5104	N	0	0
5105	N	0	0
5106	N	0	0
5107	N	0	0
5108	N	0	0
5109	N	0	0
5110	N	0	0
n	10	10	10

Posture) N: Normal, F: Flattened, H: Hunched
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Home cage observation

Period : Administration

Generation : F0 Sex : Female Week : 5 Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Posture	Convulsion	Abnormal behavior
6101	N	0	0
6102	N	0	0
6103	N	0	0
6104	N	0	0
6105	N	0	0
6106	N	0	0
6107	N	0	0
6108	N	0	0
6109	N	0	0
6110	N	0	0
n	10	10	10

Posture) N: Normal, F: Flattened, H: Hunched
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Home cage observation

Period : Administration

Generation : F0 Sex : Female Week : 6 Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Posture	Convulsion	Abnormal behavior
5101	N	0	0
5102	N	0	0
5103	N	0	0
5104	N	0	0
5105	N	0	0
5106	N	0	0
5107	N	0	0
5108	N	0	0
5109	N	0	0
5110	N	0	0
n	10	10	10

Posture) N: Normal, F: Flattened, H: Hunched
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Home cage observation

Period : Administration

Generation : F0 Sex : Female Week : 6 Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Posture	Convulsion	Abnormal behavior
6101	N	0	0
6102	N	0	0
6103	N	0	0
6104	N	0	0
6105	N	0	0
6106	N	0	0
6107	N	0	0
6108	N	0	0
6109	N	0	0
6110	N	0	0
n	10	10	10

Posture) N: Normal, F: Flattened, H: Hunched
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Home cage observation

Period : Recovery

Generation : F0 Sex : Male Week : 1 Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Posture	Convulsion	Abnormal behavior
1008	N	0	0
1009	N	0	0
1010	N	0	0
1011	N	0	0
1012	N	0	0
n	5	5	5

Posture) N: Normal, F: Flattened, H: Hunched
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Home cage observation

Period : Recovery

Generation : F0 Sex : Male Week : 1 Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Posture	Convulsion	Abnormal behavior
4008	N	0	0
4009	N	0	0
4010	N	0	0
4011	N	0	0
4012	N	0	0
n	5	5	5

Posture) N: Normal, F: Flattened, H: Hunched
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Home cage observation

Period : Recovery

Generation : F0 Sex : Male Week : 2 Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Posture	Convulsion	Abnormal behavior
1008	N	0	0
1009	N	0	0
1010	N	0	0
1011	N	0	0
1012	N	0	0
n	5	5	5

Posture) N: Normal, F: Flattened, H: Hunched
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Home cage observation

Period : Recovery

Generation : F0 Sex : Male Week : 2 Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Posture	Convulsion	Abnormal behavior
4008	N	0	0
4009	N	0	0
4010	N	0	0
4011	N	0	0
4012	N	0	0
n	5	5	5

Posture) N: Normal, F: Flattened, H: Hunched
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Home cage observation

Period : Recovery

Generation : F0 Sex : Female Week : 1 Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Posture	Convulsion	Abnormal behavior
5106	N	0	0
5107	N	0	0
5108	N	0	0
5109	N	0	0
5110	N	0	0
n	5	5	5

Posture) N: Normal, F: Flattened, H: Hunched
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Home cage observation

Period : Recovery

Generation : F0 Sex : Female Week : 1 Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Posture	Convulsion	Abnormal behavior
6106	N	0	0
6107	N	0	0
6108	N	0	0
6109	N	0	0
6110	N	0	0
n	5	5	5

Posture) N: Normal, F: Flattened, H: Hunched
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Home cage observation

Period : Recovery

Generation : F0 Sex : Female Week : 2 Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Posture	Convulsion	Abnormal behavior
5106	N	0	0
5107	N	0	0
5108	N	0	0
5109	N	0	0
5110	N	0	0
n	5	5	5

Posture) N: Normal, F: Flattened, H: Hunched
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Home cage observation

Period : Recovery

Generation : F0 Sex : Female Week : 2 Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Posture	Convulsion	Abnormal behavior
6106	N	0	0
6107	N	0	0
6108	N	0	0
6109	N	0	0
6110	N	0	0
n	5	5	5

Posture) N: Normal, F: Flattened, H: Hunched
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

In-the-hand observation

Generation : F0 Sex : Male Week : 1 Period : F0 before mating Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Ease of removal from cage	Fur condition	Skin	Secretions-Eye, Nose	Exophthalmos	Palpebral closure	Mucosal membranes	Lacrimation
1001	0	0	0	0	0	0	0	0
1002	0	0	0	0	0	0	0	0
1003	0	0	0	0	0	0	0	0
1004	0	0	0	0	0	0	0	0
1005	0	0	0	0	0	0	0	0
1006	0	0	0	0	0	0	0	0
1007	0	0	0	0	0	0	0	0
1008	0	0	0	0	0	0	0	0
1009	0	0	0	0	0	0	0	0
1010	0	0	0	0	0	0	0	0
1011	0	0	0	0	0	0	0	0
1012	0	0	0	0	0	0	0	0
n	12	12	12	12	12	12	12	12

Animal No.	Piloerection	Pupil size	Salivation	Abnormal respiration	Vocalization	Reactivity to handling
1001	0	0	0	0	0	0
1002	0	0	0	0	0	0
1003	0	0	0	0	0	0
1004	0	0	0	0	0	0
1005	0	0	0	0	0	0
1006	0	0	0	0	0	0
1007	0	0	0	0	0	0
1008	0	0	0	0	0	0
1009	0	0	0	0	0	0
1010	0	0	0	0	0	0
1011	0	0	0	0	0	0
1012	0	0	0	0	0	0
n	12	12	12	12	12	12

Ease of removal from cage) -1: Atypically docile, 0: Easy, 1: Some resistance/avoidance, 2: Difficult, 3: Very difficult
Fur condition) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Skin) 0: Nomal, 1: Slight, 2: Moderate, 3: Severe
Secretions-Eye, Nose) 0: Absent, 1: Present
Exophthalmos) 0: Absent, 1: Present
Palpebral closure) 0: Nomal, 1: Slightly closed, 2: Half closed, 3: Completely closed
Mucosal membranes) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Lacrimation) 0: Absent, 1: Present
Piloerection) 0: Absent, 1: Present
Pupil size) -1: Miosis, 0: Nomal, 1: Half opened pupil, 2: Mydriasis
Salivation) 0: None, 1: Slight, 2: Moderate, 3: Marked
Abnormal respiration) 0: None, 1: Slight, 2: Moderate, 3: Severe
Vocalization) 0: None, 1: Soft, 2: Moderate, 3: Loud/aggressive
Reactivity to handling) -1: Atypically docile, 0: Easy, 1: Slightly awkward, 2: Awkward, 3: Very Awkward
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

In-the-hand observation

Generation : F0 Sex : Male Week : 1 Period : F0 before mating Dose : BTetCA 100 mg/kg Species : Rat

Animal No.	Ease of removal from cage	Fur condition	Skin	Secretions-Eye, Nose	Exophthalmos	Palpebral closure	Mucosal membranes	Lacrimation
2001	0	0	0	0	0	0	0	0
2002	0	0	0	0	0	0	0	0
2003	0	0	0	0	0	0	0	0
2004	0	0	0	0	0	0	0	0
2005	0	0	0	0	0	0	0	0
2006	0	0	0	0	0	0	0	0
2007	0	0	0	0	0	0	0	0
2008	0	0	0	0	0	0	0	0
2009	0	0	0	0	0	0	0	0
2010	0	0	0	0	0	0	0	0
2011	0	0	0	0	0	0	0	0
2012	0	0	0	0	0	0	0	0
n	12	12	12	12	12	12	12	12

Animal No.	Piloerection	Pupil size	Salivation	Abnormal respiration	Vocalization	Reactivity to handling
2001	0	0	0	0	0	0
2002	0	0	0	0	0	0
2003	0	0	0	0	0	0
2004	0	0	0	0	0	0
2005	0	0	0	0	0	0
2006	0	0	0	0	0	0
2007	0	0	0	0	0	0
2008	0	0	0	0	0	0
2009	0	0	0	0	0	0
2010	0	0	0	0	0	0
2011	0	0	0	0	0	0
2012	0	0	0	0	0	0
n	12	12	12	12	12	12

Ease of removal from cage) -1: Atypically docile, 0: Easy, 1: Some resistance/avoidance, 2: Difficult, 3: Very difficult
Fur condition) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Skin) 0: Nomal, 1: Slight, 2: Moderate, 3: Severe
Secretions-Eye, Nose) 0: Absent, 1: Present
Exophthalmos) 0: Absent, 1: Present
Palpebral closure) 0: Nomal, 1: Slightly closed, 2: Half closed, 3: Completely closed
Mucosal membranes) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Lacrimation) 0: Absent, 1: Present
Piloerection) 0: Absent, 1: Present
Pupil size) -1: Miosis, 0: Nomal, 1: Half opened pupil, 2: Mydriasis
Salivation) 0: None, 1: Slight, 2: Moderate, 3: Marked
Abnormal respiration) 0: None, 1: Slight, 2: Moderate, 3: Severe
Vocalization) 0: None, 1: Soft, 2: Moderate, 3: Loud/aggressive
Reactivity to handling) -1: Atypically docile, 0: Easy, 1: Slightly awkward, 2: Awkward, 3: Very Awkward
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

In-the-hand observation

Generation : F0 Sex : Male Week : 1 Period : F0 before mating Dose : BTetCA 300 mg/kg Species : Rat

Animal No.	Ease of removal from cage	Fur condition	Skin	Secretions-Eye, Nose	Exophthalmos	Palpebral closure	Mucosal membranes	Lacrimation
3001	0	0	0	0	0	0	0	0
3002	0	0	0	0	0	0	0	0
3003	0	0	0	0	0	0	0	0
3004	0	0	0	0	0	0	0	0
3005	0	0	0	0	0	0	0	0
3006	0	0	0	0	0	0	0	0
3007	0	0	0	0	0	0	0	0
3008	0	0	0	0	0	0	0	0
3009	0	0	0	0	0	0	0	0
3010	0	0	0	0	0	0	0	0
3011	0	0	0	0	0	0	0	0
3012	0	0	0	0	0	0	0	0
n	12	12	12	12	12	12	12	12

Animal No.	Piloerection	Pupil size	Salivation	Abnormal respiration	Vocalization	Reactivity to handling
3001	0	0	0	0	0	0
3002	0	0	0	0	0	0
3003	0	0	0	0	0	0
3004	0	0	0	0	0	0
3005	0	0	0	0	0	0
3006	0	0	0	0	0	0
3007	0	0	0	0	0	0
3008	0	0	0	0	0	0
3009	0	0	0	0	0	0
3010	0	0	0	0	0	0
3011	0	0	0	0	0	0
3012	0	0	0	0	0	0
n	12	12	12	12	12	12

Ease of removal from cage) -1: Atypically docile, 0: Easy, 1: Some resistance/avoidance, 2: Difficult, 3: Very difficult
Fur condition) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Skin) 0: Nomal, 1: Slight, 2: Moderate, 3: Severe
Secretions-Eye, Nose) 0: Absent, 1: Present
Exophthalmos) 0: Absent, 1: Present
Palpebral closure) 0: Nomal, 1: Slightly closed, 2: Half closed, 3: Completely closed
Mucosal membranes) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Lacrimation) 0: Absent, 1: Present
Piloerection) 0: Absent, 1: Present
Pupil size) -1: Miosis, 0: Nomal, 1: Half opened pupil, 2: Mydriasis
Salivation) 0: None, 1: Slight, 2: Moderate, 3: Marked
Abnormal respiration) 0: None, 1: Slight, 2: Moderate, 3: Severe
Vocalization) 0: None, 1: Soft, 2: Moderate, 3: Loud/aggressive
Reactivity to handling) -1: Atypically docile, 0: Easy, 1: Slightly awkward, 2: Awkward, 3: Very Awkward
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

In-the-hand observation

Generation : F0 Sex : Male Week : 1 Period : F0 before mating Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Ease of removal from cage	Fur condition	Skin	Secretions-Eye, Nose	Exophthalmos	Palpebral closure	Mucosal membranes	Lacrimation
4001	0	0	0	0	0	0	0	0
4002	0	0	0	0	0	0	0	0
4003	0	0	0	0	0	0	0	0
4004	0	0	0	0	0	0	0	0
4005	0	0	0	0	0	0	0	0
4006	0	0	0	0	0	0	0	0
4007	0	0	0	0	0	0	0	0
4008	0	0	0	0	0	0	0	0
4009	0	0	0	0	0	0	0	0
4010	0	0	0	0	0	0	0	0
4011	0	0	0	0	0	0	0	0
4012	0	0	0	0	0	0	0	0
n	12	12	12	12	12	12	12	12

Animal No.	Piloerection	Pupil size	Salivation	Abnormal respiration	Vocalization	Reactivity to handling
4001	0	0	0	0	0	0
4002	0	0	0	0	0	0
4003	0	0	0	0	0	0
4004	0	0	0	0	0	0
4005	0	0	0	0	0	0
4006	0	0	0	0	0	0
4007	0	0	0	0	0	0
4008	0	0	0	0	0	0
4009	0	0	0	0	0	0
4010	0	0	0	0	0	0
4011	0	0	0	0	0	0
4012	0	0	0	0	0	0
n	12	12	12	12	12	12

Ease of removal from cage) -1: Atypically docile, 0: Easy, 1: Some resistance/avoidance, 2: Difficult, 3: Very difficult
Fur condition) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Skin) 0: Nomal, 1: Slight, 2: Moderate, 3: Severe
Secretions-Eye, Nose) 0: Absent, 1: Present
Exophthalmos) 0: Absent, 1: Present
Palpebral closure) 0: Nomal, 1: Slightly closed, 2: Half closed, 3: Completely closed
Mucosal membranes) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Lacrimation) 0: Absent, 1: Present
Piloerection) 0: Absent, 1: Present
Pupil size) -1: Miosis, 0: Nomal, 1: Half opened pupil, 2: Mydriasis
Salivation) 0: None, 1: Slight, 2: Moderate, 3: Marked
Abnormal respiration) 0: None, 1: Slight, 2: Moderate, 3: Severe
Vocalization) 0: None, 1: Soft, 2: Moderate, 3: Loud/aggressive
Reactivity to handling) -1: Atypically docile, 0: Easy, 1: Slightly awkward, 2: Awkward, 3: Very Awkward
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

In-the-hand observation

Generation : F0 Sex : Male Week : 2 Period : F0 before mating Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Ease of removal from cage	Fur condition	Skin	Secretions-Eye, Nose	Exophthalmos	Palpebral closure	Mucosal membranes	Lacrimation
1001	0	0	0	0	0	0	0	0
1002	0	0	0	0	0	0	0	0
1003	0	0	0	0	0	0	0	0
1004	0	0	0	0	0	0	0	0
1005	0	0	0	0	0	0	0	0
1006	0	0	0	0	0	0	0	0
1007	0	0	0	0	0	0	0	0
1008	0	0	0	0	0	0	0	0
1009	0	0	0	0	0	0	0	0
1010	0	0	0	0	0	0	0	0
1011	0	0	0	0	0	0	0	0
1012	0	0	0	0	0	0	0	0
n	12	12	12	12	12	12	12	12

Animal No.	Piloerection	Pupil size	Salivation	Abnormal respiration	Vocalization	Reactivity to handling
1001	0	0	0	0	0	0
1002	0	0	0	0	0	0
1003	0	0	0	0	0	0
1004	0	0	0	0	0	0
1005	0	0	0	0	0	0
1006	0	0	0	0	0	0
1007	0	0	0	0	0	0
1008	0	0	0	0	0	0
1009	0	0	0	0	0	0
1010	0	0	0	0	0	0
1011	0	0	0	0	0	0
1012	0	0	0	0	0	0
n	12	12	12	12	12	12

Ease of removal from cage) -1: Atypically docile, 0: Easy, 1: Some resistance/avoidance, 2: Difficult, 3: Very difficult
Fur condition) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Skin) 0: Nomal, 1: Slight, 2: Moderate, 3: Severe
Secretions-Eye, Nose) 0: Absent, 1: Present
Exophthalmos) 0: Absent, 1: Present
Palpebral closure) 0: Nomal, 1: Slightly closed, 2: Half closed, 3: Completely closed
Mucosal membranes) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Lacrimation) 0: Absent, 1: Present
Piloerection) 0: Absent, 1: Present
Pupil size) -1: Miosis, 0: Nomal, 1: Half opened pupil, 2: Mydriasis
Salivation) 0: None, 1: Slight, 2: Moderate, 3: Marked
Abnormal respiration) 0: None, 1: Slight, 2: Moderate, 3: Severe
Vocalization) 0: None, 1: Soft, 2: Moderate, 3: Loud/aggressive
Reactivity to handling) -1: Atypically docile, 0: Easy, 1: Slightly awkward, 2: Awkward, 3: Very Awkward
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

In-the-hand observation

Generation : F0 Sex : Male Week : 2 Period : F0 before mating Dose : BTetCA 100 mg/kg Species : Rat

Animal No.	Ease of removal from cage	Fur condition	Skin	Secretions-Eye, Nose	Exophthalmos	Palpebral closure	Mucosal membranes	Lacrimation
2001	0	0	0	0	0	0	0	0
2002	0	0	0	0	0	0	0	0
2003	0	0	0	0	0	0	0	0
2004	0	0	0	0	0	0	0	0
2005	0	0	0	0	0	0	0	0
2006	0	0	0	0	0	0	0	0
2007	0	0	0	0	0	0	0	0
2008	0	0	0	0	0	0	0	0
2009	0	0	0	0	0	0	0	0
2010	0	0	0	0	0	0	0	0
2011	0	0	0	0	0	0	0	0
2012	0	0	0	0	0	0	0	0
n	12	12	12	12	12	12	12	12

Animal No.	Piloerection	Pupil size	Salivation	Abnormal respiration	Vocalization	Reactivity to handling
2001	0	0	0	0	0	0
2002	0	0	0	0	0	0
2003	0	0	0	0	0	0
2004	0	0	0	0	0	0
2005	0	0	0	0	0	0
2006	0	0	0	0	0	0
2007	0	0	0	0	0	0
2008	0	0	0	0	0	0
2009	0	0	0	0	0	0
2010	0	0	0	0	0	0
2011	0	0	0	0	0	0
2012	0	0	0	0	0	0
n	12	12	12	12	12	12

Ease of removal from cage) -1: Atypically docile, 0: Easy, 1: Some resistance/avoidance, 2: Difficult, 3: Very difficult
Fur condition) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Skin) 0: Nomal, 1: Slight, 2: Moderate, 3: Severe
Secretions-Eye, Nose) 0: Absent, 1: Present
Exophthalmos) 0: Absent, 1: Present
Palpebral closure) 0: Nomal, 1: Slightly closed, 2: Half closed, 3: Completely closed
Mucosal membranes) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Lacrimation) 0: Absent, 1: Present
Piloerection) 0: Absent, 1: Present
Pupil size) -1: Miosis, 0: Nomal, 1: Half opened pupil, 2: Mydriasis
Salivation) 0: None, 1: Slight, 2: Moderate, 3: Marked
Abnormal respiration) 0: None, 1: Slight, 2: Moderate, 3: Severe
Vocalization) 0: None, 1: Soft, 2: Moderate, 3: Loud/aggressive
Reactivity to handling) -1: Atypically docile, 0: Easy, 1: Slightly awkward, 2: Awkward, 3: Very Awkward
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

In-the-hand observation

Generation : F0 Sex : Male Week : 2 Period : F0 before mating Dose : BTetCA 300 mg/kg Species : Rat

Animal No.	Ease of removal from cage	Fur condition	Skin	Secretions-Eye, Nose	Exophthalmos	Palpebral closure	Mucosal membranes	Lacrimation
3001	0	0	0	0	0	0	0	0
3002	0	0	0	0	0	0	0	0
3003	0	0	0	0	0	0	0	0
3004	0	0	0	0	0	0	0	0
3005	0	0	0	0	0	0	0	0
3006	0	0	0	0	0	0	0	0
3007	0	0	0	0	0	0	0	0
3008	0	0	0	0	0	0	0	0
3009	0	0	0	0	0	0	0	0
3010	0	0	0	0	0	0	0	0
3011	0	0	0	0	0	0	0	0
3012	0	0	0	0	0	0	0	0
n	12	12	12	12	12	12	12	12

Animal No.	Piloerection	Pupil size	Salivation	Abnormal respiration	Vocalization	Reactivity to handling
3001	0	0	0	0	0	0
3002	0	0	0	0	0	0
3003	0	0	0	0	0	0
3004	0	0	0	0	0	0
3005	0	0	0	0	0	0
3006	0	0	0	0	0	0
3007	0	0	0	0	0	0
3008	0	0	0	0	0	0
3009	0	0	0	0	0	0
3010	0	0	0	0	0	0
3011	0	0	0	0	0	0
3012	0	0	0	0	0	0
n	12	12	12	12	12	12

Ease of removal from cage) -1: Atypically docile, 0: Easy, 1: Some resistance/avoidance, 2: Difficult, 3: Very difficult
Fur condition) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Skin) 0: Nomal, 1: Slight, 2: Moderate, 3: Severe
Secretions-Eye, Nose) 0: Absent, 1: Present
Exophthalmos) 0: Absent, 1: Present
Palpebral closure) 0: Nomal, 1: Slightly closed, 2: Half closed, 3: Completely closed
Mucosal membranes) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Lacrimation) 0: Absent, 1: Present
Piloerection) 0: Absent, 1: Present
Pupil size) -1: Miosis, 0: Nomal, 1: Half opened pupil, 2: Mydriasis
Salivation) 0: None, 1: Slight, 2: Moderate, 3: Marked
Abnormal respiration) 0: None, 1: Slight, 2: Moderate, 3: Severe
Vocalization) 0: None, 1: Soft, 2: Moderate, 3: Loud/aggressive
Reactivity to handling) -1: Atypically docile, 0: Easy, 1: Slightly awkward, 2: Awkward, 3: Very Awkward
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

In-the-hand observation

Generation : F0 Sex : Male Week : 2 Period : F0 before mating Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Ease of removal from cage	Fur condition	Skin	Secretions-Eye, Nose	Exophthalmos	Palpebral closure	Mucosal membranes	Lacrimation
4001	0	0	0	0	0	0	0	0
4002	0	0	0	0	0	0	0	0
4003	0	0	0	0	0	0	0	0
4004	0	0	0	0	0	0	0	0
4005	0	0	0	0	0	0	0	0
4006	0	0	0	0	0	0	0	0
4007	0	0	0	0	0	0	0	0
4008	0	0	0	0	0	0	0	0
4009	0	0	0	0	0	0	0	0
4010	0	0	0	0	0	0	0	0
4011	0	0	0	0	0	0	0	0
4012	0	0	0	0	0	0	0	0
n	12	12	12	12	12	12	12	12

Animal No.	Piloerection	Pupil size	Salivation	Abnormal respiration	Vocalization	Reactivity to handling
4001	0	0	0	0	0	0
4002	0	0	0	0	0	0
4003	0	0	0	0	0	0
4004	0	0	0	0	0	0
4005	0	0	0	0	0	0
4006	0	0	0	0	0	0
4007	0	0	0	0	0	0
4008	0	0	0	0	0	0
4009	0	0	0	0	0	0
4010	0	0	0	0	0	0
4011	0	0	0	0	0	0
4012	0	0	0	0	0	0
n	12	12	12	12	12	12

Ease of removal from cage) -1: Atypically docile, 0: Easy, 1: Some resistance/avoidance, 2: Difficult, 3: Very difficult
Fur condition) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Skin) 0: Nomal, 1: Slight, 2: Moderate, 3: Severe
Secretions-Eye, Nose) 0: Absent, 1: Present
Exophthalmos) 0: Absent, 1: Present
Palpebral closure) 0: Nomal, 1: Slightly closed, 2: Half closed, 3: Completely closed
Mucosal membranes) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Lacrimation) 0: Absent, 1: Present
Piloerection) 0: Absent, 1: Present
Pupil size) -1: Miosis, 0: Nomal, 1: Half opened pupil, 2: Mydriasis
Salivation) 0: None, 1: Slight, 2: Moderate, 3: Marked
Abnormal respiration) 0: None, 1: Slight, 2: Moderate, 3: Severe
Vocalization) 0: None, 1: Soft, 2: Moderate, 3: Loud/aggressive
Reactivity to handling) -1: Atypically docile, 0: Easy, 1: Slightly awkward, 2: Awkward, 3: Very Awkward
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

In-the-hand observation

Generation : F0 Sex : Male Week : 3 Period : F0 mating Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Ease of removal from cage	Fur condition	Skin	Secretions-Eye, Nose	Exophthalmos	Palpebral closure	Mucosal membranes	Lacrimation
1001	0	0	0	0	0	0	0	0
1002	0	0	0	0	0	0	0	0
1003	0	0	0	0	0	0	0	0
1004	0	0	0	0	0	0	0	0
1005	0	0	0	0	0	0	0	0
1006	0	0	0	0	0	0	0	0
1007	0	0	0	0	0	0	0	0
1008	0	0	0	0	0	0	0	0
1009	0	0	0	0	0	0	0	0
1010	0	0	0	0	0	0	0	0
1011	0	0	0	0	0	0	0	0
1012	0	0	0	0	0	0	0	0
n	12	12	12	12	12	12	12	12

Animal No.	Piloerection	Pupil size	Salivation	Abnormal respiration	Vocalization	Reactivity to handling
1001	0	0	0	0	0	0
1002	0	0	0	0	0	0
1003	0	0	0	0	0	0
1004	0	0	0	0	0	0
1005	0	0	0	0	0	0
1006	0	0	0	0	0	0
1007	0	0	0	0	0	0
1008	0	0	0	0	0	0
1009	0	0	0	0	0	0
1010	0	0	0	0	0	0
1011	0	0	0	0	0	0
1012	0	0	0	0	0	0
n	12	12	12	12	12	12

Ease of removal from cage) -1: Atypically docile, 0: Easy, 1: Some resistance/avoidance, 2: Difficult, 3: Very difficult
Fur condition) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Skin) 0: Nomal, 1: Slight, 2: Moderate, 3: Severe
Secretions-Eye, Nose) 0: Absent, 1: Present
Exophthalmos) 0: Absent, 1: Present
Palpebral closure) 0: Nomal, 1: Slightly closed, 2: Half closed, 3: Completely closed
Mucosal membranes) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Lacrimation) 0: Absent, 1: Present
Piloerection) 0: Absent, 1: Present
Pupil size) -1: Miosis, 0: Nomal, 1: Half opened pupil, 2: Mydriasis
Salivation) 0: None, 1: Slight, 2: Moderate, 3: Marked
Abnormal respiration) 0: None, 1: Slight, 2: Moderate, 3: Severe
Vocalization) 0: None, 1: Soft, 2: Moderate, 3: Loud/aggressive
Reactivity to handling) -1: Atypically docile, 0: Easy, 1: Slightly awkward, 2: Awkward, 3: Very Awkward
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

In-the-hand observation

Generation : F0 Sex : Male Week : 3 Period : F0 mating Dose : BTetCA 100 mg/kg Species : Rat

Animal No.	Ease of removal from cage	Fur condition	Skin	Secretions-Eye, Nose	Exophthalmos	Palpebral closure	Mucosal membranes	Lacrimation
2001	0	0	0	0	0	0	0	0
2002	0	0	0	0	0	0	0	0
2003	0	0	0	0	0	0	0	0
2004	0	0	0	0	0	0	0	0
2005	0	0	0	0	0	0	0	0
2006	0	0	0	0	0	0	0	0
2007	0	0	0	0	0	0	0	0
2008	0	0	0	0	0	0	0	0
2009	0	0	0	0	0	0	0	0
2010	0	0	0	0	0	0	0	0
2011	0	0	0	0	0	0	0	0
2012	0	0	0	0	0	0	0	0
n	12	12	12	12	12	12	12	12

Animal No.	Piloerection	Pupil size	Salivation	Abnormal respiration	Vocalization	Reactivity to handling
2001	0	0	0	0	0	0
2002	0	0	0	0	0	0
2003	0	0	0	0	0	0
2004	0	0	0	0	0	0
2005	0	0	0	0	0	0
2006	0	0	0	0	0	0
2007	0	0	0	0	0	0
2008	0	0	0	0	0	0
2009	0	0	0	0	1	0
2010	0	0	0	0	0	0
2011	0	0	0	0	1	0
2012	0	0	0	0	0	0
n	12	12	12	12	12	12

Ease of removal from cage) -1: Atypically docile, 0: Easy, 1: Some resistance/avoidance, 2: Difficult, 3: Very difficult
Fur condition) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Skin) 0: Nomal, 1: Slight, 2: Moderate, 3: Severe
Secretions-Eye, Nose) 0: Absent, 1: Present
Exophthalmos) 0: Absent, 1: Present
Palpebral closure) 0: Nomal, 1: Slightly closed, 2: Half closed, 3: Completely closed
Mucosal membranes) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Lacrimation) 0: Absent, 1: Present
Piloerection) 0: Absent, 1: Present
Pupil size) -1: Miosis, 0: Nomal, 1: Half opened pupil, 2: Mydriasis
Salivation) 0: None, 1: Slight, 2: Moderate, 3: Marked
Abnormal respiration) 0: None, 1: Slight, 2: Moderate, 3: Severe
Vocalization) 0: None, 1: Soft, 2: Moderate, 3: Loud/aggressive
Reactivity to handling) -1: Atypically docile, 0: Easy, 1: Slightly awkward, 2: Awkward, 3: Very Awkward
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

In-the-hand observation

Generation : F0 Sex : Male Week : 3 Period : F0 mating Dose : BTetCA 300 mg/kg Species : Rat

Animal No.	Ease of removal from cage	Fur condition	Skin	Secretions-Eye, Nose	Exophthalmos	Palpebral closure	Mucosal membranes	Lacrimation
3001	0	0	0	0	0	0	0	0
3002	0	0	0	0	0	0	0	0
3003	0	0	0	0	0	0	0	0
3004	0	0	0	0	0	0	0	0
3005	0	0	0	0	0	0	0	0
3006	0	0	0	0	0	0	0	0
3007	0	0	0	0	0	0	0	0
3008	0	0	0	0	0	0	0	0
3009	0	0	0	0	0	0	0	0
3010	0	0	0	0	0	0	0	0
3011	0	0	0	0	0	0	0	0
3012	0	0	0	0	0	0	0	0
n	12	12	12	12	12	12	12	12

Animal No.	Piloerection	Pupil size	Salivation	Abnormal respiration	Vocalization	Reactivity to handling
3001	0	0	0	0	0	0
3002	0	0	0	0	0	0
3003	0	0	0	0	0	0
3004	0	0	0	0	0	0
3005	0	0	0	0	0	0
3006	0	0	0	0	0	0
3007	0	0	0	0	0	0
3008	0	0	0	0	0	0
3009	0	0	0	0	0	0
3010	0	0	0	0	0	0
3011	0	0	0	0	1	0
3012	0	0	0	0	0	0
n	12	12	12	12	12	12

Ease of removal from cage) -1: Atypically docile, 0: Easy, 1: Some resistance/avoidance, 2: Difficult, 3: Very difficult
Fur condition) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Skin) 0: Nomal, 1: Slight, 2: Moderate, 3: Severe
Secretions-Eye, Nose) 0: Absent, 1: Present
Exophthalmos) 0: Absent, 1: Present
Palpebral closure) 0: Nomal, 1: Slightly closed, 2: Half closed, 3: Completely closed
Mucosal membranes) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Lacrimation) 0: Absent, 1: Present
Piloerection) 0: Absent, 1: Present
Pupil size) -1: Miosis, 0: Nomal, 1: Half opened pupil, 2: Mydriasis
Salivation) 0: None, 1: Slight, 2: Moderate, 3: Marked
Abnormal respiration) 0: None, 1: Slight, 2: Moderate, 3: Severe
Vocalization) 0: None, 1: Soft, 2: Moderate, 3: Loud/aggressive
Reactivity to handling) -1: Atypically docile, 0: Easy, 1: Slightly awkward, 2: Awkward, 3: Very Awkward
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

In-the-hand observation

Generation : F0 Sex : Male Week : 3 Period : F0 mating Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Ease of removal from cage	Fur condition	Skin	Secretions-Eye, Nose	Exophthalmos	Palpebral closure	Mucosal membranes	Lacrimation
4001	0	0	0	0	0	0	0	0
4002	0	0	0	0	0	0	0	0
4003	0	0	0	0	0	0	0	0
4004	0	0	0	0	0	0	0	0
4005	0	0	0	0	0	0	0	0
4006	0	0	0	0	0	0	0	0
4007	0	0	0	0	0	0	0	0
4008	0	0	0	0	0	0	0	0
4009	0	0	0	0	0	0	0	0
4010	0	0	0	0	0	0	0	0
4011	0	0	0	0	0	0	0	0
4012	0	0	0	0	0	0	0	0
n	12	12	12	12	12	12	12	12

Animal No.	Piloerection	Pupil size	Salivation	Abnormal respiration	Vocalization	Reactivity to handling
4001	0	0	0	0	0	0
4002	0	0	0	0	1	0
4003	0	0	0	0	1	0
4004	0	0	0	0	0	0
4005	0	0	0	0	0	0
4006	0	0	0	0	0	0
4007	0	0	0	0	0	0
4008	0	0	0	0	0	0
4009	0	0	0	0	0	0
4010	0	0	0	0	0	0
4011	0	0	0	0	0	0
4012	0	0	0	0	0	0
n	12	12	12	12	12	12

Ease of removal from cage) -1: Atypically docile, 0: Easy, 1: Some resistance/avoidance, 2: Difficult, 3: Very difficult
Fur condition) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Skin) 0: Nomal, 1: Slight, 2: Moderate, 3: Severe
Secretions-Eye, Nose) 0: Absent, 1: Present
Exophthalmos) 0: Absent, 1: Present
Palpebral closure) 0: Nomal, 1: Slightly closed, 2: Half closed, 3: Completely closed
Mucosal membranes) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Lacrimation) 0: Absent, 1: Present
Piloerection) 0: Absent, 1: Present
Pupil size) -1: Miosis, 0: Nomal, 1: Half opened pupil, 2: Mydriasis
Salivation) 0: None, 1: Slight, 2: Moderate, 3: Marked
Abnormal respiration) 0: None, 1: Slight, 2: Moderate, 3: Severe
Vocalization) 0: None, 1: Soft, 2: Moderate, 3: Loud/aggressive
Reactivity to handling) -1: Atypically docile, 0: Easy, 1: Slightly awkward, 2: Awkward, 3: Very Awkward
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

In-the-hand observation

Generation : F0 Sex : Male Week : 4 Period : F0 mating Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Ease of removal from cage	Fur condition	Skin	Secretions-Eye, Nose	Exophthalmos	Palpebral closure	Mucosal membranes	Lacrimation
1001	0	0	0	0	0	0	0	0
1002	0	0	0	0	0	0	0	0
1003	0	0	0	0	0	0	0	0
1004	0	0	0	0	0	0	0	0
1005	0	0	0	0	0	0	0	0
1006	0	0	0	0	0	0	0	0
1007	0	0	0	0	0	0	0	0
1008	0	0	0	0	0	0	0	0
1009	0	0	0	0	0	0	0	0
1010	0	0	0	0	0	0	0	0
1011	0	0	0	0	0	0	0	0
1012	0	0	0	0	0	0	0	0
n	12	12	12	12	12	12	12	12

Animal No.	Piloerection	Pupil size	Salivation	Abnormal respiration	Vocalization	Reactivity to handling
1001	0	0	0	0	0	0
1002	0	0	0	0	0	0
1003	0	0	0	0	0	0
1004	0	0	0	0	0	0
1005	0	0	0	0	0	0
1006	0	0	0	0	0	0
1007	0	0	0	0	0	0
1008	0	0	0	0	0	0
1009	0	0	0	0	0	0
1010	0	0	0	0	0	0
1011	0	0	0	0	0	0
1012	0	0	0	0	0	0
n	12	12	12	12	12	12

Ease of removal from cage) -1: Atypically docile, 0: Easy, 1: Some resistance/avoidance, 2: Difficult, 3: Very difficult
Fur condition) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Skin) 0: Nomal, 1: Slight, 2: Moderate, 3: Severe
Secretions-Eye, Nose) 0: Absent, 1: Present
Exophthalmos) 0: Absent, 1: Present
Palpebral closure) 0: Nomal, 1: Slightly closed, 2: Half closed, 3: Completely closed
Mucosal membranes) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Lacrimation) 0: Absent, 1: Present
Piloerection) 0: Absent, 1: Present
Pupil size) -1: Miosis, 0: Nomal, 1: Half opened pupil, 2: Mydriasis
Salivation) 0: None, 1: Slight, 2: Moderate, 3: Marked
Abnormal respiration) 0: None, 1: Slight, 2: Moderate, 3: Severe
Vocalization) 0: None, 1: Soft, 2: Moderate, 3: Loud/aggressive
Reactivity to handling) -1: Atypically docile, 0: Easy, 1: Slightly awkward, 2: Awkward, 3: Very Awkward
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

In-the-hand observation

Generation : F0 Sex : Male Week : 4 Period : F0 mating Dose : BTetCA 100 mg/kg Species : Rat

Animal No.	Ease of removal from cage	Fur condition	Skin	Secretions-Eye, Nose	Exophthalmos	Palpebral closure	Mucosal membranes	Lacrimation
2001	0	0	0	0	0	0	0	0
2002	0	0	0	0	0	0	0	0
2003	0	0	0	0	0	0	0	0
2004	0	0	0	0	0	0	0	0
2005	0	0	0	0	0	0	0	0
2006	0	0	0	0	0	0	0	0
2007	0	0	0	0	0	0	0	0
2008	0	0	0	0	0	0	0	0
2009	0	0	0	0	0	0	0	0
2010	0	0	0	0	0	0	0	0
2011	0	0	0	0	0	0	0	0
2012	0	0	0	0	0	0	0	0
n	12	12	12	12	12	12	12	12

Animal No.	Piloerection	Pupil size	Salivation	Abnormal respiration	Vocalization	Reactivity to handling
2001	0	0	0	0	0	0
2002	0	0	0	0	0	0
2003	0	0	0	0	0	0
2004	0	0	0	0	0	0
2005	0	0	0	0	0	0
2006	0	0	0	0	0	0
2007	0	0	0	0	0	0
2008	0	0	0	0	0	0
2009	0	0	0	0	0	0
2010	0	0	0	0	0	0
2011	0	0	0	0	0	0
2012	0	0	0	0	0	0
n	12	12	12	12	12	12

Ease of removal from cage) -1: Atypically docile, 0: Easy, 1: Some resistance/avoidance, 2: Difficult, 3: Very difficult
Fur condition) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Skin) 0: Nomal, 1: Slight, 2: Moderate, 3: Severe
Secretions-Eye, Nose) 0: Absent, 1: Present
Exophthalmos) 0: Absent, 1: Present
Palpebral closure) 0: Nomal, 1: Slightly closed, 2: Half closed, 3: Completely closed
Mucosal membranes) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Lacrimation) 0: Absent, 1: Present
Piloerection) 0: Absent, 1: Present
Pupil size) -1: Miosis, 0: Nomal, 1: Half opened pupil, 2: Mydriasis
Salivation) 0: None, 1: Slight, 2: Moderate, 3: Marked
Abnormal respiration) 0: None, 1: Slight, 2: Moderate, 3: Severe
Vocalization) 0: None, 1: Soft, 2: Moderate, 3: Loud/aggressive
Reactivity to handling) -1: Atypically docile, 0: Easy, 1: Slightly awkward, 2: Awkward, 3: Very Awkward
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

In-the-hand observation

Generation : F0 Sex : Male Week : 4 Period : F0 mating Dose : BTetCA 300 mg/kg Species : Rat

Animal No.	Ease of removal from cage	Fur condition	Skin	Secretions-Eye, Nose	Exophthalmos	Palpebral closure	Mucosal membranes	Lacrimation
3001	0	0	0	0	0	0	0	0
3002	0	0	0	0	0	0	0	0
3003	0	0	0	0	0	0	0	0
3004	0	0	0	0	0	0	0	0
3005	0	0	0	0	0	0	0	0
3006	0	0	0	0	0	0	0	0
3007	0	0	0	0	0	0	0	0
3008	0	0	0	0	0	0	0	0
3009	0	0	0	0	0	0	0	0
3010	0	0	0	0	0	0	0	0
3011	0	0	0	0	0	0	0	0
3012	0	0	0	0	0	0	0	0
n	12	12	12	12	12	12	12	12

Animal No.	Piloerection	Pupil size	Salivation	Abnormal respiration	Vocalization	Reactivity to handling
3001	0	0	0	0	0	0
3002	0	0	0	0	0	0
3003	0	0	0	0	0	0
3004	0	0	0	0	0	0
3005	0	0	0	0	0	0
3006	0	0	0	0	0	0
3007	0	0	0	0	0	0
3008	0	0	0	0	0	0
3009	0	0	0	0	0	0
3010	0	0	0	0	0	0
3011	0	0	0	0	0	0
3012	0	0	0	0	0	0
n	12	12	12	12	12	12

Ease of removal from cage) -1: Atypically docile, 0: Easy, 1: Some resistance/avoidance, 2: Difficult, 3: Very difficult
Fur condition) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Skin) 0: Nomal, 1: Slight, 2: Moderate, 3: Severe
Secretions-Eye, Nose) 0: Absent, 1: Present
Exophthalmos) 0: Absent, 1: Present
Palpebral closure) 0: Nomal, 1: Slightly closed, 2: Half closed, 3: Completely closed
Mucosal membranes) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Lacrimation) 0: Absent, 1: Present
Piloerection) 0: Absent, 1: Present
Pupil size) -1: Miosis, 0: Nomal, 1: Half opened pupil, 2: Mydriasis
Salivation) 0: None, 1: Slight, 2: Moderate, 3: Marked
Abnormal respiration) 0: None, 1: Slight, 2: Moderate, 3: Severe
Vocalization) 0: None, 1: Soft, 2: Moderate, 3: Loud/aggressive
Reactivity to handling) -1: Atypically docile, 0: Easy, 1: Slightly awkward, 2: Awkward, 3: Very Awkward
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

In-the-hand observation

Generation : F0 Sex : Male Week : 4 Period : F0 mating Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Ease of removal from cage	Fur condition	Skin	Secretions-Eye, Nose	Exophthalmos	Palpebral closure	Mucosal membranes	Lacrimation
4001	0	0	0	0	0	0	0	0
4002	0	0	0	0	0	0	0	0
4003	0	0	0	0	0	0	0	0
4004	0	0	0	0	0	0	0	0
4005	0	0	0	0	0	0	0	0
4006	0	0	0	0	0	0	0	0
4007	0	0	0	0	0	0	0	0
4008	0	0	0	0	0	0	0	0
4009	0	0	0	0	0	0	0	0
4010	0	0	0	0	0	0	0	0
4011	0	0	0	0	0	0	0	0
4012	0	0	0	0	0	0	0	0
n	12	12	12	12	12	12	12	12

Animal No.	Piloerection	Pupil size	Salivation	Abnormal respiration	Vocalization	Reactivity to handling
4001	0	0	0	0	0	0
4002	0	0	0	0	0	0
4003	0	0	0	0	0	0
4004	0	0	0	0	0	0
4005	0	0	0	0	0	0
4006	0	0	0	0	0	0
4007	0	0	0	0	0	0
4008	0	0	0	0	0	0
4009	0	0	0	0	0	0
4010	0	0	0	0	0	0
4011	0	0	0	0	0	0
4012	0	0	0	0	0	0
n	12	12	12	12	12	12

Ease of removal from cage) -1: Atypically docile, 0: Easy, 1: Some resistance/avoidance, 2: Difficult, 3: Very difficult
Fur condition) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Skin) 0: Nomal, 1: Slight, 2: Moderate, 3: Severe
Secretions-Eye, Nose) 0: Absent, 1: Present
Exophthalmos) 0: Absent, 1: Present
Palpebral closure) 0: Nomal, 1: Slightly closed, 2: Half closed, 3: Completely closed
Mucosal membranes) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Lacrimation) 0: Absent, 1: Present
Piloerection) 0: Absent, 1: Present
Pupil size) -1: Miosis, 0: Nomal, 1: Half opened pupil, 2: Mydriasis
Salivation) 0: None, 1: Slight, 2: Moderate, 3: Marked
Abnormal respiration) 0: None, 1: Slight, 2: Moderate, 3: Severe
Vocalization) 0: None, 1: Soft, 2: Moderate, 3: Loud/aggressive
Reactivity to handling) -1: Atypically docile, 0: Easy, 1: Slightly awkward, 2: Awkward, 3: Very Awkward
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

In-the-hand observation

Generation : F0 Sex : Male Week : 5 Period : F0 mating Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Ease of removal from cage	Fur condition	Skin	Secretions-Eye, Nose	Exophthalmos	Palpebral closure	Mucosal membranes	Lacrimation
1001	0	0	0	0	0	0	0	0
1002	0	0	0	0	0	0	0	0
1003	0	0	0	0	0	0	0	0
1004	0	0	0	0	0	0	0	0
1005	0	0	0	0	0	0	0	0
1006	0	0	0	0	0	0	0	0
1007	0	0	0	0	0	0	0	0
1008	0	0	0	0	0	0	0	0
1009	0	0	0	0	0	0	0	0
1010	0	0	0	0	0	0	0	0
1011	0	0	0	0	0	0	0	0
1012	0	0	0	0	0	0	0	0
n	12	12	12	12	12	12	12	12

Animal No.	Piloerection	Pupil size	Salivation	Abnormal respiration	Vocalization	Reactivity to handling
1001	0	0	0	0	0	0
1002	0	0	0	0	0	0
1003	0	0	0	0	0	0
1004	0	0	0	0	0	0
1005	0	0	0	0	0	0
1006	0	0	0	0	0	0
1007	0	0	0	0	0	0
1008	0	0	0	0	0	0
1009	0	0	0	0	0	0
1010	0	0	0	0	0	0
1011	0	0	0	0	0	0
1012	0	0	0	0	0	0
n	12	12	12	12	12	12

Ease of removal from cage) -1: Atypically docile, 0: Easy, 1: Some resistance/avoidance, 2: Difficult, 3: Very difficult
Fur condition) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Skin) 0: Nomal, 1: Slight, 2: Moderate, 3: Severe
Secretions-Eye, Nose) 0: Absent, 1: Present
Exophthalmos) 0: Absent, 1: Present
Palpebral closure) 0: Nomal, 1: Slightly closed, 2: Half closed, 3: Completely closed
Mucosal membranes) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Lacrimation) 0: Absent, 1: Present
Piloerection) 0: Absent, 1: Present
Pupil size) -1: Miosis, 0: Nomal, 1: Half opened pupil, 2: Mydriasis
Salivation) 0: None, 1: Slight, 2: Moderate, 3: Marked
Abnormal respiration) 0: None, 1: Slight, 2: Moderate, 3: Severe
Vocalization) 0: None, 1: Soft, 2: Moderate, 3: Loud/aggressive
Reactivity to handling) -1: Atypically docile, 0: Easy, 1: Slightly awkward, 2: Awkward, 3: Very Awkward
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

In-the-hand observation

Generation : F0 Sex : Male Week : 5 Period : F0 mating Dose : BTetCA 100 mg/kg Species : Rat

Animal No.	Ease of removal from cage	Fur condition	Skin	Secretions-Eye, Nose	Exophthalmos	Palpebral closure	Mucosal membranes	Lacrimation
2001	0	0	0	0	0	0	0	0
2002	0	0	0	0	0	0	0	0
2003	0	0	0	0	0	0	0	0
2004	0	0	0	0	0	0	0	0
2005	0	0	0	0	0	0	0	0
2006	0	0	0	0	0	0	0	0
2007	0	0	0	0	0	0	0	0
2008	0	0	0	0	0	0	0	0
2009	0	0	0	0	0	0	0	0
2010	0	0	0	0	0	0	0	0
2011	0	0	0	0	0	0	0	0
2012	0	0	0	0	0	0	0	0
n	12	12	12	12	12	12	12	12

Animal No.	Piloerection	Pupil size	Salivation	Abnormal respiration	Vocalization	Reactivity to handling
2001	0	0	0	0	0	0
2002	0	0	0	0	0	0
2003	0	0	0	0	0	0
2004	0	0	0	0	0	0
2005	0	0	0	0	1	0
2006	0	0	0	0	0	0
2007	0	0	0	0	0	0
2008	0	0	0	0	0	0
2009	0	0	0	0	0	0
2010	0	0	0	0	0	0
2011	0	0	0	0	0	0
2012	0	0	0	0	0	0
n	12	12	12	12	12	12

Ease of removal from cage) -1: Atypically docile, 0: Easy, 1: Some resistance/avoidance, 2: Difficult, 3: Very difficult
Fur condition) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Skin) 0: Nomal, 1: Slight, 2: Moderate, 3: Severe
Secretions-Eye, Nose) 0: Absent, 1: Present
Exophthalmos) 0: Absent, 1: Present
Palpebral closure) 0: Nomal, 1: Slightly closed, 2: Half closed, 3: Completely closed
Mucosal membranes) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Lacrimation) 0: Absent, 1: Present
Piloerection) 0: Absent, 1: Present
Pupil size) -1: Miosis, 0: Nomal, 1: Half opened pupil, 2: Mydriasis
Salivation) 0: None, 1: Slight, 2: Moderate, 3: Marked
Abnormal respiration) 0: None, 1: Slight, 2: Moderate, 3: Severe
Vocalization) 0: None, 1: Soft, 2: Moderate, 3: Loud/aggressive
Reactivity to handling) -1: Atypically docile, 0: Easy, 1: Slightly awkward, 2: Awkward, 3: Very Awkward
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

In-the-hand observation

Generation : F0 Sex : Male Week : 5 Period : F0 mating Dose : BTetCA 300 mg/kg Species : Rat

Animal No.	Ease of removal from cage	Fur condition	Skin	Secretions-Eye, Nose	Exophthalmos	Palpebral closure	Mucosal membranes	Lacrimation
3001	0	0	0	0	0	0	0	0
3002	0	0	0	0	0	0	0	0
3003	0	0	0	0	0	0	0	0
3004	0	0	0	0	0	0	0	0
3005	0	0	0	0	0	0	0	0
3006	0	0	0	0	0	0	0	0
3007	0	0	0	0	0	0	0	0
3008	0	0	0	0	0	0	0	0
3009	0	0	0	0	0	0	0	0
3010	0	0	0	0	0	0	0	0
3011	0	0	0	0	0	0	0	0
3012	0	0	0	0	0	0	0	0
n	12	12	12	12	12	12	12	12

Animal No.	Piloerection	Pupil size	Salivation	Abnormal respiration	Vocalization	Reactivity to handling
3001	0	0	0	0	0	0
3002	0	0	0	0	0	0
3003	0	0	0	0	0	0
3004	0	0	0	0	0	0
3005	0	0	0	0	0	0
3006	0	0	0	0	0	0
3007	0	0	0	0	0	0
3008	0	0	0	0	0	0
3009	0	0	0	0	0	0
3010	0	0	0	0	0	0
3011	0	0	0	0	0	0
3012	0	0	0	0	0	0
n	12	12	12	12	12	12

Ease of removal from cage) -1: Atypically docile, 0: Easy, 1: Some resistance/avoidance, 2: Difficult, 3: Very difficult
Fur condition) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Skin) 0: Nomal, 1: Slight, 2: Moderate, 3: Severe
Secretions-Eye, Nose) 0: Absent, 1: Present
Exophthalmos) 0: Absent, 1: Present
Palpebral closure) 0: Nomal, 1: Slightly closed, 2: Half closed, 3: Completely closed
Mucosal membranes) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Lacrimation) 0: Absent, 1: Present
Piloerection) 0: Absent, 1: Present
Pupil size) -1: Miosis, 0: Nomal, 1: Half opened pupil, 2: Mydriasis
Salivation) 0: None, 1: Slight, 2: Moderate, 3: Marked
Abnormal respiration) 0: None, 1: Slight, 2: Moderate, 3: Severe
Vocalization) 0: None, 1: Soft, 2: Moderate, 3: Loud/aggressive
Reactivity to handling) -1: Atypically docile, 0: Easy, 1: Slightly awkward, 2: Awkward, 3: Very Awkward
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

In-the-hand observation

Generation : F0 Sex : Male Week : 5 Period : F0 mating Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Ease of removal from cage	Fur condition	Skin	Secretions-Eye, Nose	Exophthalmos	Palpebral closure	Mucosal membranes	Lacrimation
4001	0	0	0	0	0	0	0	0
4002	0	0	0	0	0	0	0	0
4003	0	0	0	0	0	0	0	0
4004	0	0	0	0	0	0	0	0
4005	0	0	0	0	0	0	0	0
4006	0	0	0	0	0	0	0	0
4007	0	0	0	0	0	0	0	0
4008	0	0	0	0	0	0	0	0
4009	0	0	0	0	0	0	0	0
4010	0	0	0	0	0	0	0	0
4011	0	0	0	0	0	0	0	0
4012	0	0	0	0	0	0	0	0
n	12	12	12	12	12	12	12	12

Animal No.	Piloerection	Pupil size	Salivation	Abnormal respiration	Vocalization	Reactivity to handling
4001	0	0	0	0	0	0
4002	0	0	0	0	0	0
4003	0	0	0	0	0	0
4004	0	0	0	0	0	0
4005	0	0	0	0	0	0
4006	0	0	0	0	0	0
4007	0	0	0	0	0	0
4008	0	0	0	0	0	0
4009	0	0	0	0	0	0
4010	0	0	0	0	0	0
4011	0	0	0	0	0	0
4012	0	0	0	0	0	0
n	12	12	12	12	12	12

Ease of removal from cage) -1: Atypically docile, 0: Easy, 1: Some resistance/avoidance, 2: Difficult, 3: Very difficult
Fur condition) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Skin) 0: Nomal, 1: Slight, 2: Moderate, 3: Severe
Secretions-Eye, Nose) 0: Absent, 1: Present
Exophthalmos) 0: Absent, 1: Present
Palpebral closure) 0: Nomal, 1: Slightly closed, 2: Half closed, 3: Completely closed
Mucosal membranes) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Lacrimation) 0: Absent, 1: Present
Piloerection) 0: Absent, 1: Present
Pupil size) -1: Miosis, 0: Nomal, 1: Half opened pupil, 2: Mydriasis
Salivation) 0: None, 1: Slight, 2: Moderate, 3: Marked
Abnormal respiration) 0: None, 1: Slight, 2: Moderate, 3: Severe
Vocalization) 0: None, 1: Soft, 2: Moderate, 3: Loud/aggressive
Reactivity to handling) -1: Atypically docile, 0: Easy, 1: Slightly awkward, 2: Awkward, 3: Very Awkward
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

In-the-hand observation

Generation : F0 Sex : Male Week : 6 Period : F0 mating Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Ease of removal from cage	Fur condition	Skin	Secretions-Eye, Nose	Exophthalmos	Palpebral closure	Mucosal membranes	Lacrimation
1001	0	0	0	0	0	0	0	0
1002	0	0	0	0	0	0	0	0
1003	0	0	0	0	0	0	0	0
1004	0	0	0	0	0	0	0	0
1005	0	0	0	0	0	0	0	0
1006	0	0	0	0	0	0	0	0
1007	0	0	0	0	0	0	0	0
1008	0	0	0	0	0	0	0	0
1009	0	0	0	0	0	0	0	0
1010	0	0	0	0	0	0	0	0
1011	0	0	0	0	0	0	0	0
1012	0	0	0	0	0	0	0	0
n	12	12	12	12	12	12	12	12

Animal No.	Piloerection	Pupil size	Salivation	Abnormal respiration	Vocalization	Reactivity to handling
1001	0	0	0	0	0	0
1002	0	0	0	0	0	0
1003	0	0	0	0	0	0
1004	0	0	0	0	0	0
1005	0	0	0	0	0	0
1006	0	0	0	0	0	0
1007	0	0	0	0	0	0
1008	0	0	0	0	0	0
1009	0	0	0	0	0	0
1010	0	0	0	0	0	0
1011	0	0	0	0	0	0
1012	0	0	0	0	0	0
n	12	12	12	12	12	12

Ease of removal from cage) -1: Atypically docile, 0: Easy, 1: Some resistance/avoidance, 2: Difficult, 3: Very difficult
Fur condition) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Skin) 0: Nomal, 1: Slight, 2: Moderate, 3: Severe
Secretions-Eye, Nose) 0: Absent, 1: Present
Exophthalmos) 0: Absent, 1: Present
Palpebral closure) 0: Nomal, 1: Slightly closed, 2: Half closed, 3: Completely closed
Mucosal membranes) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Lacrimation) 0: Absent, 1: Present
Piloerection) 0: Absent, 1: Present
Pupil size) -1: Miosis, 0: Nomal, 1: Half opened pupil, 2: Mydriasis
Salivation) 0: None, 1: Slight, 2: Moderate, 3: Marked
Abnormal respiration) 0: None, 1: Slight, 2: Moderate, 3: Severe
Vocalization) 0: None, 1: Soft, 2: Moderate, 3: Loud/aggressive
Reactivity to handling) -1: Atypically docile, 0: Easy, 1: Slightly awkward, 2: Awkward, 3: Very Awkward
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

In-the-hand observation

Generation : F0 Sex : Male Week : 6 Period : F0 mating Dose : BTetCA 100 mg/kg Species : Rat

Animal No.	Ease of removal from cage	Fur condition	Skin	Secretions-Eye, Nose	Exophthalmos	Palpebral closure	Mucosal membranes	Lacrimation
2001	0	0	0	0	0	0	0	0
2002	0	0	0	0	0	0	0	0
2003	0	0	0	0	0	0	0	0
2004	0	0	0	0	0	0	0	0
2005	0	0	0	0	0	0	0	0
2006	0	0	0	0	0	0	0	0
2007	0	0	0	0	0	0	0	0
2008	0	0	0	0	0	0	0	0
2009	0	0	0	0	0	0	0	0
2010	0	0	0	0	0	0	0	0
2011	0	0	0	0	0	0	0	0
2012	0	0	0	0	0	0	0	0
n	12	12	12	12	12	12	12	12

Animal No.	Piloerection	Pupil size	Salivation	Abnormal respiration	Vocalization	Reactivity to handling
2001	0	0	0	0	0	0
2002	0	0	0	0	0	0
2003	0	0	0	0	0	0
2004	0	0	0	0	0	0
2005	0	0	0	0	0	0
2006	0	0	0	0	0	0
2007	0	0	0	0	0	0
2008	0	0	0	0	0	0
2009	0	0	0	0	0	0
2010	0	0	0	0	0	0
2011	0	0	0	0	1	0
2012	0	0	0	0	0	0
n	12	12	12	12	12	12

Ease of removal from cage) -1: Atypically docile, 0: Easy, 1: Some resistance/avoidance, 2: Difficult, 3: Very difficult
Fur condition) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Skin) 0: Nomal, 1: Slight, 2: Moderate, 3: Severe
Secretions-Eye, Nose) 0: Absent, 1: Present
Exophthalmos) 0: Absent, 1: Present
Palpebral closure) 0: Nomal, 1: Slightly closed, 2: Half closed, 3: Completely closed
Mucosal membranes) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Lacrimation) 0: Absent, 1: Present
Piloerection) 0: Absent, 1: Present
Pupil size) -1: Miosis, 0: Nomal, 1: Half opened pupil, 2: Mydriasis
Salivation) 0: None, 1: Slight, 2: Moderate, 3: Marked
Abnormal respiration) 0: None, 1: Slight, 2: Moderate, 3: Severe
Vocalization) 0: None, 1: Soft, 2: Moderate, 3: Loud/aggressive
Reactivity to handling) -1: Atypically docile, 0: Easy, 1: Slightly awkward, 2: Awkward, 3: Very Awkward
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

In-the-hand observation

Generation : F0 Sex : Male Week : 6 Period : F0 mating Dose : BTetCA 300 mg/kg Species : Rat

Animal No.	Ease of removal from cage	Fur condition	Skin	Secretions-Eye, Nose	Exophthalmos	Palpebral closure	Mucosal membranes	Lacrimation
3001	0	0	0	0	0	0	0	0
3002	0	0	0	0	0	0	0	0
3003	0	0	0	0	0	0	0	0
3004	0	0	0	0	0	0	0	0
3005	0	0	0	0	0	0	0	0
3006	0	0	0	0	0	0	0	0
3007	0	0	0	0	0	0	0	0
3008	0	0	0	0	0	0	0	0
3009	0	0	0	0	0	0	0	0
3010	0	0	0	0	0	0	0	0
3011	0	0	0	0	0	0	0	0
3012	0	0	0	0	0	0	0	0
n	12	12	12	12	12	12	12	12

Animal No.	Piloerection	Pupil size	Salivation	Abnormal respiration	Vocalization	Reactivity to handling
3001	0	0	0	0	0	0
3002	0	0	0	0	0	0
3003	0	0	0	0	0	0
3004	0	0	0	0	0	0
3005	0	0	0	0	0	0
3006	0	0	0	0	0	0
3007	0	0	0	0	0	0
3008	0	0	0	0	0	0
3009	0	0	0	0	0	0
3010	0	0	0	0	0	0
3011	0	0	0	0	0	0
3012	0	0	0	0	0	0
n	12	12	12	12	12	12

Ease of removal from cage) -1: Atypically docile, 0: Easy, 1: Some resistance/avoidance, 2: Difficult, 3: Very difficult
Fur condition) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Skin) 0: Nomal, 1: Slight, 2: Moderate, 3: Severe
Secretions-Eye, Nose) 0: Absent, 1: Present
Exophthalmos) 0: Absent, 1: Present
Palpebral closure) 0: Nomal, 1: Slightly closed, 2: Half closed, 3: Completely closed
Mucosal membranes) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Lacrimation) 0: Absent, 1: Present
Piloerection) 0: Absent, 1: Present
Pupil size) -1: Miosis, 0: Nomal, 1: Half opened pupil, 2: Mydriasis
Salivation) 0: None, 1: Slight, 2: Moderate, 3: Marked
Abnormal respiration) 0: None, 1: Slight, 2: Moderate, 3: Severe
Vocalization) 0: None, 1: Soft, 2: Moderate, 3: Loud/aggressive
Reactivity to handling) -1: Atypically docile, 0: Easy, 1: Slightly awkward, 2: Awkward, 3: Very Awkward
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

In-the-hand observation

Generation : F0 Sex : Male Week : 6 Period : F0 mating Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Ease of removal from cage	Fur condition	Skin	Secretions-Eye, Nose	Exophthalmos	Palpebral closure	Mucosal membranes	Lacrimation
4001	0	0	0	0	0	0	0	0
4002	0	0	0	0	0	0	0	0
4003	0	0	0	0	0	0	0	0
4004	0	0	0	0	0	0	0	0
4005	0	0	0	0	0	0	0	0
4006	0	0	0	0	0	0	0	0
4007	0	0	0	0	0	0	0	0
4008	0	0	0	0	0	0	0	0
4009	0	0	0	0	0	0	0	0
4010	0	0	0	0	0	0	0	0
4011	0	0	0	0	0	0	0	0
4012	0	0	0	0	0	0	0	0
n	12	12	12	12	12	12	12	12

Animal No.	Piloerection	Pupil size	Salivation	Abnormal respiration	Vocalization	Reactivity to handling
4001	0	0	0	0	0	0
4002	0	0	0	0	0	0
4003	0	0	0	0	0	0
4004	0	0	0	0	0	0
4005	0	0	0	0	0	0
4006	0	0	0	0	0	0
4007	0	0	0	0	0	0
4008	0	0	0	0	0	0
4009	0	0	0	0	0	0
4010	0	0	0	0	0	0
4011	0	0	0	0	0	0
4012	0	0	0	0	0	0
n	12	12	12	12	12	12

Ease of removal from cage) -1: Atypically docile, 0: Easy, 1: Some resistance/avoidance, 2: Difficult, 3: Very difficult
Fur condition) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Skin) 0: Nomal, 1: Slight, 2: Moderate, 3: Severe
Secretions-Eye, Nose) 0: Absent, 1: Present
Exophthalmos) 0: Absent, 1: Present
Palpebral closure) 0: Nomal, 1: Slightly closed, 2: Half closed, 3: Completely closed
Mucosal membranes) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Lacrimation) 0: Absent, 1: Present
Piloerection) 0: Absent, 1: Present
Pupil size) -1: Miosis, 0: Nomal, 1: Half opened pupil, 2: Mydriasis
Salivation) 0: None, 1: Slight, 2: Moderate, 3: Marked
Abnormal respiration) 0: None, 1: Slight, 2: Moderate, 3: Severe
Vocalization) 0: None, 1: Soft, 2: Moderate, 3: Loud/aggressive
Reactivity to handling) -1: Atypically docile, 0: Easy, 1: Slightly awkward, 2: Awkward, 3: Very Awkward
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

In-the-hand observation

Period : F0 before mating

Generation : F0 Sex : Female Week : 1 Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Ease of removal from cage	Fur condition	Skin	Secretions-Eye, Nose	Exophthalmos	Palpebral closure	Mucosal membranes	Lacrimation
1101	0	0	0	0	0	0	0	0
1102	0	0	0	0	0	0	0	0
1103	0	0	0	0	0	0	0	0
1104	0	0	0	0	0	0	0	0
1105	0	0	0	0	0	0	0	0
1106	0	0	0	0	0	0	0	0
1107	0	0	0	0	0	0	0	0
1108	0	0	0	0	0	0	0	0
1109	0	0	0	0	0	0	0	0
1110	0	0	0	0	0	0	0	0
1111	0	0	0	0	0	0	0	0
1112	0	0	0	0	0	0	0	0
n	12	12	12	12	12	12	12	12

Animal No.	Piloerection	Pupil size	Salivation	Abnormal respiration	Vocalization	Reactivity to handling
1101	0	0	0	0	0	0
1102	0	0	0	0	0	0
1103	0	0	0	0	0	0
1104	0	0	0	0	0	0
1105	0	0	0	0	0	0
1106	0	0	0	0	0	0
1107	0	0	0	0	0	0
1108	0	0	0	0	0	0
1109	0	0	0	0	0	0
1110	0	0	0	0	0	0
1111	0	0	0	0	0	0
1112	0	0	0	0	0	0
n	12	12	12	12	12	12

Ease of removal from cage) -1: Atypically docile, 0: Easy, 1: Some resistance/avoidance, 2: Difficult, 3: Very difficult
Fur condition) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Skin) 0: Nomal, 1: Slight, 2: Moderate, 3: Severe
Secretions-Eye, Nose) 0: Absent, 1: Present
Exophthalmos) 0: Absent, 1: Present
Palpebral closure) 0: Nomal, 1: Slightly closed, 2: Half closed, 3: Completely closed
Mucosal membranes) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Lacrimation) 0: Absent, 1: Present
Piloerection) 0: Absent, 1: Present
Pupil size) -1: Miosis, 0: Nomal, 1: Half opened pupil, 2: Mydriasis
Salivation) 0: None, 1: Slight, 2: Moderate, 3: Marked
Abnormal respiration) 0: None, 1: Slight, 2: Moderate, 3: Severe
Vocalization) 0: None, 1: Soft, 2: Moderate, 3: Loud/aggressive
Reactivity to handling) -1: Atypically docile, 0: Easy, 1: Slightly awkward, 2: Awkward, 3: Very Awkward
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

In-the-hand observation

Generation : F0 Sex : Female Week : 1 Period : F0 before mating Dose : BTetCA 100 mg/kg Species : Rat

Animal No.	Ease of removal from cage	Fur condition	Skin	Secretions-Eye, Nose	Exophthalmos	Palpebral closure	Mucosal membranes	Lacrimation
2101	0	0	0	0	0	0	0	0
2102	0	0	0	0	0	0	0	0
2103	0	0	0	0	0	0	0	0
2104	0	0	0	0	0	0	0	0
2105	0	0	0	0	0	0	0	0
2106	0	0	0	0	0	0	0	0
2107	0	0	0	0	0	0	0	0
2108	0	0	0	0	0	0	0	0
2109	0	0	0	0	0	0	0	0
2110	0	0	0	0	0	0	0	0
2111	0	0	0	0	0	0	0	0
2112	0	0	0	0	0	0	0	0
n	12	12	12	12	12	12	12	12

Animal No.	Piloerection	Pupil size	Salivation	Abnormal respiration	Vocalization	Reactivity to handling
2101	0	0	0	0	0	0
2102	0	0	0	0	0	0
2103	0	0	0	0	0	0
2104	0	0	0	0	0	0
2105	0	0	0	0	0	0
2106	0	0	0	0	0	0
2107	0	0	0	0	0	0
2108	0	0	0	0	0	0
2109	0	0	0	0	0	0
2110	0	0	0	0	0	0
2111	0	0	0	0	0	0
2112	0	0	0	0	0	0
n	12	12	12	12	12	12

Ease of removal from cage) -1: Atypically docile, 0: Easy, 1: Some resistance/avoidance, 2: Difficult, 3: Very difficult
Fur condition) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Skin) 0: Nomal, 1: Slight, 2: Moderate, 3: Severe
Secretions-Eye, Nose) 0: Absent, 1: Present
Exophthalmos) 0: Absent, 1: Present
Palpebral closure) 0: Nomal, 1: Slightly closed, 2: Half closed, 3: Completely closed
Mucosal membranes) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Lacrimation) 0: Absent, 1: Present
Piloerection) 0: Absent, 1: Present
Pupil size) -1: Miosis, 0: Nomal, 1: Half opened pupil, 2: Mydriasis
Salivation) 0: None, 1: Slight, 2: Moderate, 3: Marked
Abnormal respiration) 0: None, 1: Slight, 2: Moderate, 3: Severe
Vocalization) 0: None, 1: Soft, 2: Moderate, 3: Loud/aggressive
Reactivity to handling) -1: Atypically docile, 0: Easy, 1: Slightly awkward, 2: Awkward, 3: Very Awkward
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

In-the-hand observation

Generation : F0 Sex : Female Week : 1 Period : F0 before mating Dose : BTetCA 300 mg/kg Species : Rat

Animal No.	Ease of removal from cage	Fur condition	Skin	Secretions-Eye, Nose	Exophthalmos	Palpebral closure	Mucosal membranes	Lacrimation
3101	0	0	0	0	0	0	0	0
3102	0	0	0	0	0	0	0	0
3103	0	0	0	0	0	0	0	0
3104	0	0	0	0	0	0	0	0
3105	0	0	0	0	0	0	0	0
3106	0	0	0	0	0	0	0	0
3107	0	0	0	0	0	0	0	0
3108	0	0	0	0	0	0	0	0
3109	0	0	0	0	0	0	0	0
3110	0	0	0	0	0	0	0	0
3111	0	0	0	0	0	0	0	0
3112	0	0	0	0	0	0	0	0
n	12	12	12	12	12	12	12	12

Animal No.	Piloerection	Pupil size	Salivation	Abnormal respiration	Vocalization	Reactivity to handling
3101	0	0	0	0	0	0
3102	0	0	0	0	0	0
3103	0	0	0	0	0	0
3104	0	0	0	0	0	0
3105	0	0	0	0	0	0
3106	0	0	0	0	0	0
3107	0	0	0	0	0	0
3108	0	0	0	0	0	0
3109	0	0	0	0	0	0
3110	0	0	0	0	0	0
3111	0	0	0	0	0	0
3112	0	0	0	0	0	0
n	12	12	12	12	12	12

Ease of removal from cage) -1: Atypically docile, 0: Easy, 1: Some resistance/avoidance, 2: Difficult, 3: Very difficult
Fur condition) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Skin) 0: Nomal, 1: Slight, 2: Moderate, 3: Severe
Secretions-Eye, Nose) 0: Absent, 1: Present
Exophthalmos) 0: Absent, 1: Present
Palpebral closure) 0: Nomal, 1: Slightly closed, 2: Half closed, 3: Completely closed
Mucosal membranes) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Lacrimation) 0: Absent, 1: Present
Piloerection) 0: Absent, 1: Present
Pupil size) -1: Miosis, 0: Nomal, 1: Half opened pupil, 2: Mydriasis
Salivation) 0: None, 1: Slight, 2: Moderate, 3: Marked
Abnormal respiration) 0: None, 1: Slight, 2: Moderate, 3: Severe
Vocalization) 0: None, 1: Soft, 2: Moderate, 3: Loud/aggressive
Reactivity to handling) -1: Atypically docile, 0: Easy, 1: Slightly awkward, 2: Awkward, 3: Very Awkward
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

In-the-hand observation

Period : F0 before mating

Generation : F0 Sex : Female Week : 1 Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Ease of removal from cage	Fur condition	Skin	Secretions-Eye, Nose	Exophthalmos	Palpebral closure	Mucosal membranes	Lacrimation
4101	0	0	0	0	0	0	0	0
4102	0	0	0	0	0	0	0	0
4103	0	0	0	0	0	0	0	0
4104	0	0	0	0	0	0	0	0
4105	0	0	0	0	0	0	0	0
4106	0	0	0	0	0	0	0	0
4107	0	0	0	0	0	0	0	0
4108	0	0	0	0	0	0	0	0
4109	0	0	0	0	0	0	0	0
4110	0	0	0	0	0	0	0	0
4111	0	0	0	0	0	0	0	0
4112	0	0	0	0	0	0	0	0
n	12	12	12	12	12	12	12	12

Animal No.	Piloerection	Pupil size	Salivation	Abnormal respiration	Vocalization	Reactivity to handling
4101	0	0	0	0	0	0
4102	0	0	0	0	0	0
4103	0	0	0	0	0	0
4104	0	0	0	0	0	0
4105	0	0	0	0	0	0
4106	0	0	0	0	0	0
4107	0	0	0	0	0	0
4108	0	0	0	0	0	0
4109	0	0	0	0	0	0
4110	0	0	0	0	0	0
4111	0	0	0	0	0	0
4112	0	0	0	0	0	0
n	12	12	12	12	12	12

Ease of removal from cage) -1: Atypically docile, 0: Easy, 1: Some resistance/avoidance, 2: Difficult, 3: Very difficult
Fur condition) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Skin) 0: Nomal, 1: Slight, 2: Moderate, 3: Severe
Secretions-Eye, Nose) 0: Absent, 1: Present
Exophthalmos) 0: Absent, 1: Present
Palpebral closure) 0: Nomal, 1: Slightly closed, 2: Half closed, 3: Completely closed
Mucosal membranes) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Lacrimation) 0: Absent, 1: Present
Piloerection) 0: Absent, 1: Present
Pupil size) -1: Miosis, 0: Nomal, 1: Half opened pupil, 2: Mydriasis
Salivation) 0: None, 1: Slight, 2: Moderate, 3: Marked
Abnormal respiration) 0: None, 1: Slight, 2: Moderate, 3: Severe
Vocalization) 0: None, 1: Soft, 2: Moderate, 3: Loud/aggressive
Reactivity to handling) -1: Atypically docile, 0: Easy, 1: Slightly awkward, 2: Awkward, 3: Very Awkward
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

In-the-hand observation

Period : F0 before mating

Generation : F0 Sex : Female Week : 2 Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Ease of removal from cage	Fur condition	Skin	Secretions-Eye, Nose	Exophthalmos	Palpebral closure	Mucosal membranes	Lacrimation
1101	0	0	0	0	0	0	0	0
1102	0	0	0	0	0	0	0	0
1103	0	0	0	0	0	0	0	0
1104	0	0	0	0	0	0	0	0
1105	0	0	0	0	0	0	0	0
1106	0	0	0	0	0	0	0	0
1107	0	0	0	0	0	0	0	0
1108	0	0	0	0	0	0	0	0
1109	0	0	0	0	0	0	0	0
1110	0	0	0	0	0	0	0	0
1111	0	0	0	0	0	0	0	0
1112	0	0	0	0	0	0	0	0
n	12	12	12	12	12	12	12	12

Animal No.	Piloerection	Pupil size	Salivation	Abnormal respiration	Vocalization	Reactivity to handling
1101	0	0	0	0	0	0
1102	0	0	0	0	0	0
1103	0	0	0	0	0	0
1104	0	0	0	0	0	0
1105	0	0	0	0	0	0
1106	0	0	0	0	0	0
1107	0	0	0	0	0	0
1108	0	0	0	0	0	0
1109	0	0	0	0	0	0
1110	0	0	0	0	0	0
1111	0	0	0	0	0	0
1112	0	0	0	0	0	0
n	12	12	12	12	12	12

Ease of removal from cage) -1: Atypically docile, 0: Easy, 1: Some resistance/avoidance, 2: Difficult, 3: Very difficult
Fur condition) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Skin) 0: Nomal, 1: Slight, 2: Moderate, 3: Severe
Secretions-Eye, Nose) 0: Absent, 1: Present
Exophthalmos) 0: Absent, 1: Present
Palpebral closure) 0: Nomal, 1: Slightly closed, 2: Half closed, 3: Completely closed
Mucosal membranes) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Lacrimation) 0: Absent, 1: Present
Piloerection) 0: Absent, 1: Present
Pupil size) -1: Miosis, 0: Nomal, 1: Half opened pupil, 2: Mydriasis
Salivation) 0: None, 1: Slight, 2: Moderate, 3: Marked
Abnormal respiration) 0: None, 1: Slight, 2: Moderate, 3: Severe
Vocalization) 0: None, 1: Soft, 2: Moderate, 3: Loud/aggressive
Reactivity to handling) -1: Atypically docile, 0: Easy, 1: Slightly awkward, 2: Awkward, 3: Very Awkward
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

In-the-hand observation

Period : F0 before mating

Generation : F0 Sex : Female Week : 2 Dose : BTetCA 100 mg/kg Species : Rat

Animal No.	Ease of removal from cage	Fur condition	Skin	Secretions-Eye, Nose	Exophthalmos	Palpebral closure	Mucosal membranes	Lacrimation
2101	0	0	0	0	0	0	0	0
2102	0	0	0	0	0	0	0	0
2103	0	0	0	0	0	0	0	0
2104	0	0	0	0	0	0	0	0
2105	0	0	0	0	0	0	0	0
2106	0	0	0	0	0	0	0	0
2107	0	0	0	0	0	0	0	0
2108	0	0	0	0	0	0	0	0
2109	0	0	0	0	0	0	0	0
2110	0	0	0	0	0	0	0	0
2111	0	0	0	0	0	0	0	0
2112	0	0	0	0	0	0	0	0
n	12	12	12	12	12	12	12	12

Animal No.	Piloerection	Pupil size	Salivation	Abnormal respiration	Vocalization	Reactivity to handling
2101	0	0	0	0	0	0
2102	0	0	0	0	0	0
2103	0	0	0	0	0	0
2104	0	0	0	0	0	0
2105	0	0	0	0	0	0
2106	0	0	0	0	0	0
2107	0	0	0	0	0	0
2108	0	0	0	0	0	0
2109	0	0	0	0	0	0
2110	0	0	0	0	0	0
2111	0	0	0	0	0	0
2112	0	0	0	0	0	0
n	12	12	12	12	12	12

Ease of removal from cage) -1: Atypically docile, 0: Easy, 1: Some resistance/avoidance, 2: Difficult, 3: Very difficult
Fur condition) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Skin) 0: Nomal, 1: Slight, 2: Moderate, 3: Severe
Secretions-Eye, Nose) 0: Absent, 1: Present
Exophthalmos) 0: Absent, 1: Present
Palpebral closure) 0: Nomal, 1: Slightly closed, 2: Half closed, 3: Completely closed
Mucosal membranes) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Lacrimation) 0: Absent, 1: Present
Piloerection) 0: Absent, 1: Present
Pupil size) -1: Miosis, 0: Nomal, 1: Half opened pupil, 2: Mydriasis
Salivation) 0: None, 1: Slight, 2: Moderate, 3: Marked
Abnormal respiration) 0: None, 1: Slight, 2: Moderate, 3: Severe
Vocalization) 0: None, 1: Soft, 2: Moderate, 3: Loud/aggressive
Reactivity to handling) -1: Atypically docile, 0: Easy, 1: Slightly awkward, 2: Awkward, 3: Very Awkward
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

In-the-hand observation

Period : F0 before mating

Generation : F0 Sex : Female Week : 2 Dose : BTetCA 300 mg/kg Species : Rat

Animal No.	Ease of removal from cage	Fur condition	Skin	Secretions-Eye, Nose	Exophthalmos	Palpebral closure	Mucosal membranes	Lacrimation
3101	0	0	0	0	0	0	0	0
3102	0	0	0	0	0	0	0	0
3103	0	0	0	0	0	0	0	0
3104	0	0	0	0	0	0	0	0
3105	0	0	0	0	0	0	0	0
3106	0	0	0	0	0	0	0	0
3107	0	0	0	0	0	0	0	0
3108	0	0	0	0	0	0	0	0
3109	0	0	0	0	0	0	0	0
3110	0	0	0	0	0	0	0	0
3111	0	0	0	0	0	0	0	0
3112	0	0	0	0	0	0	0	0
n	12	12	12	12	12	12	12	12

Animal No.	Piloerection	Pupil size	Salivation	Abnormal respiration	Vocalization	Reactivity to handling
3101	0	0	0	0	0	0
3102	0	0	0	0	0	0
3103	0	0	0	0	0	0
3104	0	0	0	0	0	0
3105	0	0	0	0	0	0
3106	0	0	0	0	0	0
3107	0	0	0	0	0	0
3108	0	0	0	0	0	0
3109	0	0	0	0	0	0
3110	0	0	0	0	0	0
3111	0	0	0	0	0	0
3112	0	0	0	0	0	0
n	12	12	12	12	12	12

Ease of removal from cage) -1: Atypically docile, 0: Easy, 1: Some resistance/avoidance, 2: Difficult, 3: Very difficult
Fur condition) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Skin) 0: Nomal, 1: Slight, 2: Moderate, 3: Severe
Secretions-Eye, Nose) 0: Absent, 1: Present
Exophthalmos) 0: Absent, 1: Present
Palpebral closure) 0: Nomal, 1: Slightly closed, 2: Half closed, 3: Completely closed
Mucosal membranes) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Lacrimation) 0: Absent, 1: Present
Piloerection) 0: Absent, 1: Present
Pupil size) -1: Miosis, 0: Nomal, 1: Half opened pupil, 2: Mydriasis
Salivation) 0: None, 1: Slight, 2: Moderate, 3: Marked
Abnormal respiration) 0: None, 1: Slight, 2: Moderate, 3: Severe
Vocalization) 0: None, 1: Soft, 2: Moderate, 3: Loud/aggressive
Reactivity to handling) -1: Atypically docile, 0: Easy, 1: Slightly awkward, 2: Awkward, 3: Very Awkward
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

In-the-hand observation

Period : F0 before mating

Generation : F0 Sex : Female Week : 2 Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Ease of removal from cage	Fur condition	Skin	Secretions-Eye, Nose	Exophthalmos	Palpebral closure	Mucosal membranes	Lacrimation
4101	0	0	0	0	0	0	0	0
4102	0	0	0	0	0	0	0	0
4103	0	0	0	0	0	0	0	0
4104	0	0	0	0	0	0	0	0
4105	0	0	0	0	0	0	0	0
4106	0	0	0	0	0	0	0	0
4107	0	0	0	0	0	0	0	0
4108	0	0	0	0	0	0	0	0
4109	0	0	0	0	0	0	0	0
4110	0	0	0	0	0	0	0	0
4111	0	0	0	0	0	0	0	0
4112	0	0	0	0	0	0	0	0
n	12	12	12	12	12	12	12	12

Animal No.	Piloerection	Pupil size	Salivation	Abnormal respiration	Vocalization	Reactivity to handling
4101	0	0	0	0	0	0
4102	0	0	0	0	0	0
4103	0	0	0	0	0	0
4104	0	0	0	0	0	0
4105	0	0	0	0	0	0
4106	0	0	0	0	0	0
4107	0	0	0	0	0	0
4108	0	0	0	0	0	0
4109	0	0	0	0	0	0
4110	0	0	0	0	0	0
4111	0	0	0	0	0	0
4112	0	0	0	0	0	0
n	12	12	12	12	12	12

Ease of removal from cage) -1: Atypically docile, 0: Easy, 1: Some resistance/avoidance, 2: Difficult, 3: Very difficult
Fur condition) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Skin) 0: Nomal, 1: Slight, 2: Moderate, 3: Severe
Secretions-Eye, Nose) 0: Absent, 1: Present
Exophthalmos) 0: Absent, 1: Present
Palpebral closure) 0: Nomal, 1: Slightly closed, 2: Half closed, 3: Completely closed
Mucosal membranes) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Lacrimation) 0: Absent, 1: Present
Piloerection) 0: Absent, 1: Present
Pupil size) -1: Miosis, 0: Nomal, 1: Half opened pupil, 2: Mydriasis
Salivation) 0: None, 1: Slight, 2: Moderate, 3: Marked
Abnormal respiration) 0: None, 1: Slight, 2: Moderate, 3: Severe
Vocalization) 0: None, 1: Soft, 2: Moderate, 3: Loud/aggressive
Reactivity to handling) -1: Atypically docile, 0: Easy, 1: Slightly awkward, 2: Awkward, 3: Very Awkward
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

In-the-hand observation

Generation : F0 Sex : Female Day : 1 Period : F0 gestation Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Ease of removal from cage	Fur condition	Skin	Secretions-Eye, Nose	Exophthalmos	Palpebral closure	Mucosal membranes	Lacrimation
1101	0	0	0	0	0	0	0	0
1102	0	0	0	0	0	0	0	0
1103	0	0	0	0	0	0	0	0
1104	0	0	0	0	0	0	0	0
1105	0	0	0	0	0	0	0	0
1106	0	0	0	0	0	0	0	0
1107	0	0	0	0	0	0	0	0
1108	0	0	0	0	0	0	0	0
1109	0	0	0	0	0	0	0	0
1110	0	0	0	0	0	0	0	0
1111	0	0	0	0	0	0	0	0
1112	0	0	0	0	0	0	0	0
n	12	12	12	12	12	12	12	12

Animal No.	Piloerection	Pupil size	Salivation	Abnormal respiration	Vocalization	Reactivity to handling
1101	0	0	0	0	0	0
1102	0	0	0	0	0	0
1103	0	0	0	0	0	0
1104	0	0	0	0	0	0
1105	0	0	0	0	0	0
1106	0	0	0	0	0	0
1107	0	0	0	0	0	0
1108	0	0	0	0	0	0
1109	0	0	0	0	0	0
1110	0	0	0	0	0	0
1111	0	0	0	0	0	0
1112	0	0	0	0	0	0
n	12	12	12	12	12	12

Ease of removal from cage) -1: Atypically docile, 0: Easy, 1: Some resistance/avoidance, 2: Difficult, 3: Very difficult
Fur condition) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Skin) 0: Nomal, 1: Slight, 2: Moderate, 3: Severe
Secretions-Eye, Nose) 0: Absent, 1: Present
Exophthalmos) 0: Absent, 1: Present
Palpebral closure) 0: Nomal, 1: Slightly closed, 2: Half closed, 3: Completely closed
Mucosal membranes) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Lacrimation) 0: Absent, 1: Present
Piloerection) 0: Absent, 1: Present
Pupil size) -1: Miosis, 0: Nomal, 1: Half opened pupil, 2: Mydriasis
Salivation) 0: None, 1: Slight, 2: Moderate, 3: Marked
Abnormal respiration) 0: None, 1: Slight, 2: Moderate, 3: Severe
Vocalization) 0: None, 1: Soft, 2: Moderate, 3: Loud/aggressive
Reactivity to handling) -1: Atypically docile, 0: Easy, 1: Slightly awkward, 2: Awkward, 3: Very Awkward
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

In-the-hand observation

Generation : F0 Sex : Female Day : 1 Period : F0 gestation Dose : BTetCA 100 mg/kg Species : Rat

Animal No.	Ease of removal from cage	Fur condition	Skin	Secretions-Eye, Nose	Exophthalmos	Palpebral closure	Mucosal membranes	Lacrimation
2101	0	0	0	0	0	0	0	0
2102	0	0	0	0	0	0	0	0
2103	0	0	0	0	0	0	0	0
2104	0	0	0	0	0	0	0	0
2105	0	0	0	0	0	0	0	0
2106	0	0	0	0	0	0	0	0
2107	0	0	0	0	0	0	0	0
2108	0	0	0	0	0	0	0	0
2109	0	0	0	0	0	0	0	0
2110	0	0	0	0	0	0	0	0
2111	0	0	0	0	0	0	0	0
2112	0	0	0	0	0	0	0	0
n	12	12	12	12	12	12	12	12

Animal No.	Piloerection	Pupil size	Salivation	Abnormal respiration	Vocalization	Reactivity to handling
2101	0	0	0	0	0	0
2102	0	0	0	0	0	0
2103	0	0	0	0	0	0
2104	0	0	0	0	0	0
2105	0	0	0	0	0	0
2106	0	0	0	0	0	0
2107	0	0	0	0	0	0
2108	0	0	0	0	0	0
2109	0	0	0	0	0	0
2110	0	0	0	0	0	0
2111	0	0	0	0	0	0
2112	0	0	0	0	0	0
n	12	12	12	12	12	12

Ease of removal from cage) -1: Atypically docile, 0: Easy, 1: Some resistance/avoidance, 2: Difficult, 3: Very difficult
Fur condition) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Skin) 0: Nomal, 1: Slight, 2: Moderate, 3: Severe
Secretions-Eye, Nose) 0: Absent, 1: Present
Exophthalmos) 0: Absent, 1: Present
Palpebral closure) 0: Nomal, 1: Slightly closed, 2: Half closed, 3: Completely closed
Mucosal membranes) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Lacrimation) 0: Absent, 1: Present
Piloerection) 0: Absent, 1: Present
Pupil size) -1: Miosis, 0: Nomal, 1: Half opened pupil, 2: Mydriasis
Salivation) 0: None, 1: Slight, 2: Moderate, 3: Marked
Abnormal respiration) 0: None, 1: Slight, 2: Moderate, 3: Severe
Vocalization) 0: None, 1: Soft, 2: Moderate, 3: Loud/aggressive
Reactivity to handling) -1: Atypically docile, 0: Easy, 1: Slightly awkward, 2: Awkward, 3: Very Awkward
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

In-the-hand observation

Generation : F0 Sex : Female Day : 1 Period : F0 gestation Dose : BTetCA 300 mg/kg Species : Rat

Animal No.	Ease of removal from cage	Fur condition	Skin	Secretions-Eye, Nose	Exophthalmos	Palpebral closure	Mucosal membranes	Lacrimation
3101	0	0	0	0	0	0	0	0
3102	0	0	0	0	0	0	0	0
3103	0	0	0	0	0	0	0	0
3104	0	0	0	0	0	0	0	0
3105	0	0	0	0	0	0	0	0
3106	0	0	0	0	0	0	0	0
3107	0	0	0	0	0	0	0	0
3108	0	0	0	0	0	0	0	0
3109	0	0	0	0	0	0	0	0
3110	0	0	0	0	0	0	0	0
3111	0	0	0	0	0	0	0	0
3112	0	0	0	0	0	0	0	0
n	12	12	12	12	12	12	12	12

Animal No.	Piloerection	Pupil size	Salivation	Abnormal respiration	Vocalization	Reactivity to handling
3101	0	0	0	0	0	0
3102	0	0	0	0	0	0
3103	0	0	0	0	0	0
3104	0	0	0	0	0	0
3105	0	0	0	0	0	0
3106	0	0	0	0	0	0
3107	0	0	0	0	0	0
3108	0	0	0	0	0	0
3109	0	0	0	0	0	0
3110	0	0	0	0	0	0
3111	0	0	0	0	0	0
3112	0	0	0	0	0	0
n	12	12	12	12	12	12

Ease of removal from cage) -1: Atypically docile, 0: Easy, 1: Some resistance/avoidance, 2: Difficult, 3: Very difficult
Fur condition) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Skin) 0: Nomal, 1: Slight, 2: Moderate, 3: Severe
Secretions-Eye, Nose) 0: Absent, 1: Present
Exophthalmos) 0: Absent, 1: Present
Palpebral closure) 0: Nomal, 1: Slightly closed, 2: Half closed, 3: Completely closed
Mucosal membranes) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Lacrimation) 0: Absent, 1: Present
Piloerection) 0: Absent, 1: Present
Pupil size) -1: Miosis, 0: Nomal, 1: Half opened pupil, 2: Mydriasis
Salivation) 0: None, 1: Slight, 2: Moderate, 3: Marked
Abnormal respiration) 0: None, 1: Slight, 2: Moderate, 3: Severe
Vocalization) 0: None, 1: Soft, 2: Moderate, 3: Loud/aggressive
Reactivity to handling) -1: Atypically docile, 0: Easy, 1: Slightly awkward, 2: Awkward, 3: Very Awkward
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

In-the-hand observation

Generation : F0 Sex : Female Day : 1 Period : F0 gestation Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Ease of removal from cage	Fur condition	Skin	Secretions-Eye, Nose	Exophthalmos	Palpebral closure	Mucosal membranes	Lacrimation
4101	0	0	0	0	0	0	0	0
4102	0	0	0	0	0	0	0	0
4103	0	0	0	0	0	0	0	0
4104	0	0	0	0	0	0	0	0
4105	0	0	0	0	0	0	0	0
4106	0	0	0	0	0	0	0	0
4107	0	0	0	0	0	0	0	0
4108	0	0	0	0	0	0	0	0
4109	0	0	0	0	0	0	0	0
4110	0	0	0	0	0	0	0	0
4111	0	0	0	0	0	0	0	0
4112	0	0	0	0	0	0	0	0
n	12	12	12	12	12	12	12	12

Animal No.	Piloerection	Pupil size	Salivation	Abnormal respiration	Vocalization	Reactivity to handling
4101	0	0	0	0	0	0
4102	0	0	0	0	0	0
4103	0	0	0	0	0	0
4104	0	0	0	0	0	0
4105	0	0	0	0	0	0
4106	0	0	0	0	0	0
4107	0	0	0	0	0	0
4108	0	0	0	0	0	0
4109	0	0	0	0	0	0
4110	0	0	0	0	1	0
4111	0	0	0	0	0	0
4112	0	0	0	0	0	0
n	12	12	12	12	12	12

Ease of removal from cage) -1: Atypically docile, 0: Easy, 1: Some resistance/avoidance, 2: Difficult, 3: Very difficult
Fur condition) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Skin) 0: Nomal, 1: Slight, 2: Moderate, 3: Severe
Secretions-Eye, Nose) 0: Absent, 1: Present
Exophthalmos) 0: Absent, 1: Present
Palpebral closure) 0: Nomal, 1: Slightly closed, 2: Half closed, 3: Completely closed
Mucosal membranes) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Lacrimation) 0: Absent, 1: Present
Piloerection) 0: Absent, 1: Present
Pupil size) -1: Miosis, 0: Nomal, 1: Half opened pupil, 2: Mydriasis
Salivation) 0: None, 1: Slight, 2: Moderate, 3: Marked
Abnormal respiration) 0: None, 1: Slight, 2: Moderate, 3: Severe
Vocalization) 0: None, 1: Soft, 2: Moderate, 3: Loud/aggressive
Reactivity to handling) -1: Atypically docile, 0: Easy, 1: Slightly awkward, 2: Awkward, 3: Very Awkward
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

In-the-hand observation

Generation : F0 Sex : Female Day : 7 Period : F0 gestation Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Ease of removal from cage	Fur condition	Skin	Secretions-Eye, Nose	Exophthalmos	Palpebral closure	Mucosal membranes	Lacrimation
1101	0	0	0	0	0	0	0	0
1102	0	0	0	0	0	0	0	0
1103	0	0	0	0	0	0	0	0
1104	0	0	0	0	0	0	0	0
1105	0	0	0	0	0	0	0	0
1106	0	0	0	0	0	0	0	0
1107	0	0	0	0	0	0	0	0
1108	0	0	0	0	0	0	0	0
1109	0	0	0	0	0	0	0	0
1110	0	0	0	0	0	0	0	0
1111	0	0	0	0	0	0	0	0
1112	0	0	0	0	0	0	0	0
n	12	12	12	12	12	12	12	12

Animal No.	Piloerection	Pupil size	Salivation	Abnormal respiration	Vocalization	Reactivity to handling
1101	0	0	0	0	0	0
1102	0	0	0	0	0	0
1103	0	0	0	0	0	0
1104	0	0	0	0	0	0
1105	0	0	0	0	0	0
1106	0	0	0	0	0	0
1107	0	0	0	0	0	0
1108	0	0	0	0	0	0
1109	0	0	0	0	1	0
1110	0	0	0	0	0	0
1111	0	0	0	0	0	0
1112	0	0	0	0	0	0
n	12	12	12	12	12	12

Ease of removal from cage) -1: Atypically docile, 0: Easy, 1: Some resistance/avoidance, 2: Difficult, 3: Very difficult
Fur condition) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Skin) 0: Nomal, 1: Slight, 2: Moderate, 3: Severe
Secretions-Eye, Nose) 0: Absent, 1: Present
Exophthalmos) 0: Absent, 1: Present
Palpebral closure) 0: Nomal, 1: Slightly closed, 2: Half closed, 3: Completely closed
Mucosal membranes) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Lacrimation) 0: Absent, 1: Present
Piloerection) 0: Absent, 1: Present
Pupil size) -1: Miosis, 0: Nomal, 1: Half opened pupil, 2: Mydriasis
Salivation) 0: None, 1: Slight, 2: Moderate, 3: Marked
Abnormal respiration) 0: None, 1: Slight, 2: Moderate, 3: Severe
Vocalization) 0: None, 1: Soft, 2: Moderate, 3: Loud/aggressive
Reactivity to handling) -1: Atypically docile, 0: Easy, 1: Slightly awkward, 2: Awkward, 3: Very Awkward
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

In-the-hand observation

Generation : F0 Sex : Female Day : 7 Period : F0 gestation Dose : BTetCA 100 mg/kg Species : Rat

Animal No.	Ease of removal from cage	Fur condition	Skin	Secretions-Eye, Nose	Exophthalmos	Palpebral closure	Mucosal membranes	Lacrimation
2101	0	0	0	0	0	0	0	0
2102	0	0	0	0	0	0	0	0
2103	0	0	0	0	0	0	0	0
2104	0	0	0	0	0	0	0	0
2105	0	0	0	0	0	0	0	0
2106	0	0	0	0	0	0	0	0
2107	0	0	0	0	0	0	0	0
2108	0	0	0	0	0	0	0	0
2109	0	0	0	0	0	0	0	0
2110	0	0	0	0	0	0	0	0
2111	0	0	0	0	0	0	0	0
2112	0	0	0	0	0	0	0	0
n	12	12	12	12	12	12	12	12

Animal No.	Piloerection	Pupil size	Salivation	Abnormal respiration	Vocalization	Reactivity to handling
2101	0	0	0	0	0	0
2102	0	0	0	0	0	0
2103	0	0	0	0	0	0
2104	0	0	0	0	0	0
2105	0	0	0	0	0	0
2106	0	0	0	0	0	0
2107	0	0	0	0	0	0
2108	0	0	0	0	0	0
2109	0	0	0	0	0	0
2110	0	0	0	0	0	0
2111	0	0	0	0	0	0
2112	0	0	0	0	0	0
n	12	12	12	12	12	12

Ease of removal from cage) -1: Atypically docile, 0: Easy, 1: Some resistance/avoidance, 2: Difficult, 3: Very difficult
Fur condition) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Skin) 0: Nomal, 1: Slight, 2: Moderate, 3: Severe
Secretions-Eye, Nose) 0: Absent, 1: Present
Exophthalmos) 0: Absent, 1: Present
Palpebral closure) 0: Nomal, 1: Slightly closed, 2: Half closed, 3: Completely closed
Mucosal membranes) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Lacrimation) 0: Absent, 1: Present
Piloerection) 0: Absent, 1: Present
Pupil size) -1: Miosis, 0: Nomal, 1: Half opened pupil, 2: Mydriasis
Salivation) 0: None, 1: Slight, 2: Moderate, 3: Marked
Abnormal respiration) 0: None, 1: Slight, 2: Moderate, 3: Severe
Vocalization) 0: None, 1: Soft, 2: Moderate, 3: Loud/aggressive
Reactivity to handling) -1: Atypically docile, 0: Easy, 1: Slightly awkward, 2: Awkward, 3: Very Awkward
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

In-the-hand observation

Period : F0 gestation

Generation : F0 Sex : Female Day : 7 Dose : BTetCA 300 mg/kg Species : Rat

Animal No.	Ease of removal from cage	Fur condition	Skin	Secretions-Eye, Nose	Exophthalmos	Palpebral closure	Mucosal membranes	Lacrimation
3101	0	0	0	0	0	0	0	0
3102	0	0	0	0	0	0	0	0
3103	0	0	0	0	0	0	0	0
3104	0	0	0	0	0	0	0	0
3105	0	0	0	0	0	0	0	0
3106	0	0	0	0	0	0	0	0
3107	0	0	0	0	0	0	0	0
3108	0	0	0	0	0	0	0	0
3109	0	0	0	0	0	0	0	0
3110	0	0	0	0	0	0	0	0
3111	0	0	0	0	0	0	0	0
3112	0	0	0	0	0	0	0	0
n	12	12	12	12	12	12	12	12

Animal No.	Piloerection	Pupil size	Salivation	Abnormal respiration	Vocalization	Reactivity to handling
3101	0	0	0	0	0	0
3102	0	0	0	0	0	0
3103	0	0	0	0	0	0
3104	0	0	0	0	0	0
3105	0	0	0	0	0	0
3106	0	0	0	0	0	0
3107	0	0	0	0	0	0
3108	0	0	0	0	0	0
3109	0	0	0	0	0	0
3110	0	0	0	0	0	0
3111	0	0	0	0	0	0
3112	0	0	0	0	0	0
n	12	12	12	12	12	12

Ease of removal from cage) -1: Atypically docile, 0: Easy, 1: Some resistance/avoidance, 2: Difficult, 3: Very difficult
Fur condition) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Skin) 0: Nomal, 1: Slight, 2: Moderate, 3: Severe
Secretions-Eye, Nose) 0: Absent, 1: Present
Exophthalmos) 0: Absent, 1: Present
Palpebral closure) 0: Nomal, 1: Slightly closed, 2: Half closed, 3: Completely closed
Mucosal membranes) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Lacrimation) 0: Absent, 1: Present
Piloerection) 0: Absent, 1: Present
Pupil size) -1: Miosis, 0: Nomal, 1: Half opened pupil, 2: Mydriasis
Salivation) 0: None, 1: Slight, 2: Moderate, 3: Marked
Abnormal respiration) 0: None, 1: Slight, 2: Moderate, 3: Severe
Vocalization) 0: None, 1: Soft, 2: Moderate, 3: Loud/aggressive
Reactivity to handling) -1: Atypically docile, 0: Easy, 1: Slightly awkward, 2: Awkward, 3: Very Awkward
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

In-the-hand observation

Generation : F0 Sex : Female Day : 7 Period : F0 gestation Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Ease of removal from cage	Fur condition	Skin	Secretions-Eye, Nose	Exophthalmos	Palpebral closure	Mucosal membranes	Lacrimation
4101	0	0	0	0	0	0	0	0
4102	0	0	0	0	0	0	0	0
4103	0	0	0	0	0	0	0	0
4104	0	0	0	0	0	0	0	0
4105	0	0	0	0	0	0	0	0
4106	0	0	0	0	0	0	0	0
4107	0	0	0	0	0	0	0	0
4108	0	0	0	0	0	0	0	0
4109	0	0	0	0	0	0	0	0
4110	0	0	0	0	0	0	0	0
4111	0	0	0	0	0	0	0	0
4112	0	0	0	0	0	0	0	0
n	12	12	12	12	12	12	12	12

Animal No.	Piloerection	Pupil size	Salivation	Abnormal respiration	Vocalization	Reactivity to handling
4101	0	0	0	0	0	0
4102	0	0	0	0	1	0
4103	0	0	0	0	0	0
4104	0	0	0	0	0	0
4105	0	0	0	0	0	0
4106	0	0	0	0	0	0
4107	0	0	0	0	0	0
4108	0	0	0	0	0	0
4109	0	0	0	0	0	0
4110	0	0	0	0	0	0
4111	0	0	0	0	0	0
4112	0	0	0	0	0	0
n	12	12	12	12	12	12

Ease of removal from cage) -1: Atypically docile, 0: Easy, 1: Some resistance/avoidance, 2: Difficult, 3: Very difficult
Fur condition) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Skin) 0: Nomal, 1: Slight, 2: Moderate, 3: Severe
Secretions-Eye, Nose) 0: Absent, 1: Present
Exophthalmos) 0: Absent, 1: Present
Palpebral closure) 0: Nomal, 1: Slightly closed, 2: Half closed, 3: Completely closed
Mucosal membranes) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Lacrimation) 0: Absent, 1: Present
Piloerection) 0: Absent, 1: Present
Pupil size) -1: Miosis, 0: Nomal, 1: Half opened pupil, 2: Mydriasis
Salivation) 0: None, 1: Slight, 2: Moderate, 3: Marked
Abnormal respiration) 0: None, 1: Slight, 2: Moderate, 3: Severe
Vocalization) 0: None, 1: Soft, 2: Moderate, 3: Loud/aggressive
Reactivity to handling) -1: Atypically docile, 0: Easy, 1: Slightly awkward, 2: Awkward, 3: Very Awkward
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

In-the-hand observation

Generation : F0 Sex : Female Day : 14 Period : F0 gestation Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Ease of removal from cage	Fur condition	Skin	Secretions-Eye, Nose	Exophthalmos	Palpebral closure	Mucosal membranes	Lacrimation
1101	0	0	0	0	0	0	0	0
1102	0	0	0	0	0	0	0	0
1103	0	0	0	0	0	0	0	0
1104	0	0	0	0	0	0	0	0
1105	0	0	0	0	0	0	0	0
1106	0	0	0	0	0	0	0	0
1107	0	0	0	0	0	0	0	0
1108	0	0	0	0	0	0	0	0
1109	0	0	0	0	0	0	0	0
1110	0	0	0	0	0	0	0	0
1111	0	0	0	0	0	0	0	0
1112	0	0	0	0	0	0	0	0
n	12	12	12	12	12	12	12	12

Animal No.	Piloerection	Pupil size	Salivation	Abnormal respiration	Vocalization	Reactivity to handling
1101	0	0	0	0	0	0
1102	0	0	0	0	0	0
1103	0	0	0	0	0	0
1104	0	0	0	0	0	0
1105	0	0	0	0	0	0
1106	0	0	0	0	0	0
1107	0	0	0	0	0	0
1108	0	0	0	0	0	0
1109	0	0	0	0	1	0
1110	0	0	0	0	0	0
1111	0	0	0	0	0	0
1112	0	0	0	0	0	0
n	12	12	12	12	12	12

Ease of removal from cage) -1: Atypically docile, 0: Easy, 1: Some resistance/avoidance, 2: Difficult, 3: Very difficult
Fur condition) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Skin) 0: Nomal, 1: Slight, 2: Moderate, 3: Severe
Secretions-Eye, Nose) 0: Absent, 1: Present
Exophthalmos) 0: Absent, 1: Present
Palpebral closure) 0: Nomal, 1: Slightly closed, 2: Half closed, 3: Completely closed
Mucosal membranes) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Lacrimation) 0: Absent, 1: Present
Piloerection) 0: Absent, 1: Present
Pupil size) -1: Miosis, 0: Nomal, 1: Half opened pupil, 2: Mydriasis
Salivation) 0: None, 1: Slight, 2: Moderate, 3: Marked
Abnormal respiration) 0: None, 1: Slight, 2: Moderate, 3: Severe
Vocalization) 0: None, 1: Soft, 2: Moderate, 3: Loud/aggressive
Reactivity to handling) -1: Atypically docile, 0: Easy, 1: Slightly awkward, 2: Awkward, 3: Very Awkward
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

In-the-hand observation

Generation : F0 Sex : Female Day : 14 Period : F0 gestation Dose : BTetCA 100 mg/kg Species : Rat

Animal No.	Ease of removal from cage	Fur condition	Skin	Secretions-Eye, Nose	Exophthalmos	Palpebral closure	Mucosal membranes	Lacrimation
2101	0	0	0	0	0	0	0	0
2102	0	0	0	0	0	0	0	0
2103	0	0	0	0	0	0	0	0
2104	0	0	0	0	0	0	0	0
2105	0	0	0	0	0	0	0	0
2106	0	0	0	0	0	0	0	0
2107	0	0	0	0	0	0	0	0
2108	0	0	0	0	0	0	0	0
2109	0	0	0	0	0	0	0	0
2110	0	0	0	0	0	0	0	0
2111	0	0	0	0	0	0	0	0
2112	0	0	0	0	0	0	0	0
n	12	12	12	12	12	12	12	12

Animal No.	Piloerection	Pupil size	Salivation	Abnormal respiration	Vocalization	Reactivity to handling
2101	0	0	0	0	0	0
2102	0	0	0	0	0	0
2103	0	0	0	0	0	0
2104	0	0	0	0	0	0
2105	0	0	0	0	0	0
2106	0	0	0	0	0	0
2107	0	0	0	0	0	0
2108	0	0	0	0	0	0
2109	0	0	0	0	0	0
2110	0	0	0	0	0	0
2111	0	0	0	0	0	0
2112	0	0	0	0	0	0
n	12	12	12	12	12	12

Ease of removal from cage) -1: Atypically docile, 0: Easy, 1: Some resistance/avoidance, 2: Difficult, 3: Very difficult
Fur condition) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Skin) 0: Nomal, 1: Slight, 2: Moderate, 3: Severe
Secretions-Eye, Nose) 0: Absent, 1: Present
Exophthalmos) 0: Absent, 1: Present
Palpebral closure) 0: Nomal, 1: Slightly closed, 2: Half closed, 3: Completely closed
Mucosal membranes) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Lacrimation) 0: Absent, 1: Present
Piloerection) 0: Absent, 1: Present
Pupil size) -1: Miosis, 0: Nomal, 1: Half opened pupil, 2: Mydriasis
Salivation) 0: None, 1: Slight, 2: Moderate, 3: Marked
Abnormal respiration) 0: None, 1: Slight, 2: Moderate, 3: Severe
Vocalization) 0: None, 1: Soft, 2: Moderate, 3: Loud/aggressive
Reactivity to handling) -1: Atypically docile, 0: Easy, 1: Slightly awkward, 2: Awkward, 3: Very Awkward
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

In-the-hand observation

Generation : F0 Sex : Female Day : 14 Period : F0 gestation Dose : BTetCA 300 mg/kg Species : Rat

Animal No.	Ease of removal from cage	Fur condition	Skin	Secretions-Eye, Nose	Exophthalmos	Palpebral closure	Mucosal membranes	Lacrimation
3101	0	0	0	0	0	0	0	0
3102	0	0	0	0	0	0	0	0
3103	0	0	0	0	0	0	0	0
3104	0	0	0	0	0	0	0	0
3105	0	0	0	0	0	0	0	0
3106	0	0	0	0	0	0	0	0
3107	0	0	0	0	0	0	0	0
3108	0	0	0	0	0	0	0	0
3109	0	0	0	0	0	0	0	0
3110	0	0	0	0	0	0	0	0
3111	0	0	0	0	0	0	0	0
3112	0	0	0	0	0	0	0	0
n	12	12	12	12	12	12	12	12

Animal No.	Piloerection	Pupil size	Salivation	Abnormal respiration	Vocalization	Reactivity to handling
3101	0	0	0	0	0	0
3102	0	0	0	0	0	0
3103	0	0	0	0	0	0
3104	0	0	0	0	0	0
3105	0	0	0	0	0	0
3106	0	0	0	0	0	0
3107	0	0	0	0	0	0
3108	0	0	0	0	0	0
3109	0	0	0	0	0	0
3110	0	0	0	0	0	0
3111	0	0	0	0	0	0
3112	0	0	0	0	0	0
n	12	12	12	12	12	12

Ease of removal from cage) -1: Atypically docile, 0: Easy, 1: Some resistance/avoidance, 2: Difficult, 3: Very difficult
Fur condition) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Skin) 0: Nomal, 1: Slight, 2: Moderate, 3: Severe
Secretions-Eye, Nose) 0: Absent, 1: Present
Exophthalmos) 0: Absent, 1: Present
Palpebral closure) 0: Nomal, 1: Slightly closed, 2: Half closed, 3: Completely closed
Mucosal membranes) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Lacrimation) 0: Absent, 1: Present
Piloerection) 0: Absent, 1: Present
Pupil size) -1: Miosis, 0: Nomal, 1: Half opened pupil, 2: Mydriasis
Salivation) 0: None, 1: Slight, 2: Moderate, 3: Marked
Abnormal respiration) 0: None, 1: Slight, 2: Moderate, 3: Severe
Vocalization) 0: None, 1: Soft, 2: Moderate, 3: Loud/aggressive
Reactivity to handling) -1: Atypically docile, 0: Easy, 1: Slightly awkward, 2: Awkward, 3: Very Awkward
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

In-the-hand observation

Generation : F0 Sex : Female Day : 14 Period : F0 gestation Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Ease of removal from cage	Fur condition	Skin	Secretions-Eye, Nose	Exophthalmos	Palpebral closure	Mucosal membranes	Lacrimation
4101	0	0	0	0	0	0	0	0
4102	0	0	0	0	0	0	0	0
4103	0	0	0	0	0	0	0	0
4104	0	0	0	0	0	0	0	0
4105	0	0	0	0	0	0	0	0
4106	0	0	0	0	0	0	0	0
4107	0	0	0	0	0	0	0	0
4108	0	0	0	0	0	0	0	0
4109	0	0	0	0	0	0	0	0
4110	0	0	0	0	0	0	0	0
4111	0	0	0	0	0	0	0	0
4112	0	0	0	0	0	0	0	0
n	12	12	12	12	12	12	12	12

Animal No.	Piloerection	Pupil size	Salivation	Abnormal respiration	Vocalization	Reactivity to handling
4101	0	0	0	0	0	0
4102	0	0	0	0	0	0
4103	0	0	0	0	0	0
4104	0	0	0	0	0	0
4105	0	0	0	0	0	0
4106	0	0	0	0	0	0
4107	0	0	0	0	0	0
4108	0	0	0	0	0	0
4109	0	0	0	0	0	0
4110	0	0	0	0	0	0
4111	0	0	0	0	0	0
4112	0	0	0	0	0	0
n	12	12	12	12	12	12

Ease of removal from cage) -1: Atypically docile, 0: Easy, 1: Some resistance/avoidance, 2: Difficult, 3: Very difficult
Fur condition) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Skin) 0: Nomal, 1: Slight, 2: Moderate, 3: Severe
Secretions-Eye, Nose) 0: Absent, 1: Present
Exophthalmos) 0: Absent, 1: Present
Palpebral closure) 0: Nomal, 1: Slightly closed, 2: Half closed, 3: Completely closed
Mucosal membranes) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Lacrimation) 0: Absent, 1: Present
Piloerection) 0: Absent, 1: Present
Pupil size) -1: Miosis, 0: Nomal, 1: Half opened pupil, 2: Mydriasis
Salivation) 0: None, 1: Slight, 2: Moderate, 3: Marked
Abnormal respiration) 0: None, 1: Slight, 2: Moderate, 3: Severe
Vocalization) 0: None, 1: Soft, 2: Moderate, 3: Loud/aggressive
Reactivity to handling) -1: Atypically docile, 0: Easy, 1: Slightly awkward, 2: Awkward, 3: Very Awkward
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

In-the-hand observation

Generation : F0 Sex : Female Day : 20 Period : F0 gestation Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Ease of removal from cage	Fur condition	Skin	Secretions-Eye, Nose	Exophthalmos	Palpebral closure	Mucosal membranes	Lacrimation
1101	0	0	0	0	0	0	0	0
1102	0	0	0	0	0	0	0	0
1103	0	0	0	0	0	0	0	0
1104	0	0	0	0	0	0	0	0
1105	0	0	0	0	0	0	0	0
1106	0	0	0	0	0	0	0	0
1107	0	0	0	0	0	0	0	0
1108	0	0	0	0	0	0	0	0
1109	0	0	0	0	0	0	0	0
1110	0	0	0	0	0	0	0	0
1111	0	0	0	0	0	0	0	0
1112	0	0	0	0	0	0	0	0
n	12	12	12	12	12	12	12	12

Animal No.	Piloerection	Pupil size	Salivation	Abnormal respiration	Vocalization	Reactivity to handling
1101	0	0	0	0	0	0
1102	0	0	0	0	0	0
1103	0	0	0	0	0	0
1104	0	0	0	0	0	0
1105	0	0	0	0	0	0
1106	0	0	0	0	0	0
1107	0	0	0	0	0	0
1108	0	0	0	0	0	0
1109	0	0	0	0	0	0
1110	0	0	0	0	0	0
1111	0	0	0	0	0	0
1112	0	0	0	0	0	0
n	12	12	12	12	12	12

Ease of removal from cage) -1: Atypically docile, 0: Easy, 1: Some resistance/avoidance, 2: Difficult, 3: Very difficult
Fur condition) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Skin) 0: Nomal, 1: Slight, 2: Moderate, 3: Severe
Secretions-Eye, Nose) 0: Absent, 1: Present
Exophthalmos) 0: Absent, 1: Present
Palpebral closure) 0: Nomal, 1: Slightly closed, 2: Half closed, 3: Completely closed
Mucosal membranes) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Lacrimation) 0: Absent, 1: Present
Piloerection) 0: Absent, 1: Present
Pupil size) -1: Miosis, 0: Nomal, 1: Half opened pupil, 2: Mydriasis
Salivation) 0: None, 1: Slight, 2: Moderate, 3: Marked
Abnormal respiration) 0: None, 1: Slight, 2: Moderate, 3: Severe
Vocalization) 0: None, 1: Soft, 2: Moderate, 3: Loud/aggressive
Reactivity to handling) -1: Atypically docile, 0: Easy, 1: Slightly awkward, 2: Awkward, 3: Very Awkward
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

In-the-hand observation

Generation : F0 Sex : Female Day : 20 Period : F0 gestation Dose : BTetCA 100 mg/kg Species : Rat

Animal No.	Ease of removal from cage	Fur condition	Skin	Secretions-Eye, Nose	Exophthalmos	Palpebral closure	Mucosal membranes	Lacrimation
2101	0	0	0	0	0	0	0	0
2102	0	0	0	0	0	0	0	0
2103	0	0	0	0	0	0	0	0
2104	0	0	0	0	0	0	0	0
2105	0	0	0	0	0	0	0	0
2106	0	0	0	0	0	0	0	0
2107	0	0	0	0	0	0	0	0
2108	0	0	0	0	0	0	0	0
2109	0	0	0	0	0	0	0	0
2110	0	0	0	0	0	0	0	0
2111	0	0	0	0	0	0	0	0
2112	0	0	0	0	0	0	0	0
n	12	12	12	12	12	12	12	12

Animal No.	Piloerection	Pupil size	Salivation	Abnormal respiration	Vocalization	Reactivity to handling
2101	0	0	0	0	0	0
2102	0	0	0	0	0	0
2103	0	0	0	0	0	0
2104	0	0	0	0	0	0
2105	0	0	0	0	0	0
2106	0	0	0	0	0	0
2107	0	0	0	0	0	0
2108	0	0	0	0	0	0
2109	0	0	0	0	0	0
2110	0	0	0	0	0	0
2111	0	0	0	0	0	0
2112	0	0	0	0	0	0
n	12	12	12	12	12	12

Ease of removal from cage) -1: Atypically docile, 0: Easy, 1: Some resistance/avoidance, 2: Difficult, 3: Very difficult
Fur condition) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Skin) 0: Nomal, 1: Slight, 2: Moderate, 3: Severe
Secretions-Eye, Nose) 0: Absent, 1: Present
Exophthalmos) 0: Absent, 1: Present
Palpebral closure) 0: Nomal, 1: Slightly closed, 2: Half closed, 3: Completely closed
Mucosal membranes) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Lacrimation) 0: Absent, 1: Present
Piloerection) 0: Absent, 1: Present
Pupil size) -1: Miosis, 0: Nomal, 1: Half opened pupil, 2: Mydriasis
Salivation) 0: None, 1: Slight, 2: Moderate, 3: Marked
Abnormal respiration) 0: None, 1: Slight, 2: Moderate, 3: Severe
Vocalization) 0: None, 1: Soft, 2: Moderate, 3: Loud/aggressive
Reactivity to handling) -1: Atypically docile, 0: Easy, 1: Slightly awkward, 2: Awkward, 3: Very Awkward
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

In-the-hand observation

Period : F0 gestation

Generation : F0 Sex : Female Day : 20 Dose : BTetCA 300 mg/kg Species : Rat

Animal No.	Ease of removal from cage	Fur condition	Skin	Secretions-Eye, Nose	Exophthalmos	Palpebral closure	Mucosal membranes	Lacrimation
3101	0	0	0	0	0	0	0	0
3102	0	0	0	0	0	0	0	0
3103	0	0	0	0	0	0	0	0
3104	0	0	0	0	0	0	0	0
3105	0	0	0	0	0	0	0	0
3106	0	0	0	0	0	0	0	0
3107	0	0	0	0	0	0	0	0
3108	0	0	0	0	0	0	0	0
3109	0	0	0	0	0	0	0	0
3110	0	0	0	0	0	0	0	0
3111	0	0	0	0	0	0	0	0
3112	0	0	0	0	0	0	0	0
n	12	12	12	12	12	12	12	12

Animal No.	Piloerection	Pupil size	Salivation	Abnormal respiration	Vocalization	Reactivity to handling
3101	0	0	0	0	0	0
3102	0	0	0	0	0	0
3103	0	0	0	0	0	0
3104	0	0	0	0	0	0
3105	0	0	0	0	0	0
3106	0	0	0	0	0	0
3107	0	0	0	0	0	0
3108	0	0	0	0	0	0
3109	0	0	0	0	0	0
3110	0	0	0	0	0	0
3111	0	0	0	0	0	0
3112	0	0	0	0	0	0
n	12	12	12	12	12	12

Ease of removal from cage) -1: Atypically docile, 0: Easy, 1: Some resistance/avoidance, 2: Difficult, 3: Very difficult
Fur condition) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Skin) 0: Nomal, 1: Slight, 2: Moderate, 3: Severe
Secretions-Eye, Nose) 0: Absent, 1: Present
Exophthalmos) 0: Absent, 1: Present
Palpebral closure) 0: Nomal, 1: Slightly closed, 2: Half closed, 3: Completely closed
Mucosal membranes) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Lacrimation) 0: Absent, 1: Present
Piloerection) 0: Absent, 1: Present
Pupil size) -1: Miosis, 0: Nomal, 1: Half opened pupil, 2: Mydriasis
Salivation) 0: None, 1: Slight, 2: Moderate, 3: Marked
Abnormal respiration) 0: None, 1: Slight, 2: Moderate, 3: Severe
Vocalization) 0: None, 1: Soft, 2: Moderate, 3: Loud/aggressive
Reactivity to handling) -1: Atypically docile, 0: Easy, 1: Slightly awkward, 2: Awkward, 3: Very Awkward
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

In-the-hand observation

Period : F0 gestation

Generation : F0 Sex : Female Day : 20 Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Ease of removal from cage	Fur condition	Skin	Secretions-Eye, Nose	Exophthalmos	Palpebral closure	Mucosal membranes	Lacrimation
4101	0	0	0	0	0	0	0	0
4102	0	0	0	0	0	0	0	0
4103	0	0	0	0	0	0	0	0
4104	0	0	0	0	0	0	0	0
4105	0	0	0	0	0	0	0	0
4106	0	0	0	0	0	0	0	0
4107	0	0	0	0	0	0	0	0
4108	0	0	0	0	0	0	0	0
4109	0	0	0	0	0	0	0	0
4110	0	0	0	0	0	0	0	0
4111	0	0	0	0	0	0	0	0
4112	0	0	0	0	0	0	0	0
n	12	12	12	12	12	12	12	12

Animal No.	Piloerection	Pupil size	Salivation	Abnormal respiration	Vocalization	Reactivity to handling
4101	0	0	0	0	0	0
4102	0	0	0	0	0	0
4103	0	0	0	0	0	0
4104	0	0	0	0	0	0
4105	0	0	0	0	0	0
4106	0	0	0	0	0	0
4107	0	0	0	0	0	0
4108	0	0	0	0	0	0
4109	0	0	0	0	0	0
4110	0	0	0	0	0	0
4111	0	0	0	0	0	0
4112	0	0	0	0	0	0
n	12	12	12	12	12	12

Ease of removal from cage) -1: Atypically docile, 0: Easy, 1: Some resistance/avoidance, 2: Difficult, 3: Very difficult
Fur condition) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Skin) 0: Nomal, 1: Slight, 2: Moderate, 3: Severe
Secretions-Eye, Nose) 0: Absent, 1: Present
Exophthalmos) 0: Absent, 1: Present
Palpebral closure) 0: Nomal, 1: Slightly closed, 2: Half closed, 3: Completely closed
Mucosal membranes) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Lacrimation) 0: Absent, 1: Present
Piloerection) 0: Absent, 1: Present
Pupil size) -1: Miosis, 0: Nomal, 1: Half opened pupil, 2: Mydriasis
Salivation) 0: None, 1: Slight, 2: Moderate, 3: Marked
Abnormal respiration) 0: None, 1: Slight, 2: Moderate, 3: Severe
Vocalization) 0: None, 1: Soft, 2: Moderate, 3: Loud/aggressive
Reactivity to handling) -1: Atypically docile, 0: Easy, 1: Slightly awkward, 2: Awkward, 3: Very Awkward
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

In-the-hand observation

Generation : F0 Sex : Female Day : 4 Period : F0 lactation Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Ease of removal from cage	Fur condition	Skin	Secretions-Eye, Nose	Exophthalmos	Palpebral closure	Mucosal membranes	Lacrimation
1101	0	0	0	0	0	0	0	0
1102	0	0	0	0	0	0	0	0
1103	0	0	0	0	0	0	0	0
1104	0	0	0	0	0	0	0	0
1105	0	0	0	0	0	0	0	0
1106	0	0	0	0	0	0	0	0
1107	0	0	0	0	0	0	0	0
1108	0	0	0	0	0	0	0	0
1109	0	0	0	0	0	0	0	0
1110	0	0	0	0	0	0	0	0
1111	0	0	0	0	0	0	0	0
1112	0	0	0	0	0	0	0	0
n	12	12	12	12	12	12	12	12

Animal No.	Piloerection	Pupil size	Salivation	Abnormal respiration	Vocalization	Reactivity to handling
1101	0	0	0	0	0	0
1102	0	0	0	0	0	0
1103	0	0	0	0	0	0
1104	0	0	0	0	0	0
1105	0	0	0	0	0	0
1106	0	0	0	0	0	0
1107	0	0	0	0	0	0
1108	0	0	0	0	0	0
1109	0	0	0	0	0	0
1110	0	0	0	0	0	0
1111	0	0	0	0	0	0
1112	0	0	0	0	0	0
n	12	12	12	12	12	12

Ease of removal from cage) -1: Atypically docile, 0: Easy, 1: Some resistance/avoidance, 2: Difficult, 3: Very difficult
Fur condition) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Skin) 0: Nomal, 1: Slight, 2: Moderate, 3: Severe
Secretions-Eye, Nose) 0: Absent, 1: Present
Exophthalmos) 0: Absent, 1: Present
Palpebral closure) 0: Nomal, 1: Slightly closed, 2: Half closed, 3: Completely closed
Mucosal membranes) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Lacrimation) 0: Absent, 1: Present
Piloerection) 0: Absent, 1: Present
Pupil size) -1: Miosis, 0: Nomal, 1: Half opened pupil, 2: Mydriasis
Salivation) 0: None, 1: Slight, 2: Moderate, 3: Marked
Abnormal respiration) 0: None, 1: Slight, 2: Moderate, 3: Severe
Vocalization) 0: None, 1: Soft, 2: Moderate, 3: Loud/aggressive
Reactivity to handling) -1: Atypically docile, 0: Easy, 1: Slightly awkward, 2: Awkward, 3: Very Awkward
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

In-the-hand observation

Generation : F0 Sex : Female Day : 4 Period : F0 lactation Dose : BTetCA 100 mg/kg Species : Rat

Animal No.	Ease of removal from cage	Fur condition	Skin	Secretions-Eye, Nose	Exophthalmos	Palpebral closure	Mucosal membranes	Lacrimation
2101	0	0	0	0	0	0	0	0
2102	0	0	0	0	0	0	0	0
2103	0	0	0	0	0	0	0	0
2104	0	0	0	0	0	0	0	0
2105	0	0	0	0	0	0	0	0
2106	0	0	0	0	0	0	0	0
2107	0	0	0	0	0	0	0	0
2108	0	0	0	0	0	0	0	0
2109	0	0	0	0	0	0	0	0
2110	0	0	0	0	0	0	0	0
2111	0	0	0	0	0	0	0	0
2112	0	0	0	0	0	0	0	0
n	12	12	12	12	12	12	12	12

Animal No.	Piloerection	Pupil size	Salivation	Abnormal respiration	Vocalization	Reactivity to handling
2101	0	0	0	0	0	0
2102	0	0	0	0	0	0
2103	0	0	0	0	0	0
2104	0	0	0	0	0	0
2105	0	0	0	0	0	0
2106	0	0	0	0	0	0
2107	0	0	0	0	0	0
2108	0	0	0	0	0	0
2109	0	0	0	0	0	0
2110	0	0	0	0	0	0
2111	0	0	0	0	0	0
2112	0	0	0	0	0	0
n	12	12	12	12	12	12

Ease of removal from cage) -1: Atypically docile, 0: Easy, 1: Some resistance/avoidance, 2: Difficult, 3: Very difficult
Fur condition) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Skin) 0: Nomal, 1: Slight, 2: Moderate, 3: Severe
Secretions-Eye, Nose) 0: Absent, 1: Present
Exophthalmos) 0: Absent, 1: Present
Palpebral closure) 0: Nomal, 1: Slightly closed, 2: Half closed, 3: Completely closed
Mucosal membranes) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Lacrimation) 0: Absent, 1: Present
Piloerection) 0: Absent, 1: Present
Pupil size) -1: Miosis, 0: Nomal, 1: Half opened pupil, 2: Mydriasis
Salivation) 0: None, 1: Slight, 2: Moderate, 3: Marked
Abnormal respiration) 0: None, 1: Slight, 2: Moderate, 3: Severe
Vocalization) 0: None, 1: Soft, 2: Moderate, 3: Loud/aggressive
Reactivity to handling) -1: Atypically docile, 0: Easy, 1: Slightly awkward, 2: Awkward, 3: Very Awkward
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

In-the-hand observation

Generation : F0 Sex : Female Day : 4 Period : F0 lactation Dose : BTetCA 300 mg/kg Species : Rat

Animal No.	Ease of removal from cage	Fur condition	Skin	Secretions-Eye, Nose	Exophthalmos	Palpebral closure	Mucosal membranes	Lacrimation
3101	0	0	0	0	0	0	0	0
3102	0	0	0	0	0	0	0	0
3103	0	0	0	0	0	0	0	0
3104	0	0	0	0	0	0	0	0
3105	0	0	0	0	0	0	0	0
3106	0	0	0	0	0	0	0	0
3107	0	0	0	0	0	0	0	0
3108	0	0	0	0	0	0	0	0
3109	0	0	0	0	0	0	0	0
3110	0	0	0	0	0	0	0	0
3111	0	0	0	0	0	0	0	0
3112	0	0	0	0	0	0	0	0
n	12	12	12	12	12	12	12	12

Animal No.	Piloerection	Pupil size	Salivation	Abnormal respiration	Vocalization	Reactivity to handling
3101	0	0	0	0	0	0
3102	0	0	0	0	0	0
3103	0	0	0	0	0	0
3104	0	0	0	0	0	0
3105	0	0	0	0	0	0
3106	0	0	0	0	0	0
3107	0	0	0	0	0	0
3108	0	0	0	0	0	0
3109	0	0	0	0	0	0
3110	0	0	0	0	0	0
3111	0	0	0	0	0	0
3112	0	0	0	0	0	0
n	12	12	12	12	12	12

Ease of removal from cage) -1: Atypically docile, 0: Easy, 1: Some resistance/avoidance, 2: Difficult, 3: Very difficult
Fur condition) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Skin) 0: Nomal, 1: Slight, 2: Moderate, 3: Severe
Secretions-Eye, Nose) 0: Absent, 1: Present
Exophthalmos) 0: Absent, 1: Present
Palpebral closure) 0: Nomal, 1: Slightly closed, 2: Half closed, 3: Completely closed
Mucosal membranes) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Lacrimation) 0: Absent, 1: Present
Piloerection) 0: Absent, 1: Present
Pupil size) -1: Miosis, 0: Nomal, 1: Half opened pupil, 2: Mydriasis
Salivation) 0: None, 1: Slight, 2: Moderate, 3: Marked
Abnormal respiration) 0: None, 1: Slight, 2: Moderate, 3: Severe
Vocalization) 0: None, 1: Soft, 2: Moderate, 3: Loud/aggressive
Reactivity to handling) -1: Atypically docile, 0: Easy, 1: Slightly awkward, 2: Awkward, 3: Very Awkward
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

In-the-hand observation

Generation : F0 Sex : Female Day : 4 Period : F0 lactation Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Ease of removal from cage	Fur condition	Skin	Secretions-Eye, Nose	Exophthalmos	Palpebral closure	Mucosal membranes	Lacrimation
4101	0	0	0	0	0	0	0	0
4102	0	0	0	0	0	0	0	0
4103	0	0	0	0	0	0	0	0
4104	0	0	0	0	0	0	0	0
4105	0	0	0	0	0	0	0	0
4106	0	0	0	0	0	0	0	0
4107	0	0	0	0	0	0	0	0
4108	0	0	0	0	0	0	0	0
4109	0	0	0	0	0	0	0	0
4110	0	0	0	0	0	0	0	0
4111	0	0	0	0	0	0	0	0
4112	0	0	0	0	0	0	0	0
n	12	12	12	12	12	12	12	12

Animal No.	Piloerection	Pupil size	Salivation	Abnormal respiration	Vocalization	Reactivity to handling
4101	0	0	0	0	0	0
4102	0	0	0	0	0	0
4103	0	0	0	0	0	0
4104	0	0	0	0	0	0
4105	0	0	0	0	0	0
4106	0	0	0	0	0	0
4107	0	0	0	0	0	0
4108	0	0	0	0	0	0
4109	0	0	0	0	0	0
4110	0	0	0	0	0	0
4111	0	0	0	0	0	0
4112	0	0	0	0	0	0
n	12	12	12	12	12	12

Ease of removal from cage) -1: Atypically docile, 0: Easy, 1: Some resistance/avoidance, 2: Difficult, 3: Very difficult
Fur condition) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Skin) 0: Nomal, 1: Slight, 2: Moderate, 3: Severe
Secretions-Eye, Nose) 0: Absent, 1: Present
Exophthalmos) 0: Absent, 1: Present
Palpebral closure) 0: Nomal, 1: Slightly closed, 2: Half closed, 3: Completely closed
Mucosal membranes) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Lacrimation) 0: Absent, 1: Present
Piloerection) 0: Absent, 1: Present
Pupil size) -1: Miosis, 0: Nomal, 1: Half opened pupil, 2: Mydriasis
Salivation) 0: None, 1: Slight, 2: Moderate, 3: Marked
Abnormal respiration) 0: None, 1: Slight, 2: Moderate, 3: Severe
Vocalization) 0: None, 1: Soft, 2: Moderate, 3: Loud/aggressive
Reactivity to handling) -1: Atypically docile, 0: Easy, 1: Slightly awkward, 2: Awkward, 3: Very Awkward
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

In-the-hand observation

Period : Administration

Generation : F0 Sex : Female Week : 1 Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Ease of removal from cage	Fur condition	Skin	Secretions-Eye, Nose	Exophthalmos	Palpebral closure	Mucosal membranes	Lacrimation
5101	0	0	0	0	0	0	0	0
5102	0	0	0	0	0	0	0	0
5103	0	0	0	0	0	0	0	0
5104	0	0	0	0	0	0	0	0
5105	0	0	0	0	0	0	0	0
5106	0	0	0	0	0	0	0	0
5107	0	0	0	0	0	0	0	0
5108	0	0	0	0	0	0	0	0
5109	0	0	0	0	0	0	0	0
5110	0	0	0	0	0	0	0	0
n	10	10	10	10	10	10	10	10

Animal No.	Piloerection	Pupil size	Salivation	Abnormal respiration	Vocalization	Reactivity to handling
5101	0	0	0	0	0	0
5102	0	0	0	0	0	0
5103	0	0	0	0	0	0
5104	0	0	0	0	0	0
5105	0	0	0	0	0	0
5106	0	0	0	0	0	0
5107	0	0	0	0	0	0
5108	0	0	0	0	0	0
5109	0	0	0	0	0	0
5110	0	0	0	0	0	0
n	10	10	10	10	10	10

Ease of removal from cage) -1: Atypically docile, 0: Easy, 1: Some resistance/avoidance, 2: Difficult, 3: Very difficult
Fur condition) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Skin) 0: Nomal, 1: Slight, 2: Moderate, 3: Severe
Secretions-Eye, Nose) 0: Absent, 1: Present
Exophthalmos) 0: Absent, 1: Present
Palpebral closure) 0: Nomal, 1: Slightly closed, 2: Half closed, 3: Completely closed
Mucosal membranes) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Lacrimation) 0: Absent, 1: Present
Piloerection) 0: Absent, 1: Present
Pupil size) -1: Miosis, 0: Nomal, 1: Half opened pupil, 2: Mydriasis
Salivation) 0: None, 1: Slight, 2: Moderate, 3: Marked
Abnormal respiration) 0: None, 1: Slight, 2: Moderate, 3: Severe
Vocalization) 0: None, 1: Soft, 2: Moderate, 3: Loud/aggressive
Reactivity to handling) -1: Atypically docile, 0: Easy, 1: Slightly awkward, 2: Awkward, 3: Very Awkward
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

In-the-hand observation

Period : Administration

Generation : F0 Sex : Female Week : 1 Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Ease of removal from cage	Fur condition	Skin	Secretions-Eye, Nose	Exophthalmos	Palpebral closure	Mucosal membranes	Lacrimation
6101	0	0	0	0	0	0	0	0
6102	0	0	0	0	0	0	0	0
6103	0	0	0	0	0	0	0	0
6104	0	0	0	0	0	0	0	0
6105	0	0	0	0	0	0	0	0
6106	0	0	0	0	0	0	0	0
6107	0	0	0	0	0	0	0	0
6108	0	0	0	0	0	0	0	0
6109	0	0	0	0	0	0	0	0
6110	0	0	0	0	0	0	0	0
n	10	10	10	10	10	10	10	10

Animal No.	Piloerection	Pupil size	Salivation	Abnormal respiration	Vocalization	Reactivity to handling
6101	0	0	0	0	0	0
6102	0	0	0	0	0	0
6103	0	0	0	0	0	0
6104	0	0	0	0	0	0
6105	0	0	0	0	0	0
6106	0	0	0	0	0	0
6107	0	0	0	0	0	0
6108	0	0	0	0	0	0
6109	0	0	0	0	0	0
6110	0	0	0	0	0	0
n	10	10	10	10	10	10

Ease of removal from cage) -1: Atypically docile, 0: Easy, 1: Some resistance/avoidance, 2: Difficult, 3: Very difficult
Fur condition) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Skin) 0: Nomal, 1: Slight, 2: Moderate, 3: Severe
Secretions-Eye, Nose) 0: Absent, 1: Present
Exophthalmos) 0: Absent, 1: Present
Palpebral closure) 0: Nomal, 1: Slightly closed, 2: Half closed, 3: Completely closed
Mucosal membranes) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Lacrimation) 0: Absent, 1: Present
Piloerection) 0: Absent, 1: Present
Pupil size) -1: Miosis, 0: Nomal, 1: Half opened pupil, 2: Mydriasis
Salivation) 0: None, 1: Slight, 2: Moderate, 3: Marked
Abnormal respiration) 0: None, 1: Slight, 2: Moderate, 3: Severe
Vocalization) 0: None, 1: Soft, 2: Moderate, 3: Loud/aggressive
Reactivity to handling) -1: Atypically docile, 0: Easy, 1: Slightly awkward, 2: Awkward, 3: Very Awkward
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

In-the-hand observation

Period : Administration

Generation : F0 Sex : Female Week : 2 Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Ease of removal from cage	Fur condition	Skin	Secretions-Eye, Nose	Exophthalmos	Palpebral closure	Mucosal membranes	Lacrimation
5101	0	0	0	0	0	0	0	0
5102	0	0	0	0	0	0	0	0
5103	0	0	0	0	0	0	0	0
5104	0	0	0	0	0	0	0	0
5105	0	0	0	0	0	0	0	0
5106	0	0	0	0	0	0	0	0
5107	0	0	0	0	0	0	0	0
5108	0	0	0	0	0	0	0	0
5109	0	0	0	0	0	0	0	0
5110	0	0	0	0	0	0	0	0
n	10	10	10	10	10	10	10	10

Animal No.	Piloerection	Pupil size	Salivation	Abnormal respiration	Vocalization	Reactivity to handling
5101	0	0	0	0	0	0
5102	0	0	0	0	0	0
5103	0	0	0	0	0	0
5104	0	0	0	0	0	0
5105	0	0	0	0	0	0
5106	0	0	0	0	0	0
5107	0	0	0	0	0	0
5108	0	0	0	0	0	0
5109	0	0	0	0	0	0
5110	0	0	0	0	0	0
n	10	10	10	10	10	10

Ease of removal from cage) -1: Atypically docile, 0: Easy, 1: Some resistance/avoidance, 2: Difficult, 3: Very difficult
Fur condition) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Skin) 0: Nomal, 1: Slight, 2: Moderate, 3: Severe
Secretions-Eye, Nose) 0: Absent, 1: Present
Exophthalmos) 0: Absent, 1: Present
Palpebral closure) 0: Nomal, 1: Slightly closed, 2: Half closed, 3: Completely closed
Mucosal membranes) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Lacrimation) 0: Absent, 1: Present
Piloerection) 0: Absent, 1: Present
Pupil size) -1: Miosis, 0: Nomal, 1: Half opened pupil, 2: Mydriasis
Salivation) 0: None, 1: Slight, 2: Moderate, 3: Marked
Abnormal respiration) 0: None, 1: Slight, 2: Moderate, 3: Severe
Vocalization) 0: None, 1: Soft, 2: Moderate, 3: Loud/aggressive
Reactivity to handling) -1: Atypically docile, 0: Easy, 1: Slightly awkward, 2: Awkward, 3: Very Awkward
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

In-the-hand observation

Period : Administration

Generation : F0 Sex : Female Week : 2 Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Ease of removal from cage	Fur condition	Skin	Secretions-Eye, Nose	Exophthalmos	Palpebral closure	Mucosal membranes	Lacrimation
6101	0	0	0	0	0	0	0	0
6102	0	0	0	0	0	0	0	0
6103	0	0	0	0	0	0	0	0
6104	0	0	0	0	0	0	0	0
6105	0	0	0	0	0	0	0	0
6106	0	0	0	0	0	0	0	0
6107	0	0	0	0	0	0	0	0
6108	0	0	0	0	0	0	0	0
6109	0	0	0	0	0	0	0	0
6110	0	0	0	0	0	0	0	0
n	10	10	10	10	10	10	10	10

Animal No.	Piloerection	Pupil size	Salivation	Abnormal respiration	Vocalization	Reactivity to handling
6101	0	0	0	0	0	0
6102	0	0	0	0	0	0
6103	0	0	0	0	0	0
6104	0	0	0	0	0	0
6105	0	0	0	0	0	0
6106	0	0	0	0	0	0
6107	0	0	0	0	0	0
6108	0	0	0	0	0	0
6109	0	0	0	0	0	0
6110	0	0	0	0	0	0
n	10	10	10	10	10	10

Ease of removal from cage) -1: Atypically docile, 0: Easy, 1: Some resistance/avoidance, 2: Difficult, 3: Very difficult
Fur condition) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Skin) 0: Nomal, 1: Slight, 2: Moderate, 3: Severe
Secretions-Eye, Nose) 0: Absent, 1: Present
Exophthalmos) 0: Absent, 1: Present
Palpebral closure) 0: Nomal, 1: Slightly closed, 2: Half closed, 3: Completely closed
Mucosal membranes) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Lacrimation) 0: Absent, 1: Present
Piloerection) 0: Absent, 1: Present
Pupil size) -1: Miosis, 0: Nomal, 1: Half opened pupil, 2: Mydriasis
Salivation) 0: None, 1: Slight, 2: Moderate, 3: Marked
Abnormal respiration) 0: None, 1: Slight, 2: Moderate, 3: Severe
Vocalization) 0: None, 1: Soft, 2: Moderate, 3: Loud/aggressive
Reactivity to handling) -1: Atypically docile, 0: Easy, 1: Slightly awkward, 2: Awkward, 3: Very Awkward
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

In-the-hand observation

Period : Administration

Generation : F0 Sex : Female Week : 3 Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Ease of removal from cage	Fur condition	Skin	Secretions-Eye, Nose	Exophthalmos	Palpebral closure	Mucosal membranes	Lacrimation
5101	0	0	0	0	0	0	0	0
5102	0	0	0	0	0	0	0	0
5103	0	0	0	0	0	0	0	0
5104	0	0	0	0	0	0	0	0
5105	0	0	0	0	0	0	0	0
5106	0	0	0	0	0	0	0	0
5107	0	0	0	0	0	0	0	0
5108	0	0	0	0	0	0	0	0
5109	0	0	0	0	0	0	0	0
5110	0	0	0	0	0	0	0	0
n	10	10	10	10	10	10	10	10

Animal No.	Piloerection	Pupil size	Salivation	Abnormal respiration	Vocalization	Reactivity to handling
5101	0	0	0	0	0	0
5102	0	0	0	0	0	0
5103	0	0	0	0	0	0
5104	0	0	0	0	0	0
5105	0	0	0	0	0	1
5106	0	0	0	0	0	0
5107	0	0	0	0	0	0
5108	0	0	0	0	0	0
5109	0	0	0	0	0	0
5110	0	0	0	0	0	0
n	10	10	10	10	10	10

Ease of removal from cage) -1: Atypically docile, 0: Easy, 1: Some resistance/avoidance, 2: Difficult, 3: Very difficult
Fur condition) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Skin) 0: Nomal, 1: Slight, 2: Moderate, 3: Severe
Secretions-Eye, Nose) 0: Absent, 1: Present
Exophthalmos) 0: Absent, 1: Present
Palpebral closure) 0: Nomal, 1: Slightly closed, 2: Half closed, 3: Completely closed
Mucosal membranes) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Lacrimation) 0: Absent, 1: Present
Piloerection) 0: Absent, 1: Present
Pupil size) -1: Miosis, 0: Nomal, 1: Half opened pupil, 2: Mydriasis
Salivation) 0: None, 1: Slight, 2: Moderate, 3: Marked
Abnormal respiration) 0: None, 1: Slight, 2: Moderate, 3: Severe
Vocalization) 0: None, 1: Soft, 2: Moderate, 3: Loud/aggressive
Reactivity to handling) -1: Atypically docile, 0: Easy, 1: Slightly awkward, 2: Awkward, 3: Very Awkward
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

In-the-hand observation

Period : Administration

Generation : F0 Sex : Female Week : 3 Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Ease of removal from cage	Fur condition	Skin	Secretions-Eye, Nose	Exophthalmos	Palpebral closure	Mucosal membranes	Lacrimation
6101	0	0	0	0	0	0	0	0
6102	0	0	0	0	0	0	0	0
6103	0	0	0	0	0	0	0	0
6104	0	0	0	0	0	0	0	0
6105	0	0	0	0	0	0	0	0
6106	0	0	0	0	0	0	0	0
6107	0	0	0	0	0	0	0	0
6108	0	0	0	0	0	0	0	0
6109	0	0	0	0	0	0	0	0
6110	0	0	0	0	0	0	0	0
n	10	10	10	10	10	10	10	10

Animal No.	Piloerection	Pupil size	Salivation	Abnormal respiration	Vocalization	Reactivity to handling
6101	0	0	0	0	1	0
6102	0	0	0	0	0	0
6103	0	0	0	0	0	0
6104	0	0	0	0	0	0
6105	0	0	0	0	0	0
6106	0	0	0	0	0	0
6107	0	0	0	0	0	0
6108	0	0	0	0	0	0
6109	0	0	0	0	0	0
6110	0	0	0	0	0	0
n	10	10	10	10	10	10

Ease of removal from cage) -1: Atypically docile, 0: Easy, 1: Some resistance/avoidance, 2: Difficult, 3: Very difficult
Fur condition) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Skin) 0: Nomal, 1: Slight, 2: Moderate, 3: Severe
Secretions-Eye, Nose) 0: Absent, 1: Present
Exophthalmos) 0: Absent, 1: Present
Palpebral closure) 0: Nomal, 1: Slightly closed, 2: Half closed, 3: Completely closed
Mucosal membranes) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Lacrimation) 0: Absent, 1: Present
Piloerection) 0: Absent, 1: Present
Pupil size) -1: Miosis, 0: Nomal, 1: Half opened pupil, 2: Mydriasis
Salivation) 0: None, 1: Slight, 2: Moderate, 3: Marked
Abnormal respiration) 0: None, 1: Slight, 2: Moderate, 3: Severe
Vocalization) 0: None, 1: Soft, 2: Moderate, 3: Loud/aggressive
Reactivity to handling) -1: Atypically docile, 0: Easy, 1: Slightly awkward, 2: Awkward, 3: Very Awkward
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

In-the-hand observation

Period : Administration

Generation : F0 Sex : Female Week : 4 Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Ease of removal from cage	Fur condition	Skin	Secretions-Eye, Nose	Exophthalmos	Palpebral closure	Mucosal membranes	Lacrimation
5101	0	0	0	0	0	0	0	0
5102	0	0	0	0	0	0	0	0
5103	0	0	0	0	0	0	0	0
5104	0	0	0	0	0	0	0	0
5105	0	0	0	0	0	0	0	0
5106	0	0	0	0	0	0	0	0
5107	0	0	0	0	0	0	0	0
5108	0	0	0	0	0	0	0	0
5109	0	0	0	0	0	0	0	0
5110	0	0	0	0	0	0	0	0
n	10	10	10	10	10	10	10	10

Animal No.	Piloerection	Pupil size	Salivation	Abnormal respiration	Vocalization	Reactivity to handling
5101	0	0	0	0	0	0
5102	0	0	0	0	0	0
5103	0	0	0	0	0	0
5104	0	0	0	0	0	0
5105	0	0	0	0	0	0
5106	0	0	0	0	0	0
5107	0	0	0	0	0	0
5108	0	0	0	0	0	0
5109	0	0	0	0	0	0
5110	0	0	0	0	0	0
n	10	10	10	10	10	10

Ease of removal from cage) -1: Atypically docile, 0: Easy, 1: Some resistance/avoidance, 2: Difficult, 3: Very difficult
Fur condition) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Skin) 0: Nomal, 1: Slight, 2: Moderate, 3: Severe
Secretions-Eye, Nose) 0: Absent, 1: Present
Exophthalmos) 0: Absent, 1: Present
Palpebral closure) 0: Nomal, 1: Slightly closed, 2: Half closed, 3: Completely closed
Mucosal membranes) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Lacrimation) 0: Absent, 1: Present
Piloerection) 0: Absent, 1: Present
Pupil size) -1: Miosis, 0: Nomal, 1: Half opened pupil, 2: Mydriasis
Salivation) 0: None, 1: Slight, 2: Moderate, 3: Marked
Abnormal respiration) 0: None, 1: Slight, 2: Moderate, 3: Severe
Vocalization) 0: None, 1: Soft, 2: Moderate, 3: Loud/aggressive
Reactivity to handling) -1: Atypically docile, 0: Easy, 1: Slightly awkward, 2: Awkward, 3: Very Awkward
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

In-the-hand observation

Period : Administration

Generation : F0 Sex : Female Week : 4 Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Ease of removal from cage	Fur condition	Skin	Secretions-Eye, Nose	Exophthalmos	Palpebral closure	Mucosal membranes	Lacrimation
6101	0	0	0	0	0	0	0	0
6102	0	0	0	0	0	0	0	0
6103	0	0	0	0	0	0	0	0
6104	0	0	0	0	0	0	0	0
6105	0	0	0	0	0	0	0	0
6106	0	0	0	0	0	0	0	0
6107	0	0	0	0	0	0	0	0
6108	0	0	0	0	0	0	0	0
6109	0	0	0	0	0	0	0	0
6110	0	0	0	0	0	0	0	0
n	10	10	10	10	10	10	10	10

Animal No.	Piloerection	Pupil size	Salivation	Abnormal respiration	Vocalization	Reactivity to handling
6101	0	0	0	0	0	0
6102	0	0	0	0	0	0
6103	0	0	0	0	0	0
6104	0	0	0	0	0	0
6105	0	0	0	0	0	0
6106	0	0	0	0	0	0
6107	0	0	0	0	0	0
6108	0	0	0	0	0	0
6109	0	0	0	0	0	0
6110	0	0	0	0	0	0
n	10	10	10	10	10	10

Ease of removal from cage) -1: Atypically docile, 0: Easy, 1: Some resistance/avoidance, 2: Difficult, 3: Very difficult
Fur condition) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Skin) 0: Nomal, 1: Slight, 2: Moderate, 3: Severe
Secretions-Eye, Nose) 0: Absent, 1: Present
Exophthalmos) 0: Absent, 1: Present
Palpebral closure) 0: Nomal, 1: Slightly closed, 2: Half closed, 3: Completely closed
Mucosal membranes) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Lacrimation) 0: Absent, 1: Present
Piloerection) 0: Absent, 1: Present
Pupil size) -1: Miosis, 0: Nomal, 1: Half opened pupil, 2: Mydriasis
Salivation) 0: None, 1: Slight, 2: Moderate, 3: Marked
Abnormal respiration) 0: None, 1: Slight, 2: Moderate, 3: Severe
Vocalization) 0: None, 1: Soft, 2: Moderate, 3: Loud/aggressive
Reactivity to handling) -1: Atypically docile, 0: Easy, 1: Slightly awkward, 2: Awkward, 3: Very Awkward
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

In-the-hand observation

Period : Administration

Generation : F0 Sex : Female Week : 5 Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Ease of removal from cage	Fur condition	Skin	Secretions-Eye, Nose	Exophthalmos	Palpebral closure	Mucosal membranes	Lacrimation
5101	0	0	0	0	0	0	0	0
5102	0	0	0	0	0	0	0	0
5103	0	0	0	0	0	0	0	0
5104	0	0	0	0	0	0	0	0
5105	0	0	0	0	0	0	0	0
5106	0	0	0	0	0	0	0	0
5107	0	0	0	0	0	0	0	0
5108	0	0	0	0	0	0	0	0
5109	0	0	0	0	0	0	0	0
5110	0	0	0	0	0	0	0	0
n	10	10	10	10	10	10	10	10

Animal No.	Piloerection	Pupil size	Salivation	Abnormal respiration	Vocalization	Reactivity to handling
5101	0	0	0	0	0	0
5102	0	0	0	0	0	0
5103	0	0	0	0	0	0
5104	0	0	0	0	0	0
5105	0	0	0	0	0	0
5106	0	0	0	0	0	0
5107	0	0	0	0	0	0
5108	0	0	0	0	0	0
5109	0	0	0	0	0	0
5110	0	0	0	0	0	0
n	10	10	10	10	10	10

Ease of removal from cage) -1: Atypically docile, 0: Easy, 1: Some resistance/avoidance, 2: Difficult, 3: Very difficult
Fur condition) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Skin) 0: Nomal, 1: Slight, 2: Moderate, 3: Severe
Secretions-Eye, Nose) 0: Absent, 1: Present
Exophthalmos) 0: Absent, 1: Present
Palpebral closure) 0: Nomal, 1: Slightly closed, 2: Half closed, 3: Completely closed
Mucosal membranes) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Lacrimation) 0: Absent, 1: Present
Piloerection) 0: Absent, 1: Present
Pupil size) -1: Miosis, 0: Nomal, 1: Half opened pupil, 2: Mydriasis
Salivation) 0: None, 1: Slight, 2: Moderate, 3: Marked
Abnormal respiration) 0: None, 1: Slight, 2: Moderate, 3: Severe
Vocalization) 0: None, 1: Soft, 2: Moderate, 3: Loud/aggressive
Reactivity to handling) -1: Atypically docile, 0: Easy, 1: Slightly awkward, 2: Awkward, 3: Very Awkward
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

In-the-hand observation

Period : Administration

Generation : F0 Sex : Female Week : 5 Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Ease of removal from cage	Fur condition	Skin	Secretions-Eye, Nose	Exophthalmos	Palpebral closure	Mucosal membranes	Lacrimation
6101	0	0	0	0	0	0	0	0
6102	0	0	0	0	0	0	0	0
6103	0	0	0	0	0	0	0	0
6104	0	0	0	0	0	0	0	0
6105	0	0	0	0	0	0	0	0
6106	0	0	0	0	0	0	0	0
6107	0	0	0	0	0	0	0	0
6108	0	0	0	0	0	0	0	0
6109	0	0	0	0	0	0	0	0
6110	0	0	0	0	0	0	0	0
n	10	10	10	10	10	10	10	10

Animal No.	Piloerection	Pupil size	Salivation	Abnormal respiration	Vocalization	Reactivity to handling
6101	0	0	0	0	0	0
6102	0	0	0	0	0	0
6103	0	0	0	0	0	0
6104	0	0	0	0	0	0
6105	0	0	0	0	0	0
6106	0	0	0	0	0	0
6107	0	0	0	0	0	0
6108	0	0	0	0	0	0
6109	0	0	0	0	0	0
6110	0	0	0	0	0	0
n	10	10	10	10	10	10

Ease of removal from cage) -1: Atypically docile, 0: Easy, 1: Some resistance/avoidance, 2: Difficult, 3: Very difficult
Fur condition) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Skin) 0: Nomal, 1: Slight, 2: Moderate, 3: Severe
Secretions-Eye, Nose) 0: Absent, 1: Present
Exophthalmos) 0: Absent, 1: Present
Palpebral closure) 0: Nomal, 1: Slightly closed, 2: Half closed, 3: Completely closed
Mucosal membranes) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Lacrimation) 0: Absent, 1: Present
Piloerection) 0: Absent, 1: Present
Pupil size) -1: Miosis, 0: Nomal, 1: Half opened pupil, 2: Mydriasis
Salivation) 0: None, 1: Slight, 2: Moderate, 3: Marked
Abnormal respiration) 0: None, 1: Slight, 2: Moderate, 3: Severe
Vocalization) 0: None, 1: Soft, 2: Moderate, 3: Loud/aggressive
Reactivity to handling) -1: Atypically docile, 0: Easy, 1: Slightly awkward, 2: Awkward, 3: Very Awkward
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

In-the-hand observation

Period : Administration

Generation : F0 Sex : Female Week : 6 Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Ease of removal from cage	Fur condition	Skin	Secretions-Eye, Nose	Exophthalmos	Palpebral closure	Mucosal membranes	Lacrimation
5101	0	0	0	0	0	0	0	0
5102	0	0	0	0	0	0	0	0
5103	0	0	0	0	0	0	0	0
5104	0	0	0	0	0	0	0	0
5105	0	0	0	0	0	0	0	0
5106	0	0	0	0	0	0	0	0
5107	0	0	0	0	0	0	0	0
5108	0	0	0	0	0	0	0	0
5109	0	0	0	0	0	0	0	0
5110	0	0	0	0	0	0	0	0
n	10	10	10	10	10	10	10	10

Animal No.	Piloerection	Pupil size	Salivation	Abnormal respiration	Vocalization	Reactivity to handling
5101	0	0	0	0	0	0
5102	0	0	0	0	0	0
5103	0	0	0	0	0	0
5104	0	0	0	0	0	0
5105	0	0	0	0	0	0
5106	0	0	0	0	0	0
5107	0	0	0	0	0	0
5108	0	0	0	0	0	0
5109	0	0	0	0	0	0
5110	0	0	0	0	0	0
n	10	10	10	10	10	10

Ease of removal from cage) -1: Atypically docile, 0: Easy, 1: Some resistance/avoidance, 2: Difficult, 3: Very difficult
Fur condition) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Skin) 0: Nomal, 1: Slight, 2: Moderate, 3: Severe
Secretions-Eye, Nose) 0: Absent, 1: Present
Exophthalmos) 0: Absent, 1: Present
Palpebral closure) 0: Nomal, 1: Slightly closed, 2: Half closed, 3: Completely closed
Mucosal membranes) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Lacrimation) 0: Absent, 1: Present
Piloerection) 0: Absent, 1: Present
Pupil size) -1: Miosis, 0: Nomal, 1: Half opened pupil, 2: Mydriasis
Salivation) 0: None, 1: Slight, 2: Moderate, 3: Marked
Abnormal respiration) 0: None, 1: Slight, 2: Moderate, 3: Severe
Vocalization) 0: None, 1: Soft, 2: Moderate, 3: Loud/aggressive
Reactivity to handling) -1: Atypically docile, 0: Easy, 1: Slightly awkward, 2: Awkward, 3: Very Awkward
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

In-the-hand observation

Period : Administration

Generation : F0 Sex : Female Week : 6 Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Ease of removal from cage	Fur condition	Skin	Secretions-Eye, Nose	Exophthalmos	Palpebral closure	Mucosal membranes	Lacrimation
6101	0	0	0	0	0	0	0	0
6102	0	0	0	0	0	0	0	0
6103	0	0	0	0	0	0	0	0
6104	0	0	0	0	0	0	0	0
6105	0	0	0	0	0	0	0	0
6106	0	0	0	0	0	0	0	0
6107	0	0	0	0	0	0	0	0
6108	0	0	0	0	0	0	0	0
6109	0	0	0	0	0	0	0	0
6110	0	0	0	0	0	0	0	0
n	10	10	10	10	10	10	10	10

Animal No.	Piloerection	Pupil size	Salivation	Abnormal respiration	Vocalization	Reactivity to handling
6101	0	0	0	0	0	0
6102	0	0	0	0	0	0
6103	0	0	0	0	0	0
6104	0	0	0	0	0	0
6105	0	0	0	0	0	0
6106	0	0	0	0	0	0
6107	0	0	0	0	0	0
6108	0	0	0	0	0	0
6109	0	0	0	0	0	0
6110	0	0	0	0	0	0
n	10	10	10	10	10	10

Ease of removal from cage) -1: Atypically docile, 0: Easy, 1: Some resistance/avoidance, 2: Difficult, 3: Very difficult
Fur condition) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Skin) 0: Nomal, 1: Slight, 2: Moderate, 3: Severe
Secretions-Eye, Nose) 0: Absent, 1: Present
Exophthalmos) 0: Absent, 1: Present
Palpebral closure) 0: Nomal, 1: Slightly closed, 2: Half closed, 3: Completely closed
Mucosal membranes) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Lacrimation) 0: Absent, 1: Present
Piloerection) 0: Absent, 1: Present
Pupil size) -1: Miosis, 0: Nomal, 1: Half opened pupil, 2: Mydriasis
Salivation) 0: None, 1: Slight, 2: Moderate, 3: Marked
Abnormal respiration) 0: None, 1: Slight, 2: Moderate, 3: Severe
Vocalization) 0: None, 1: Soft, 2: Moderate, 3: Loud/aggressive
Reactivity to handling) -1: Atypically docile, 0: Easy, 1: Slightly awkward, 2: Awkward, 3: Very Awkward
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

In-the-hand observation Period : Recovery
Generation : F0 Sex : Male Week : 1 Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Ease of removal from cage	Fur condition	Skin	Secretions-Eye, Nose	Exophthalmos	Palpebral closure	Mucosal membranes	Lacrimation
1008	0	0	0	0	0	0	0	0
1009	0	0	0	0	0	0	0	0
1010	0	0	0	0	0	0	0	0
1011	0	0	0	0	0	0	0	0
1012	0	0	0	0	0	0	0	0
n	5	5	5	5	5	5	5	5

Animal No.	Piloerection	Pupil size	Salivation	Abnormal respiration	Vocalization	Reactivity to handling
1008	0	0	0	0	0	0
1009	0	0	0	0	0	0
1010	0	0	0	0	0	0
1011	0	0	0	0	0	0
1012	0	0	0	0	0	0
n	5	5	5	5	5	5

Ease of removal from cage) -1: Atypically docile, 0: Easy, 1: Some resistance/avoidance, 2: Difficult, 3: Very difficult
Fur condition) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Skin) 0: Nomal, 1: Slight, 2: Moderate, 3: Severe
Secretions-Eye, Nose) 0: Absent, 1: Present
Exophthalmos) 0: Absent, 1: Present
Palpebral closure) 0: Nomal, 1: Slightly closed, 2: Half closed, 3: Completely closed
Mucosal membranes) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Lacrimation) 0: Absent, 1: Present
Piloerection) 0: Absent, 1: Present
Pupil size) -1: Miosis, 0: Nomal, 1: Half opened pupil, 2: Mydriasis
Salivation) 0: None, 1: Slight, 2: Moderate, 3: Marked
Abnormal respiration) 0: None, 1: Slight, 2: Moderate, 3: Severe
Vocalization) 0: None, 1: Soft, 2: Moderate, 3: Loud/aggressive
Reactivity to handling) -1: Atypically docile, 0: Easy, 1: Slightly awkward, 2: Awkward, 3: Very Awkward
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

In-the-hand observation Period : Recovery
Generation : F0 Sex : Male Week : 1 Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Ease of removal from cage	Fur condition	Skin	Secretions-Eye, Nose	Exophthalmos	Palpebral closure	Mucosal membranes	Lacrimation
4008	0	0	0	0	0	0	0	0
4009	0	0	0	0	0	0	0	0
4010	0	0	0	0	0	0	0	0
4011	0	0	0	0	0	0	0	0
4012	0	0	0	0	0	0	0	0
n	5	5	5	5	5	5	5	5

Animal No.	Piloerection	Pupil size	Salivation	Abnormal respiration	Vocalization	Reactivity to handling
4008	0	0	0	0	0	0
4009	0	0	0	0	0	0
4010	0	0	0	0	0	0
4011	0	0	0	0	0	0
4012	0	0	0	0	0	0
n	5	5	5	5	5	5

Ease of removal from cage) -1: Atypically docile, 0: Easy, 1: Some resistance/avoidance, 2: Difficult, 3: Very difficult
Fur condition) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Skin) 0: Nomal, 1: Slight, 2: Moderate, 3: Severe
Secretions-Eye, Nose) 0: Absent, 1: Present
Exophthalmos) 0: Absent, 1: Present
Palpebral closure) 0: Nomal, 1: Slightly closed, 2: Half closed, 3: Completely closed
Mucosal membranes) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Lacrimation) 0: Absent, 1: Present
Piloerection) 0: Absent, 1: Present
Pupil size) -1: Miosis, 0: Nomal, 1: Half opened pupil, 2: Mydriasis
Salivation) 0: None, 1: Slight, 2: Moderate, 3: Marked
Abnormal respiration) 0: None, 1: Slight, 2: Moderate, 3: Severe
Vocalization) 0: None, 1: Soft, 2: Moderate, 3: Loud/aggressive
Reactivity to handling) -1: Atypically docile, 0: Easy, 1: Slightly awkward, 2: Awkward, 3: Very Awkward
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

In-the-hand observation

Period : Recovery

Generation : F0 Sex : Male Week : 2 Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Ease of removal from cage	Fur condition	Skin	Secretions-Eye, Nose	Exophthalmos	Palpebral closure	Mucosal membranes	Lacrimation
1008	0	0	0	0	0	0	0	0
1009	0	0	0	0	0	0	0	0
1010	0	0	0	0	0	0	0	0
1011	0	0	0	0	0	0	0	0
1012	0	0	0	0	0	0	0	0
n	5	5	5	5	5	5	5	5

Animal No.	Piloerection	Pupil size	Salivation	Abnormal respiration	Vocalization	Reactivity to handling
1008	0	0	0	0	0	0
1009	0	0	0	0	0	0
1010	0	0	0	0	0	0
1011	0	0	0	0	0	0
1012	0	0	0	0	0	0
n	5	5	5	5	5	5

Ease of removal from cage) -1: Atypically docile, 0: Easy, 1: Some resistance/avoidance, 2: Difficult, 3: Very difficult
Fur condition) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Skin) 0: Nomal, 1: Slight, 2: Moderate, 3: Severe
Secretions-Eye, Nose) 0: Absent, 1: Present
Exophthalmos) 0: Absent, 1: Present
Palpebral closure) 0: Nomal, 1: Slightly closed, 2: Half closed, 3: Completely closed
Mucosal membranes) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Lacrimation) 0: Absent, 1: Present
Piloerection) 0: Absent, 1: Present
Pupil size) -1: Miosis, 0: Nomal, 1: Half opened pupil, 2: Mydriasis
Salivation) 0: None, 1: Slight, 2: Moderate, 3: Marked
Abnormal respiration) 0: None, 1: Slight, 2: Moderate, 3: Severe
Vocalization) 0: None, 1: Soft, 2: Moderate, 3: Loud/aggressive
Reactivity to handling) -1: Atypically docile, 0: Easy, 1: Slightly awkward, 2: Awkward, 3: Very Awkward
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

In-the-hand observation

Period : Recovery

Generation : F0 Sex : Male Week : 2 Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Ease of removal from cage	Fur condition	Skin	Secretions-Eye, Nose	Exophthalmos	Palpebral closure	Mucosal membranes	Lacrimation
4008	0	0	0	0	0	0	0	0
4009	0	0	0	0	0	0	0	0
4010	0	0	0	0	0	0	0	0
4011	0	0	0	0	0	0	0	0
4012	0	0	0	0	0	0	0	0
n	5	5	5	5	5	5	5	5

Animal No.	Piloerection	Pupil size	Salivation	Abnormal respiration	Vocalization	Reactivity to handling
4008	0	0	0	0	0	0
4009	0	0	0	0	0	0
4010	0	0	0	0	0	0
4011	0	0	0	0	0	0
4012	0	0	0	0	0	0
n	5	5	5	5	5	5

Ease of removal from cage) -1: Atypically docile, 0: Easy, 1: Some resistance/avoidance, 2: Difficult, 3: Very difficult
Fur condition) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Skin) 0: Nomal, 1: Slight, 2: Moderate, 3: Severe
Secretions-Eye, Nose) 0: Absent, 1: Present
Exophthalmos) 0: Absent, 1: Present
Palpebral closure) 0: Nomal, 1: Slightly closed, 2: Half closed, 3: Completely closed
Mucosal membranes) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Lacrimation) 0: Absent, 1: Present
Piloerection) 0: Absent, 1: Present
Pupil size) -1: Miosis, 0: Nomal, 1: Half opened pupil, 2: Mydriasis
Salivation) 0: None, 1: Slight, 2: Moderate, 3: Marked
Abnormal respiration) 0: None, 1: Slight, 2: Moderate, 3: Severe
Vocalization) 0: None, 1: Soft, 2: Moderate, 3: Loud/aggressive
Reactivity to handling) -1: Atypically docile, 0: Easy, 1: Slightly awkward, 2: Awkward, 3: Very Awkward
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

In-the-hand observation Period : Recovery
Generation : F0 Sex : Female Week : 1 Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Ease of removal from cage	Fur condition	Skin	Secretions-Eye, Nose	Exophthalmos	Palpebral closure	Mucosal membranes	Lacrimation
5106	0	0	0	0	0	0	0	0
5107	0	0	0	0	0	0	0	0
5108	0	0	0	0	0	0	0	0
5109	0	0	0	0	0	0	0	0
5110	0	0	0	0	0	0	0	0
n	5	5	5	5	5	5	5	5

Animal No.	Piloerection	Pupil size	Salivation	Abnormal respiration	Vocalization	Reactivity to handling
5106	0	0	0	0	0	0
5107	0	0	0	0	0	0
5108	0	0	0	0	0	0
5109	0	0	0	0	0	0
5110	0	0	0	0	0	0
n	5	5	5	5	5	5

Ease of removal from cage) -1: Atypically docile, 0: Easy, 1: Some resistance/avoidance, 2: Difficult, 3: Very difficult
Fur condition) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Skin) 0: Nomal, 1: Slight, 2: Moderate, 3: Severe
Secretions-Eye, Nose) 0: Absent, 1: Present
Exophthalmos) 0: Absent, 1: Present
Palpebral closure) 0: Nomal, 1: Slightly closed, 2: Half closed, 3: Completely closed
Mucosal membranes) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Lacrimation) 0: Absent, 1: Present
Piloerection) 0: Absent, 1: Present
Pupil size) -1: Miosis, 0: Nomal, 1: Half opened pupil, 2: Mydriasis
Salivation) 0: None, 1: Slight, 2: Moderate, 3: Marked
Abnormal respiration) 0: None, 1: Slight, 2: Moderate, 3: Severe
Vocalization) 0: None, 1: Soft, 2: Moderate, 3: Loud/aggressive
Reactivity to handling) -1: Atypically docile, 0: Easy, 1: Slightly awkward, 2: Awkward, 3: Very Awkward
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

In-the-hand observation Period : Recovery
Generation : F0 Sex : Female Week : 1 Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Ease of removal from cage	Fur condition	Skin	Secretions-Eye, Nose	Exophthalmos	Palpebral closure	Mucosal membranes	Lacrimation
6106	0	0	0	0	0	0	0	0
6107	0	0	0	0	0	0	0	0
6108	0	0	0	0	0	0	0	0
6109	0	0	0	0	0	0	0	0
6110	0	0	0	0	0	0	0	0
n	5	5	5	5	5	5	5	5

Animal No.	Piloerection	Pupil size	Salivation	Abnormal respiration	Vocalization	Reactivity to handling
6106	0	0	0	0	0	0
6107	0	0	0	0	0	0
6108	0	0	0	0	0	0
6109	0	0	0	0	0	0
6110	0	0	0	0	0	0
n	5	5	5	5	5	5

Ease of removal from cage) -1: Atypically docile, 0: Easy, 1: Some resistance/avoidance, 2: Difficult, 3: Very difficult
Fur condition) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Skin) 0: Nomal, 1: Slight, 2: Moderate, 3: Severe
Secretions-Eye, Nose) 0: Absent, 1: Present
Exophthalmos) 0: Absent, 1: Present
Palpebral closure) 0: Nomal, 1: Slightly closed, 2: Half closed, 3: Completely closed
Mucosal membranes) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Lacrimation) 0: Absent, 1: Present
Piloerection) 0: Absent, 1: Present
Pupil size) -1: Miosis, 0: Nomal, 1: Half opened pupil, 2: Mydriasis
Salivation) 0: None, 1: Slight, 2: Moderate, 3: Marked
Abnormal respiration) 0: None, 1: Slight, 2: Moderate, 3: Severe
Vocalization) 0: None, 1: Soft, 2: Moderate, 3: Loud/aggressive
Reactivity to handling) -1: Atypically docile, 0: Easy, 1: Slightly awkward, 2: Awkward, 3: Very Awkward
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

In-the-hand observation Period : Recovery
Generation : F0 Sex : Female Week : 2 Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Ease of removal from cage	Fur condition	Skin	Secretions-Eye, Nose	Exophthalmos	Palpebral closure	Mucosal membranes	Lacrimation
5106	0	0	0	0	0	0	0	0
5107	0	0	0	0	0	0	0	0
5108	0	0	0	0	0	0	0	0
5109	0	0	0	0	0	0	0	0
5110	0	0	0	0	0	0	0	0
n	5	5	5	5	5	5	5	5

Animal No.	Piloerection	Pupil size	Salivation	Abnormal respiration	Vocalization	Reactivity to handling
5106	0	0	0	0	0	0
5107	0	0	0	0	0	0
5108	0	0	0	0	0	0
5109	0	0	0	0	0	0
5110	0	0	0	0	0	0
n	5	5	5	5	5	5

Ease of removal from cage) -1: Atypically docile, 0: Easy, 1: Some resistance/avoidance, 2: Difficult, 3: Very difficult
Fur condition) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Skin) 0: Nomal, 1: Slight, 2: Moderate, 3: Severe
Secretions-Eye, Nose) 0: Absent, 1: Present
Exophthalmos) 0: Absent, 1: Present
Palpebral closure) 0: Nomal, 1: Slightly closed, 2: Half closed, 3: Completely closed
Mucosal membranes) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Lacrimation) 0: Absent, 1: Present
Piloerection) 0: Absent, 1: Present
Pupil size) -1: Miosis, 0: Nomal, 1: Half opened pupil, 2: Mydriasis
Salivation) 0: None, 1: Slight, 2: Moderate, 3: Marked
Abnormal respiration) 0: None, 1: Slight, 2: Moderate, 3: Severe
Vocalization) 0: None, 1: Soft, 2: Moderate, 3: Loud/aggressive
Reactivity to handling) -1: Atypically docile, 0: Easy, 1: Slightly awkward, 2: Awkward, 3: Very Awkward
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

In-the-hand observation Period : Recovery
Generation : F0 Sex : Female Week : 2 Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Ease of removal from cage	Fur condition	Skin	Secretions-Eye, Nose	Exophthalmos	Palpebral closure	Mucosal membranes	Lacrimation
6106	0	0	0	0	0	0	0	0
6107	0	0	0	0	0	0	0	0
6108	0	0	0	0	0	0	0	0
6109	0	0	0	0	0	0	0	0
6110	0	0	0	0	0	0	0	0
n	5	5	5	5	5	5	5	5

Animal No.	Piloerection	Pupil size	Salivation	Abnormal respiration	Vocalization	Reactivity to handling
6106	0	0	0	0	0	0
6107	0	0	0	0	0	0
6108	0	0	0	0	0	0
6109	0	0	0	0	0	0
6110	0	0	0	0	0	0
n	5	5	5	5	5	5

Ease of removal from cage) -1: Atypically docile, 0: Easy, 1: Some resistance/avoidance, 2: Difficult, 3: Very difficult
Fur condition) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Skin) 0: Nomal, 1: Slight, 2: Moderate, 3: Severe
Secretions-Eye, Nose) 0: Absent, 1: Present
Exophthalmos) 0: Absent, 1: Present
Palpebral closure) 0: Nomal, 1: Slightly closed, 2: Half closed, 3: Completely closed
Mucosal membranes) 0: Nomal, 1: Slight, 2: Moderate, 3: Marked
Lacrimation) 0: Absent, 1: Present
Piloerection) 0: Absent, 1: Present
Pupil size) -1: Miosis, 0: Nomal, 1: Half opened pupil, 2: Mydriasis
Salivation) 0: None, 1: Slight, 2: Moderate, 3: Marked
Abnormal respiration) 0: None, 1: Slight, 2: Moderate, 3: Severe
Vocalization) 0: None, 1: Soft, 2: Moderate, 3: Loud/aggressive
Reactivity to handling) -1: Atypically docile, 0: Easy, 1: Slightly awkward, 2: Awkward, 3: Very Awkward
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : F0 before mating

Generation : F0 Sex : Male Week : 1 Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Arousal	Convulsion	Abnormal behavior	Stereotypy	Gait	Posture	Grooming	Urination
1001	0	0	0	0	0	N	0	0
1002	0	0	0	0	0	N	0	0
1003	0	0	0	0	0	N	0	0
1004	0	0	0	0	0	N	0	0
1005	0	0	0	0	0	N	0	0
1006	0	0	0	0	0	N	0	0
1007	0	0	0	0	0	N	0	0
1008	0	0	0	0	0	N	0	0
1009	0	0	0	0	0	N	0	0
1010	0	0	0	0	0	N	0	0
1011	0	0	0	0	0	N	0	0
1012	0	0	0	0	0	N	0	0
n	12	12	12	12	12	12	12	12

Arousal) -2: Unconscious/semi-conscious, -1: Reduced awareness, 0: Nomal, 1: Increased alertness, 2: Markedly alert
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Stereotypy) 0: None, 1: Minor, 2: Moderate, 3: Sevear
Gait) U: No/minimal location, 0: Nomal, 1: Slight, 2: Moderate, 3: Markedly
Posture) N: Normal, F: Flattened, H: Hunched
Grooming) 0: None, 1: Occasional bouts (up to four), 2: Numerous (more than four)
Urination) 0: None, 1: Small amount, 2: Moderate amount, 3: Large/excessive amount
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : F0 before mating

Generation : F0 Sex : Male Week : 1 Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Rearing	Defecation count
1001	2	0
1002	4	0
1003	3	0
1004	2	0
1005	6	0
1006	8	0
1007	3	0
1008	3	0
1009	7	0
1010	2	0
1011	4	0
1012	8	4
n	12	12
Mean	4	0
S.D.	2	1

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : F0 before mating

Generation : F0 Sex : Male Week : 1 Dose : BTetCA 100 mg/kg Species : Rat

Animal No.	Arousal	Convulsion	Abnormal behavior	Stereotypy	Gait	Posture	Grooming	Urination
2001	0	0	0	0	0	N	0	0
2002	0	0	0	0	0	N	0	0
2003	0	0	0	0	0	N	0	0
2004	0	0	0	0	0	N	0	0
2005	0	0	0	0	0	N	0	0
2006	0	0	0	0	0	N	0	0
2007	0	0	0	0	0	N	0	0
2008	0	0	0	0	0	N	0	0
2009	0	0	0	0	0	N	0	0
2010	0	0	0	0	0	N	0	0
2011	0	0	0	0	0	N	0	0
2012	0	0	0	0	0	N	0	0
n	12	12	12	12	12	12	12	12

Arousal) -2: Unconscious/semi-conscious, -1: Reduced awareness, 0: Nomal, 1: Increased alertness, 2: Markedly alert
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Stereotypy) 0: None, 1: Minor, 2: Moderate, 3: Sevear
Gait) U: No/minimal location, 0: Nomal, 1: Slight, 2: Moderate, 3: Markedly
Posture) N: Normal, F: Flattened, H: Hunched
Grooming) 0: None, 1: Occasional bouts (up to four), 2: Numerous (more than four)
Urination) 0: None, 1: Small amount, 2: Moderate amount, 3: Large/excessive amount
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : F0 before mating

Generation : F0 Sex : Male Week : 1 Dose : BTetCA 100 mg/kg Species : Rat

Animal No.	Rearing	Defecation count
2001	4	0
2002	0	1
2003	3	0
2004	0	0
2005	3	0
2006	3	0
2007	2	0
2008	7	0
2009	7	0
2010	0	2
2011	4	0
2012	8	0
n	12	12
Mean	3	0
S.D.	3	1

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : F0 before mating

Generation : F0 Sex : Male Week : 1 Dose : BTetCA 300 mg/kg Species : Rat

Animal No.	Arousal	Convulsion	Abnormal behavior	Stereotypy	Gait	Posture	Grooming	Urination
3001	0	0	0	0	0	N	0	0
3002	0	0	0	0	0	N	0	0
3003	0	0	0	0	0	N	0	0
3004	0	0	0	0	0	N	0	0
3005	0	0	0	0	0	N	0	0
3006	0	0	0	0	0	N	0	0
3007	0	0	0	0	0	N	0	0
3008	0	0	0	0	0	N	0	0
3009	0	0	0	0	0	N	0	0
3010	0	0	0	0	0	N	0	0
3011	0	0	0	0	0	N	0	0
3012	0	0	0	0	0	N	0	0
n	12	12	12	12	12	12	12	12

Arousal) -2: Unconscious/semi-conscious, -1: Reduced awareness, 0: Nomal, 1: Increased alertness, 2: Markedly alert
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Stereotypy) 0: None, 1: Minor, 2: Moderate, 3: Sevear
Gait) U: No/minimal location, 0: Nomal, 1: Slight, 2: Moderate, 3: Markedly
Posture) N: Normal, F: Flattened, H: Hunched
Grooming) 0: None, 1: Occasional bouts (up to four), 2: Numerous (more than four)
Urination) 0: None, 1: Small amount, 2: Moderate amount, 3: Large/excessive amount
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : F0 before mating

Generation : F0 Sex : Male Week : 1 Dose : BTetCA 300 mg/kg Species : Rat

Animal No.	Rearing	Defecation count
3001	6	0
3002	4	0
3003	5	0
3004	6	0
3005	6	0
3006	3	0
3007	7	0
3008	6	0
3009	3	0
3010	3	0
3011	4	0
3012	3	0
n	12	12
Mean	5	0
S.D.	1	0

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : F0 before mating

Generation : F0 Sex : Male Week : 1 Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Arousal	Convulsion	Abnormal behavior	Stereotypy	Gait	Posture	Grooming	Urination
4001	0	0	0	0	0	N	0	0
4002	0	0	0	0	0	N	0	0
4003	0	0	0	0	0	N	0	0
4004	0	0	0	0	0	N	0	0
4005	0	0	0	0	0	N	0	0
4006	0	0	0	0	0	N	0	0
4007	0	0	0	0	0	N	0	0
4008	0	0	0	0	0	N	0	0
4009	0	0	0	0	0	N	0	0
4010	0	0	0	0	0	N	0	0
4011	0	0	0	0	0	N	0	0
4012	0	0	0	0	0	N	0	0
n	12	12	12	12	12	12	12	12

Arousal) -2: Unconscious/semi-conscious, -1: Reduced awareness, 0: Nomal, 1: Increased alertness, 2: Markedly alert
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Stereotypy) 0: None, 1: Minor, 2: Moderate, 3: Sevear
Gait) U: No/minimal location, 0: Nomal, 1: Slight, 2: Moderate, 3: Markedly
Posture) N: Normal, F: Flattened, H: Hunched
Grooming) 0: None, 1: Occasional bouts (up to four), 2: Numerous (more than four)
Urination) 0: None, 1: Small amount, 2: Moderate amount, 3: Large/excessive amount
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Open field observation Period : F0 before mating

Generation : F0 Sex : Male Week : 1 Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Rearing	Defecation count
4001	5	0
4002	5	0
4003	6	0
4004	1	0
4005	4	0
4006	4	0
4007	9	0
4008	5	0
4009	4	0
4010	5	0
4011	3	0
4012	6	0
n	12	12
Mean	5	0
S.D.	2	0

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : F0 before mating

Generation : F0 Sex : Male Week : 2 Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Arousal	Convulsion	Abnormal behavior	Stereotypy	Gait	Posture	Grooming	Urination
1001	0	0	0	0	0	N	0	0
1002	0	0	0	0	0	N	0	1
1003	0	0	0	0	0	N	0	1
1004	0	0	0	0	0	N	0	0
1005	0	0	0	0	0	N	0	0
1006	0	0	0	0	0	N	0	1
1007	0	0	0	0	0	N	0	0
1008	0	0	0	0	0	N	0	0
1009	0	0	0	0	0	N	0	0
1010	0	0	0	0	0	N	0	0
1011	0	0	0	0	0	N	0	0
1012	0	0	0	0	0	N	0	0
n	12	12	12	12	12	12	12	12

Arousal) -2: Unconscious/semi-conscious, -1: Reduced awareness, 0: Nomal, 1: Increased alertness, 2: Markedly alert
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Stereotypy) 0: None, 1: Minor, 2: Moderate, 3: Sevear
Gait) U: No/minimal location, 0: Nomal, 1: Slight, 2: Moderate, 3: Markedly
Posture) N: Normal, F: Flattened, H: Hunched
Grooming) 0: None, 1: Occasional bouts (up to four), 2: Numerous (more than four)
Urination) 0: None, 1: Small amount, 2: Moderate amount, 3: Large/excessive amount
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : F0 before mating

Generation : F0 Sex : Male Week : 2 Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Rearing	Defecation count
1001	3	0
1002	3	1
1003	4	0
1004	3	0
1005	6	0
1006	9	0
1007	2	0
1008	1	0
1009	5	0
1010	1	0
1011	4	0
1012	3	1
n	12	12
Mean	4	0
S.D.	2	0

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : F0 before mating

Generation : F0 Sex : Male Week : 2 Dose : BTetCA 100 mg/kg Species : Rat

Animal No.	Arousal	Convulsion	Abnormal behavior	Stereotypy	Gait	Posture	Grooming	Urination
2001	0	0	0	0	0	N	0	1
2002	0	0	0	0	0	N	0	0
2003	0	0	0	0	0	N	0	0
2004	0	0	0	0	0	N	0	0
2005	0	0	0	0	0	N	0	0
2006	0	0	0	0	0	N	0	0
2007	0	0	0	0	0	N	0	0
2008	0	0	0	0	0	N	0	0
2009	0	0	0	0	0	N	0	0
2010	0	0	0	0	0	N	0	0
2011	0	0	0	0	0	N	0	0
2012	0	0	0	0	0	N	0	0
n	12	12	12	12	12	12	12	12

Arousal) -2: Unconscious/semi-conscious, -1: Reduced awareness, 0: Nomal, 1: Increased alertness, 2: Markedly alert
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Stereotypy) 0: None, 1: Minor, 2: Moderate, 3: Sevear
Gait) U: No/minimal location, 0: Nomal, 1: Slight, 2: Moderate, 3: Markedly
Posture) N: Normal, F: Flattened, H: Hunched
Grooming) 0: None, 1: Occasional bouts (up to four), 2: Numerous (more than four)
Urination) 0: None, 1: Small amount, 2: Moderate amount, 3: Large/excessive amount
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : F0 before mating

Generation : F0 Sex : Male Week : 2 Dose : BTetCA 100 mg/kg Species : Rat

Animal No.	Rearing	Defecation count
2001	2	0
2002	1	0
2003	3	0
2004	2	0
2005	1	0
2006	2	0
2007	1	0
2008	4	0
2009	2	0
2010	0	4
2011	5	0
2012	4	0
n	12	12
Mean	2	0
S.D.	1	1

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : F0 before mating

Generation : F0 Sex : Male Week : 2 Dose : BTetCA 300 mg/kg Species : Rat

Animal No.	Arousal	Convulsion	Abnormal behavior	Stereotypy	Gait	Posture	Grooming	Urination
3001	0	0	0	0	0	N	0	0
3002	0	0	0	0	0	N	0	0
3003	0	0	0	0	0	N	0	0
3004	0	0	0	0	0	N	0	0
3005	0	0	0	0	0	N	0	0
3006	0	0	0	0	0	N	0	0
3007	0	0	0	0	0	N	0	0
3008	0	0	0	0	0	N	0	0
3009	0	0	0	0	0	N	0	0
3010	0	0	0	0	0	N	0	0
3011	0	0	0	0	0	N	0	0
3012	0	0	0	0	0	N	0	0
n	12	12	12	12	12	12	12	12

Arousal) -2: Unconscious/semi-conscious, -1: Reduced awareness, 0: Nomal, 1: Increased alertness, 2: Markedly alert
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Stereotypy) 0: None, 1: Minor, 2: Moderate, 3: Sevear
Gait) U: No/minimal location, 0: Nomal, 1: Slight, 2: Moderate, 3: Markedly
Posture) N: Normal, F: Flattened, H: Hunched
Grooming) 0: None, 1: Occasional bouts (up to four), 2: Numerous (more than four)
Urination) 0: None, 1: Small amount, 2: Moderate amount, 3: Large/excessive amount
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : F0 before mating

Generation : F0 Sex : Male Week : 2 Dose : BTetCA 300 mg/kg Species : Rat

Animal No.	Rearing	Defecation count
3001	5	0
3002	4	0
3003	4	0
3004	3	0
3005	5	0
3006	4	0
3007	5	1
3008	5	0
3009	2	0
3010	5	0
3011	0	0
3012	4	0
n	12	12
Mean	4	0
S.D.	2	0

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : F0 before mating

Generation : F0 Sex : Male Week : 2 Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Arousal	Convulsion	Abnormal behavior	Stereotypy	Gait	Posture	Grooming	Urination
4001	0	0	0	0	0	N	0	0
4002	0	0	0	0	0	N	0	0
4003	0	0	0	0	0	N	0	0
4004	0	0	0	0	0	N	0	0
4005	0	0	0	0	0	N	0	0
4006	0	0	0	0	0	N	0	1
4007	0	0	0	0	0	N	0	0
4008	0	0	0	0	0	N	0	0
4009	0	0	0	0	0	N	0	0
4010	0	0	0	0	0	N	0	0
4011	0	0	0	0	0	N	0	1
4012	0	0	0	0	0	N	0	0
n	12	12	12	12	12	12	12	12

Arousal) -2: Unconscious/semi-conscious, -1: Reduced awareness, 0: Nomal, 1: Increased alertness, 2: Markedly alert
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Stereotypy) 0: None, 1: Minor, 2: Moderate, 3: Sevear
Gait) U: No/minimal location, 0: Nomal, 1: Slight, 2: Moderate, 3: Markedly
Posture) N: Normal, F: Flattened, H: Hunched
Grooming) 0: None, 1: Occasional bouts (up to four), 2: Numerous (more than four)
Urination) 0: None, 1: Small amount, 2: Moderate amount, 3: Large/excessive amount
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : F0 before mating

Generation : F0 Sex : Male Week : 2 Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Rearing	Defecation count
4001	6	0
4002	3	0
4003	7	0
4004	3	0
4005	7	0
4006	2	3
4007	5	0
4008	1	1
4009	3	0
4010	5	0
4011	3	0
4012	2	0
n	12	12
Mean	4	0
S.D.	2	1

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : F0 mating

Generation : F0 Sex : Male Week : 3 Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Arousal	Convulsion	Abnormal behavior	Stereotypy	Gait	Posture	Grooming	Urination
1001	0	0	0	0	0	N	0	1
1002	0	0	0	0	0	N	0	0
1003	0	0	0	0	0	N	0	0
1004	0	0	0	0	0	N	0	0
1005	0	0	0	0	0	N	0	0
1006	0	0	0	0	0	N	0	0
1007	0	0	0	0	U	N	0	0
1008	0	0	0	0	U	N	0	0
1009	0	0	0	0	0	N	0	0
1010	0	0	0	0	0	N	0	0
1011	0	0	0	0	0	N	0	0
1012	0	0	0	0	0	N	0	0
n	12	12	12	12	12	12	12	12

Arousal) -2: Unconscious/semi-conscious, -1: Reduced awareness, 0: Nomal, 1: Increased alertness, 2: Markedly alert
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Stereotypy) 0: None, 1: Minor, 2: Moderate, 3: Sevear
Gait) U: No/minimal location, 0: Nomal, 1: Slight, 2: Moderate, 3: Markedly
Posture) N: Normal, F: Flattened, H: Hunched
Grooming) 0: None, 1: Occasional bouts (up to four), 2: Numerous (more than four)
Urination) 0: None, 1: Small amount, 2: Moderate amount, 3: Large/excessive amount
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Open field observation Period : F0 mating

Generation : F0 Sex : Male Week : 3 Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Rearing	Defecation count
1001	5	0
1002	3	0
1003	3	0
1004	3	0
1005	5	0
1006	6	0
1007	1	0
1008	0	0
1009	5	0
1010	2	0
1011	3	0
1012	7	0
n	12	12
Mean	4	0
S.D.	2	0

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : F0 mating

Generation : F0 Sex : Male Week : 3 Dose : BTetCA 100 mg/kg Species : Rat

Animal No.	Arousal	Convulsion	Abnormal behavior	Stereotypy	Gait	Posture	Grooming	Urination
2001	0	0	0	0	0	N	0	0
2002	0	0	0	0	0	N	0	0
2003	0	0	0	0	0	N	0	0
2004	0	0	0	0	0	N	0	0
2005	0	0	0	0	0	N	0	0
2006	0	0	0	0	0	N	0	0
2007	0	0	0	0	0	N	0	0
2008	0	0	0	0	0	N	0	0
2009	0	0	0	0	0	N	0	0
2010	0	0	0	0	0	N	0	0
2011	0	0	0	0	0	N	0	0
2012	0	0	0	0	0	N	0	0
n	12	12	12	12	12	12	12	12

Arousal) -2: Unconscious/semi-conscious, -1: Reduced awareness, 0: Nomal, 1: Increased alertness, 2: Markedly alert
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Stereotypy) 0: None, 1: Minor, 2: Moderate, 3: Sevear
Gait) U: No/minimal location, 0: Nomal, 1: Slight, 2: Moderate, 3: Markedly
Posture) N: Normal, F: Flattened, H: Hunched
Grooming) 0: None, 1: Occasional bouts (up to four), 2: Numerous (more than four)
Urination) 0: None, 1: Small amount, 2: Moderate amount, 3: Large/excessive amount
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Open field observation Period : F0 mating

Generation : F0 Sex : Male Week : 3 Dose : BTetCA 100 mg/kg Species : Rat

Animal No.	Rearing	Defecation count
2001	2	0
2002	3	0
2003	5	0
2004	2	0
2005	2	0
2006	4	0
2007	4	0
2008	4	0
2009	7	0
2010	2	0
2011	7	0
2012	4	0
n	12	12
Mean	4	0
S.D.	2	0

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : F0 mating

Generation : F0 Sex : Male Week : 3 Dose : BTetCA 300 mg/kg Species : Rat

Animal No.	Arousal	Convulsion	Abnormal behavior	Stereotypy	Gait	Posture	Grooming	Urination
3001	0	0	0	0	0	N	0	0
3002	0	0	0	0	0	N	0	0
3003	0	0	0	0	0	N	0	0
3004	0	0	0	0	0	N	0	0
3005	0	0	0	0	0	N	0	0
3006	0	0	0	0	0	N	0	0
3007	0	0	0	0	U	N	0	0
3008	0	0	0	0	0	N	0	0
3009	0	0	0	0	0	N	0	0
3010	0	0	0	0	0	N	0	0
3011	0	0	0	0	0	N	0	1
3012	0	0	0	0	0	N	0	0
n	12	12	12	12	12	12	12	12

Arousal) -2: Unconscious/semi-conscious, -1: Reduced awareness, 0: Nomal, 1: Increased alertness, 2: Markedly alert
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Stereotypy) 0: None, 1: Minor, 2: Moderate, 3: Sevear
Gait) U: No/minimal location, 0: Nomal, 1: Slight, 2: Moderate, 3: Markedly
Posture) N: Normal, F: Flattened, H: Hunched
Grooming) 0: None, 1: Occasional bouts (up to four), 2: Numerous (more than four)
Urination) 0: None, 1: Small amount, 2: Moderate amount, 3: Large/excessive amount
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : F0 mating

Generation : F0 Sex : Male Week : 3 Dose : BTetCA 300 mg/kg Species : Rat

Animal No.	Rearing	Defecation count
3001	3	0
3002	5	0
3003	3	0
3004	5	0
3005	5	0
3006	8	0
3007	0	0
3008	6	0
3009	4	0
3010	4	0
3011	8	1
3012	4	0
n	12	12
Mean	5	0
S.D.	2	0

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : F0 mating

Generation : F0 Sex : Male Week : 3 Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Arousal	Convulsion	Abnormal behavior	Stereotypy	Gait	Posture	Grooming	Urination
4001	0	0	0	0	U	N	0	0
4002	0	0	0	0	0	N	0	0
4003	0	0	0	0	0	N	0	0
4004	0	0	0	0	0	N	0	0
4005	0	0	0	0	0	N	0	0
4006	0	0	0	0	0	N	0	0
4007	0	0	0	0	0	N	0	0
4008	0	0	0	0	0	N	0	1
4009	0	0	0	0	0	N	0	0
4010	0	0	0	0	0	N	0	0
4011	0	0	0	0	0	N	0	0
4012	0	0	0	0	0	N	0	0
n	12	12	12	12	12	12	12	12

Arousal) -2: Unconscious/semi-conscious, -1: Reduced awareness, 0: Nomal, 1: Increased alertness, 2: Markedly alert
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Stereotypy) 0: None, 1: Minor, 2: Moderate, 3: Sevear
Gait) U: No/minimal location, 0: Nomal, 1: Slight, 2: Moderate, 3: Markedly
Posture) N: Normal, F: Flattened, H: Hunched
Grooming) 0: None, 1: Occasional bouts (up to four), 2: Numerous (more than four)
Urination) 0: None, 1: Small amount, 2: Moderate amount, 3: Large/excessive amount
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : F0 mating

Generation : F0 Sex : Male Week : 3 Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Rearing	Defecation count
4001	4	0
4002	4	0
4003	8	0
4004	5	0
4005	7	0
4006	4	0
4007	6	0
4008	3	1
4009	5	0
4010	6	0
4011	2	0
4012	4	0
n	12	12
Mean	5	0
S.D.	2	0

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : F0 mating

Generation : F0 Sex : Male Week : 4 Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Arousal	Convulsion	Abnormal behavior	Stereotypy	Gait	Posture	Grooming	Urination
1001	0	0	0	0	0	N	0	0
1002	0	0	0	0	0	N	0	0
1003	0	0	0	0	0	N	0	0
1004	0	0	0	0	0	N	0	0
1005	0	0	0	0	0	N	0	0
1006	0	0	0	0	0	N	0	0
1007	0	0	0	0	0	N	0	0
1008	0	0	0	0	0	N	0	0
1009	0	0	0	0	0	N	0	0
1010	0	0	0	0	0	N	0	0
1011	0	0	0	0	0	N	0	0
1012	0	0	0	0	0	N	0	0
n	12	12	12	12	12	12	12	12

Arousal) -2: Unconscious/semi-conscious, -1: Reduced awareness, 0: Nomal, 1: Increased alertness, 2: Markedly alert
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Stereotypy) 0: None, 1: Minor, 2: Moderate, 3: Sevear
Gait) U: No/minimal location, 0: Nomal, 1: Slight, 2: Moderate, 3: Markedly
Posture) N: Normal, F: Flattened, H: Hunched
Grooming) 0: None, 1: Occasional bouts (up to four), 2: Numerous (more than four)
Urination) 0: None, 1: Small amount, 2: Moderate amount, 3: Large/excessive amount
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Open field observation Period : F0 mating

Generation : F0 Sex : Male Week : 4 Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Rearing	Defecation count
1001	2	0
1002	8	0
1003	4	0
1004	2	0
1005	8	0
1006	6	0
1007	4	0
1008	3	0
1009	3	0
1010	3	0
1011	5	0
1012	4	0
n	12	12
Mean	4	0
S.D.	2	0

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : F0 mating

Generation : F0 Sex : Male Week : 4 Dose : BTetCA 100 mg/kg Species : Rat

Animal No.	Arousal	Convulsion	Abnormal behavior	Stereotypy	Gait	Posture	Grooming	Urination
2001	0	0	0	0	0	N	0	0
2002	0	0	0	0	0	N	0	0
2003	0	0	0	0	0	N	0	0
2004	0	0	0	0	0	N	0	0
2005	0	0	0	0	0	N	0	0
2006	0	0	0	0	0	N	0	0
2007	0	0	0	0	0	N	0	1
2008	0	0	0	0	0	N	0	0
2009	0	0	0	0	0	N	0	0
2010	0	0	0	0	0	N	0	0
2011	0	0	0	0	0	N	0	0
2012	0	0	0	0	0	N	0	0
n	12	12	12	12	12	12	12	12

Arousal) -2: Unconscious/semi-conscious, -1: Reduced awareness, 0: Nomal, 1: Increased alertness, 2: Markedly alert
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Stereotypy) 0: None, 1: Minor, 2: Moderate, 3: Sevear
Gait) U: No/minimal location, 0: Nomal, 1: Slight, 2: Moderate, 3: Markedly
Posture) N: Normal, F: Flattened, H: Hunched
Grooming) 0: None, 1: Occasional bouts (up to four), 2: Numerous (more than four)
Urination) 0: None, 1: Small amount, 2: Moderate amount, 3: Large/excessive amount
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : F0 mating

Generation : F0 Sex : Male Week : 4 Dose : BTetCA 100 mg/kg Species : Rat

Animal No.	Rearing	Defecation count
2001	3	0
2002	2	0
2003	6	0
2004	5	0
2005	1	0
2006	6	0
2007	5	0
2008	6	0
2009	3	0
2010	3	0
2011	4	0
2012	3	0
n	12	12
Mean	4	0
S.D.	2	0

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : F0 mating

Generation : F0 Sex : Male Week : 4 Dose : BTetCA 300 mg/kg Species : Rat

Animal No.	Arousal	Convulsion	Abnormal behavior	Stereotypy	Gait	Posture	Grooming	Urination
3001	0	0	0	0	0	N	0	0
3002	0	0	0	0	0	N	0	0
3003	0	0	0	0	0	N	0	0
3004	0	0	0	0	0	N	0	0
3005	0	0	0	0	0	N	0	0
3006	0	0	0	0	0	N	0	0
3007	0	0	0	0	0	N	0	0
3008	0	0	0	0	0	N	0	0
3009	0	0	0	0	0	N	0	0
3010	0	0	0	0	0	N	0	0
3011	0	0	0	0	0	N	0	0
3012	0	0	0	0	0	N	0	0
n	12	12	12	12	12	12	12	12

Arousal) -2: Unconscious/semi-conscious, -1: Reduced awareness, 0: Nomal, 1: Increased alertness, 2: Markedly alert
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Stereotypy) 0: None, 1: Minor, 2: Moderate, 3: Sevear
Gait) U: No/minimal location, 0: Nomal, 1: Slight, 2: Moderate, 3: Markedly
Posture) N: Normal, F: Flattened, H: Hunched
Grooming) 0: None, 1: Occasional bouts (up to four), 2: Numerous (more than four)
Urination) 0: None, 1: Small amount, 2: Moderate amount, 3: Large/excessive amount
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Open field observation Period : F0 mating

Generation : F0 Sex : Male Week : 4 Dose : BTetCA 300 mg/kg Species : Rat

Animal No.	Rearing	Defecation count
3001	6	0
3002	5	0
3003	5	0
3004	2	0
3005	4	0
3006	5	0
3007	3	0
3008	2	0
3009	5	0
3010	4	0
3011	2	0
3012	5	0
n	12	12
Mean	4	0
S.D.	1	0

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : F0 mating

Generation : F0 Sex : Male Week : 4 Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Arousal	Convulsion	Abnormal behavior	Stereotypy	Gait	Posture	Grooming	Urination
4001	0	0	0	0	0	N	0	0
4002	0	0	0	0	0	N	0	0
4003	0	0	0	0	0	N	0	0
4004	0	0	0	0	0	N	0	0
4005	0	0	0	0	0	N	0	0
4006	0	0	0	0	0	N	0	0
4007	0	0	0	0	0	N	0	0
4008	0	0	0	0	0	N	0	0
4009	0	0	0	0	0	N	0	0
4010	0	0	0	0	0	N	0	0
4011	0	0	0	0	0	N	0	0
4012	0	0	0	0	0	N	0	0
n	12	12	12	12	12	12	12	12

Arousal) -2: Unconscious/semi-conscious, -1: Reduced awareness, 0: Nomal, 1: Increased alertness, 2: Markedly alert
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Stereotypy) 0: None, 1: Minor, 2: Moderate, 3: Sevear
Gait) U: No/minimal location, 0: Nomal, 1: Slight, 2: Moderate, 3: Markedly
Posture) N: Normal, F: Flattened, H: Hunched
Grooming) 0: None, 1: Occasional bouts (up to four), 2: Numerous (more than four)
Urination) 0: None, 1: Small amount, 2: Moderate amount, 3: Large/excessive amount
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : F0 mating

Generation : F0 Sex : Male Week : 4 Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Rearing	Defecation count
4001	6	0
4002	5	0
4003	8	0
4004	3	0
4005	3	0
4006	2	0
4007	8	0
4008	2	0
4009	5	0
4010	8	0
4011	5	0
4012	7	0
n	12	12
Mean	5	0
S.D.	2	0

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : F0 mating

Generation : F0 Sex : Male Week : 5 Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Arousal	Convulsion	Abnormal behavior	Stereotypy	Gait	Posture	Grooming	Urination
1001	0	0	0	0	0	N	0	0
1002	0	0	0	0	0	N	0	0
1003	0	0	0	0	0	N	0	0
1004	0	0	0	0	0	N	0	0
1005	0	0	0	0	0	N	0	0
1006	0	0	0	0	0	N	0	1
1007	0	0	0	0	0	N	0	0
1008	0	0	0	0	0	N	0	0
1009	0	0	0	0	0	N	0	0
1010	0	0	0	0	0	N	0	0
1011	0	0	0	0	0	N	0	0
1012	0	0	0	0	0	N	0	0
n	12	12	12	12	12	12	12	12

Arousal) -2: Unconscious/semi-conscious, -1: Reduced awareness, 0: Nomal, 1: Increased alertness, 2: Markedly alert
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Stereotypy) 0: None, 1: Minor, 2: Moderate, 3: Sevear
Gait) U: No/minimal location, 0: Nomal, 1: Slight, 2: Moderate, 3: Markedly
Posture) N: Normal, F: Flattened, H: Hunched
Grooming) 0: None, 1: Occasional bouts (up to four), 2: Numerous (more than four)
Urination) 0: None, 1: Small amount, 2: Moderate amount, 3: Large/excessive amount
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : F0 mating

Generation : F0 Sex : Male Week : 5 Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Rearing	Defecation count
1001	6	0
1002	4	0
1003	6	0
1004	3	0
1005	7	0
1006	6	0
1007	4	0
1008	4	0
1009	6	0
1010	3	0
1011	9	0
1012	5	0
n	12	12
Mean	5	0
S.D.	2	0

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : F0 mating

Generation : F0 Sex : Male Week : 5 Dose : BTetCA 100 mg/kg Species : Rat

Animal No.	Arousal	Convulsion	Abnormal behavior	Stereotypy	Gait	Posture	Grooming	Urination
2001	0	0	0	0	0	N	0	0
2002	0	0	0	0	0	N	0	0
2003	0	0	0	0	0	N	0	0
2004	0	0	0	0	0	N	0	0
2005	0	0	0	0	0	N	0	0
2006	0	0	0	0	0	N	0	0
2007	0	0	0	0	0	N	0	1
2008	0	0	0	0	0	N	0	0
2009	0	0	0	0	0	N	0	1
2010	0	0	0	0	0	N	0	0
2011	0	0	0	0	0	N	0	0
2012	0	0	0	0	0	N	0	0
n	12	12	12	12	12	12	12	12

Arousal) -2: Unconscious/semi-conscious, -1: Reduced awareness, 0: Nomal, 1: Increased alertness, 2: Markedly alert
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Stereotypy) 0: None, 1: Minor, 2: Moderate, 3: Sevear
Gait) U: No/minimal location, 0: Nomal, 1: Slight, 2: Moderate, 3: Markedly
Posture) N: Normal, F: Flattened, H: Hunched
Grooming) 0: None, 1: Occasional bouts (up to four), 2: Numerous (more than four)
Urination) 0: None, 1: Small amount, 2: Moderate amount, 3: Large/excessive amount
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : F0 mating

Generation : F0 Sex : Male Week : 5 Dose : BTetCA 100 mg/kg Species : Rat

Animal No.	Rearing	Defecation count
2001	4	0
2002	4	0
2003	6	0
2004	8	0
2005	4	0
2006	5	0
2007	4	0
2008	5	0
2009	5	0
2010	4	0
2011	1	0
2012	6	0
n	12	12
Mean	5	0
S.D.	2	0

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : F0 mating

Generation : F0 Sex : Male Week : 5 Dose : BTetCA 300 mg/kg Species : Rat

Animal No.	Arousal	Convulsion	Abnormal behavior	Stereotypy	Gait	Posture	Grooming	Urination
3001	0	0	0	0	0	N	0	0
3002	0	0	0	0	0	N	0	0
3003	0	0	0	0	0	N	0	0
3004	0	0	0	0	0	N	0	0
3005	0	0	0	0	0	N	0	0
3006	0	0	0	0	0	N	0	0
3007	0	0	0	0	0	N	0	0
3008	0	0	0	0	0	N	0	1
3009	0	0	0	0	0	N	0	0
3010	0	0	0	0	0	N	0	0
3011	0	0	0	0	0	N	0	0
3012	0	0	0	0	0	N	0	0
n	12	12	12	12	12	12	12	12

Arousal) -2: Unconscious/semi-conscious, -1: Reduced awareness, 0: Nomal, 1: Increased alertness, 2: Markedly alert
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Stereotypy) 0: None, 1: Minor, 2: Moderate, 3: Sevear
Gait) U: No/minimal location, 0: Nomal, 1: Slight, 2: Moderate, 3: Markedly
Posture) N: Normal, F: Flattened, H: Hunched
Grooming) 0: None, 1: Occasional bouts (up to four), 2: Numerous (more than four)
Urination) 0: None, 1: Small amount, 2: Moderate amount, 3: Large/excessive amount
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : F0 mating

Generation : F0 Sex : Male Week : 5 Dose : BTetCA 300 mg/kg Species : Rat

Animal No.	Rearing	Defecation count
3001	6	0
3002	6	0
3003	5	0
3004	4	0
3005	4	0
3006	7	0
3007	4	0
3008	7	0
3009	5	0
3010	3	0
3011	3	1
3012	5	0
n	12	12
Mean	5	0
S.D.	1	0

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : F0 mating

Generation : F0 Sex : Male Week : 5 Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Arousal	Convulsion	Abnormal behavior	Stereotypy	Gait	Posture	Grooming	Urination
4001	0	0	0	0	0	N	0	1
4002	0	0	0	0	0	N	0	0
4003	0	0	0	0	0	N	0	0
4004	0	0	0	0	0	N	0	0
4005	0	0	0	0	0	N	0	0
4006	0	0	0	0	0	N	0	0
4007	0	0	0	0	0	N	0	0
4008	0	0	0	0	0	N	0	0
4009	0	0	0	0	0	N	0	0
4010	0	0	0	0	0	N	0	1
4011	0	0	0	0	0	N	0	0
4012	0	0	0	0	0	N	0	0
n	12	12	12	12	12	12	12	12

Arousal) -2: Unconscious/semi-conscious, -1: Reduced awareness, 0: Nomal, 1: Increased alertness, 2: Markedly alert
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Stereotypy) 0: None, 1: Minor, 2: Moderate, 3: Sevear
Gait) U: No/minimal location, 0: Nomal, 1: Slight, 2: Moderate, 3: Markedly
Posture) N: Normal, F: Flattened, H: Hunched
Grooming) 0: None, 1: Occasional bouts (up to four), 2: Numerous (more than four)
Urination) 0: None, 1: Small amount, 2: Moderate amount, 3: Large/excessive amount
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : F0 mating

Generation : F0 Sex : Male Week : 5 Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Rearing	Defecation count
4001	2	0
4002	7	0
4003	10	0
4004	2	0
4005	6	0
4006	5	0
4007	8	0
4008	5	0
4009	5	0
4010	9	0
4011	2	0
4012	6	0
n	12	12
Mean	6	0
S.D.	3	0

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : F0 mating

Generation : F0 Sex : Male Week : 6 Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Arousal	Convulsion	Abnormal behavior	Stereotypy	Gait	Posture	Grooming	Urination
1001	0	0	0	0	0	N	0	0
1002	0	0	0	0	0	N	0	0
1003	0	0	0	0	0	N	0	0
1004	0	0	0	0	0	N	0	0
1005	0	0	0	0	0	N	0	0
1006	0	0	0	0	0	N	0	1
1007	0	0	0	0	0	N	0	0
1008	0	0	0	0	0	N	0	0
1009	0	0	0	0	0	N	0	0
1010	0	0	0	0	0	N	0	0
1011	0	0	0	0	0	N	0	0
1012	0	0	0	0	0	N	0	1
n	12	12	12	12	12	12	12	12

Arousal) -2: Unconscious/semi-conscious, -1: Reduced awareness, 0: Nomal, 1: Increased alertness, 2: Markedly alert
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Stereotypy) 0: None, 1: Minor, 2: Moderate, 3: Sevear
Gait) U: No/minimal location, 0: Nomal, 1: Slight, 2: Moderate, 3: Markedly
Posture) N: Normal, F: Flattened, H: Hunched
Grooming) 0: None, 1: Occasional bouts (up to four), 2: Numerous (more than four)
Urination) 0: None, 1: Small amount, 2: Moderate amount, 3: Large/excessive amount
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : F0 mating

Generation : F0 Sex : Male Week : 6 Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Rearing	Defecation count
1001	4	0
1002	6	0
1003	6	0
1004	1	0
1005	6	0
1006	5	0
1007	1	0
1008	5	0
1009	5	0
1010	1	0
1011	6	0
1012	3	0
n	12	12
Mean	4	0
S.D.	2	0

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : F0 mating

Generation : F0 Sex : Male Week : 6 Dose : BTetCA 100 mg/kg Species : Rat

Animal No.	Arousal	Convulsion	Abnormal behavior	Stereotypy	Gait	Posture	Grooming	Urination
2001	0	0	0	0	0	N	0	0
2002	0	0	0	0	0	N	0	0
2003	0	0	0	0	0	N	0	0
2004	0	0	0	0	0	N	0	0
2005	0	0	0	0	0	N	0	0
2006	0	0	0	0	0	N	0	1
2007	0	0	0	0	0	N	0	1
2008	0	0	0	0	0	N	0	1
2009	0	0	0	0	0	N	0	0
2010	0	0	0	0	0	N	0	0
2011	0	0	0	0	0	N	0	0
2012	0	0	0	0	0	N	0	0
n	12	12	12	12	12	12	12	12

Arousal) -2: Unconscious/semi-conscious, -1: Reduced awareness, 0: Nomal, 1: Increased alertness, 2: Markedly alert
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Stereotypy) 0: None, 1: Minor, 2: Moderate, 3: Sevear
Gait) U: No/minimal location, 0: Nomal, 1: Slight, 2: Moderate, 3: Markedly
Posture) N: Normal, F: Flattened, H: Hunched
Grooming) 0: None, 1: Occasional bouts (up to four), 2: Numerous (more than four)
Urination) 0: None, 1: Small amount, 2: Moderate amount, 3: Large/excessive amount
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : F0 mating

Generation : F0 Sex : Male Week : 6 Dose : BTetCA 100 mg/kg Species : Rat

Animal No.	Rearing	Defecation count
2001	1	0
2002	4	0
2003	6	0
2004	3	0
2005	4	0
2006	3	0
2007	3	0
2008	7	0
2009	3	0
2010	5	0
2011	6	0
2012	7	0
n	12	12
Mean	4	0
S.D.	2	0

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : F0 mating

Generation : F0 Sex : Male Week : 6 Dose : BTetCA 300 mg/kg Species : Rat

Animal No.	Arousal	Convulsion	Abnormal behavior	Stereotypy	Gait	Posture	Grooming	Urination
3001	0	0	0	0	0	N	0	0
3002	0	0	0	0	0	N	0	0
3003	0	0	0	0	0	N	0	1
3004	0	0	0	0	0	N	0	0
3005	0	0	0	0	0	N	0	0
3006	0	0	0	0	0	N	0	0
3007	0	0	0	0	0	N	0	1
3008	0	0	0	0	0	N	0	1
3009	0	0	0	0	0	N	0	0
3010	0	0	0	0	0	N	0	0
3011	0	0	0	0	0	N	0	0
3012	0	0	0	0	0	N	0	1
n	12	12	12	12	12	12	12	12

Arousal) -2: Unconscious/semi-conscious, -1: Reduced awareness, 0: Nomal, 1: Increased alertness, 2: Markedly alert
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Stereotypy) 0: None, 1: Minor, 2: Moderate, 3: Sevear
Gait) U: No/minimal location, 0: Nomal, 1: Slight, 2: Moderate, 3: Markedly
Posture) N: Normal, F: Flattened, H: Hunched
Grooming) 0: None, 1: Occasional bouts (up to four), 2: Numerous (more than four)
Urination) 0: None, 1: Small amount, 2: Moderate amount, 3: Large/excessive amount
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Open field observation Period : F0 mating

Generation : F0 Sex : Male Week : 6 Dose : BTetCA 300 mg/kg Species : Rat

Animal No.	Rearing	Defecation count
3001	5	0
3002	4	0
3003	5	0
3004	5	0
3005	3	0
3006	3	0
3007	3	0
3008	8	0
3009	5	0
3010	4	0
3011	6	0
3012	6	0
n	12	12
Mean	5	0
S.D.	1	0

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : F0 mating

Generation : F0 Sex : Male Week : 6 Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Arousal	Convulsion	Abnormal behavior	Stereotypy	Gait	Posture	Grooming	Urination
4001	0	0	0	0	0	N	0	0
4002	0	0	0	0	0	N	0	1
4003	0	0	0	0	0	N	0	0
4004	0	0	0	0	0	N	0	0
4005	0	0	0	0	0	N	0	0
4006	0	0	0	0	0	N	0	0
4007	0	0	0	0	0	N	0	0
4008	0	0	0	0	0	N	0	0
4009	0	0	0	0	0	N	0	0
4010	0	0	0	0	0	N	0	0
4011	0	0	0	0	0	N	0	0
4012	0	0	0	0	0	N	0	0
n	12	12	12	12	12	12	12	12

Arousal) -2: Unconscious/semi-conscious, -1: Reduced awareness, 0: Nomal, 1: Increased alertness, 2: Markedly alert
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Stereotypy) 0: None, 1: Minor, 2: Moderate, 3: Sevear
Gait) U: No/minimal location, 0: Nomal, 1: Slight, 2: Moderate, 3: Markedly
Posture) N: Normal, F: Flattened, H: Hunched
Grooming) 0: None, 1: Occasional bouts (up to four), 2: Numerous (more than four)
Urination) 0: None, 1: Small amount, 2: Moderate amount, 3: Large/excessive amount
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : F0 mating

Generation : F0 Sex : Male Week : 6 Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Rearing	Defecation count
4001	4	0
4002	3	0
4003	4	0
4004	3	0
4005	5	0
4006	2	0
4007	5	0
4008	5	0
4009	6	0
4010	5	0
4011	4	0
4012	4	0
n	12	12
Mean	4	0
S.D.	1	0

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : F0 before mating

Generation : F0 Sex : Female Week : 1 Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Arousal	Convulsion	Abnormal behavior	Stereotypy	Gait	Posture	Grooming	Urination
1101	0	0	0	0	0	N	0	0
1102	0	0	0	0	0	N	0	0
1103	0	0	0	0	0	N	0	0
1104	0	0	0	0	0	N	0	0
1105	0	0	0	0	0	N	0	0
1106	0	0	0	0	0	N	0	0
1107	0	0	0	0	0	N	0	0
1108	0	0	0	0	0	N	0	0
1109	0	0	0	0	0	N	0	0
1110	0	0	0	0	0	N	0	0
1111	0	0	0	0	0	N	0	0
1112	0	0	0	0	0	N	0	0
n	12	12	12	12	12	12	12	12

Arousal) -2: Unconscious/semi-conscious, -1: Reduced awareness, 0: Nomal, 1: Increased alertness, 2: Markedly alert
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Stereotypy) 0: None, 1: Minor, 2: Moderate, 3: Sevear
Gait) U: No/minimal location, 0: Nomal, 1: Slight, 2: Moderate, 3: Markedly
Posture) N: Normal, F: Flattened, H: Hunched
Grooming) 0: None, 1: Occasional bouts (up to four), 2: Numerous (more than four)
Urination) 0: None, 1: Small amount, 2: Moderate amount, 3: Large/excessive amount
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : F0 before mating

Generation : F0 Sex : Female Week : 1 Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Rearing	Defecation count
1101	8	0
1102	9	0
1103	7	0
1104	6	0
1105	9	0
1106	3	0
1107	6	0
1108	10	0
1109	6	0
1110	6	0
1111	9	0
1112	5	0
n	12	12
Mean	7	0
S.D.	2	0

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : F0 before mating

Generation : F0 Sex : Female Week : 1 Dose : BTetCA 100 mg/kg Species : Rat

Animal No.	Arousal	Convulsion	Abnormal behavior	Stereotypy	Gait	Posture	Grooming	Urination
2101	0	0	0	0	0	N	0	0
2102	0	0	0	0	0	N	0	0
2103	0	0	0	0	0	N	0	0
2104	0	0	0	0	0	N	0	0
2105	0	0	0	0	0	N	0	0
2106	0	0	0	0	0	N	0	0
2107	0	0	0	0	0	N	0	0
2108	0	0	0	0	0	N	0	0
2109	0	0	0	0	0	N	0	0
2110	0	0	0	0	0	N	0	0
2111	0	0	0	0	0	N	0	0
2112	0	0	0	0	0	N	0	0
n	12	12	12	12	12	12	12	12

Arousal) -2: Unconscious/semi-conscious, -1: Reduced awareness, 0: Nomal, 1: Increased alertness, 2: Markedly alert
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Stereotypy) 0: None, 1: Minor, 2: Moderate, 3: Sevear
Gait) U: No/minimal location, 0: Nomal, 1: Slight, 2: Moderate, 3: Markedly
Posture) N: Normal, F: Flattened, H: Hunched
Grooming) 0: None, 1: Occasional bouts (up to four), 2: Numerous (more than four)
Urination) 0: None, 1: Small amount, 2: Moderate amount, 3: Large/excessive amount
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Open field observation Period : F0 before mating

Generation : F0 Sex : Female Week : 1 Dose : BTetCA 100 mg/kg Species : Rat

Animal No.	Rearing	Defecation count
2101	8	0
2102	6	0
2103	2	0
2104	6	0
2105	9	0
2106	5	0
2107	7	0
2108	7	0
2109	5	0
2110	7	0
2111	7	0
2112	9	0
n	12	12
Mean	7	0
S.D.	2	0

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : F0 before mating

Generation : F0 Sex : Female Week : 1 Dose : BTetCA 300 mg/kg Species : Rat

Animal No.	Arousal	Convulsion	Abnormal behavior	Stereotypy	Gait	Posture	Grooming	Urination
3101	0	0	0	0	0	N	0	0
3102	0	0	0	0	0	N	0	0
3103	0	0	0	0	0	N	0	0
3104	0	0	0	0	0	N	0	0
3105	0	0	0	0	0	N	0	0
3106	0	0	0	0	0	N	0	0
3107	0	0	0	0	0	N	0	0
3108	0	0	0	0	0	N	0	0
3109	0	0	0	0	0	N	0	0
3110	0	0	0	0	0	N	0	0
3111	0	0	0	0	0	N	0	0
3112	0	0	0	0	0	N	0	0
n	12	12	12	12	12	12	12	12

Arousal) -2: Unconscious/semi-conscious, -1: Reduced awareness, 0: Nomal, 1: Increased alertness, 2: Markedly alert
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Stereotypy) 0: None, 1: Minor, 2: Moderate, 3: Sevear
Gait) U: No/minimal location, 0: Nomal, 1: Slight, 2: Moderate, 3: Markedly
Posture) N: Normal, F: Flattened, H: Hunched
Grooming) 0: None, 1: Occasional bouts (up to four), 2: Numerous (more than four)
Urination) 0: None, 1: Small amount, 2: Moderate amount, 3: Large/excessive amount
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Open field observation Period : F0 before mating

Generation : F0 Sex : Female Week : 1 Dose : BTetCA 300 mg/kg Species : Rat

Animal No.	Rearing	Defecation count
3101	9	0
3102	4	0
3103	9	0
3104	6	0
3105	11	0
3106	6	0
3107	7	0
3108	8	0
3109	7	0
3110	3	0
3111	7	0
3112	12	0
n	12	12
Mean	7	0
S.D.	3	0

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : F0 before mating

Generation : F0 Sex : Female Week : 1 Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Arousal	Convulsion	Abnormal behavior	Stereotypy	Gait	Posture	Grooming	Urination
4101	0	0	0	0	0	N	0	0
4102	0	0	0	0	0	N	0	0
4103	0	0	0	0	0	N	0	0
4104	0	0	0	0	0	N	0	0
4105	0	0	0	0	0	N	0	0
4106	0	0	0	0	0	N	0	0
4107	0	0	0	0	0	N	0	0
4108	0	0	0	0	0	N	0	0
4109	0	0	0	0	0	N	0	0
4110	0	0	0	0	0	N	0	0
4111	0	0	0	0	0	N	0	0
4112	0	0	0	0	0	N	0	0
n	12	12	12	12	12	12	12	12

Arousal) -2: Unconscious/semi-conscious, -1: Reduced awareness, 0: Nomal, 1: Increased alertness, 2: Markedly alert
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Stereotypy) 0: None, 1: Minor, 2: Moderate, 3: Sevear
Gait) U: No/minimal location, 0: Nomal, 1: Slight, 2: Moderate, 3: Markedly
Posture) N: Normal, F: Flattened, H: Hunched
Grooming) 0: None, 1: Occasional bouts (up to four), 2: Numerous (more than four)
Urination) 0: None, 1: Small amount, 2: Moderate amount, 3: Large/excessive amount
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Open field observation Period : F0 before mating

Generation : F0 Sex : Female Week : 1 Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Rearing	Defecation count
4101	8	0
4102	7	0
4103	6	0
4104	8	0
4105	11	0
4106	8	0
4107	9	0
4108	7	0
4109	5	0
4110	7	0
4111	7	0
4112	6	0
n	12	12
Mean	7	0
S.D.	2	0

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : F0 before mating

Generation : F0 Sex : Female Week : 2 Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Arousal	Convulsion	Abnormal behavior	Stereotypy	Gait	Posture	Grooming	Urination
1101	0	0	0	0	0	N	0	0
1102	0	0	0	0	0	N	0	0
1103	0	0	0	0	0	N	0	0
1104	0	0	0	0	0	N	0	0
1105	0	0	0	0	0	N	0	0
1106	0	0	0	0	0	N	0	0
1107	0	0	0	0	0	N	0	0
1108	0	0	0	0	0	N	0	0
1109	0	0	0	0	0	N	0	0
1110	0	0	0	0	0	N	0	0
1111	0	0	0	0	0	N	0	0
1112	0	0	0	0	0	N	0	0
n	12	12	12	12	12	12	12	12

Arousal) -2: Unconscious/semi-conscious, -1: Reduced awareness, 0: Nomal, 1: Increased alertness, 2: Markedly alert
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Stereotypy) 0: None, 1: Minor, 2: Moderate, 3: Sevear
Gait) U: No/minimal location, 0: Nomal, 1: Slight, 2: Moderate, 3: Markedly
Posture) N: Normal, F: Flattened, H: Hunched
Grooming) 0: None, 1: Occasional bouts (up to four), 2: Numerous (more than four)
Urination) 0: None, 1: Small amount, 2: Moderate amount, 3: Large/excessive amount
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Open field observation

Period : F0 before mating

Generation : F0 Sex : Female Week : 2 Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Rearing	Defecation count
1101	10	0
1102	9	0
1103	7	0
1104	7	0
1105	7	0
1106	3	0
1107	5	0
1108	11	0
1109	6	0
1110	10	0
1111	5	0
1112	8	0
n	12	12
Mean	7	0
S.D.	2	0

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : F0 before mating

Generation : F0 Sex : Female Week : 2 Dose : BTetCA 100 mg/kg Species : Rat

Animal No.	Arousal	Convulsion	Abnormal behavior	Stereotypy	Gait	Posture	Grooming	Urination
2101	0	0	0	0	0	N	0	0
2102	0	0	0	0	0	N	0	0
2103	0	0	0	0	0	N	0	0
2104	0	0	0	0	0	N	0	0
2105	0	0	0	0	0	N	0	0
2106	0	0	0	0	0	N	0	0
2107	0	0	0	0	0	N	0	0
2108	0	0	0	0	0	N	0	0
2109	0	0	0	0	0	N	0	0
2110	0	0	0	0	0	N	0	0
2111	0	0	0	0	0	N	0	0
2112	0	0	0	0	0	N	0	0
n	12	12	12	12	12	12	12	12

Arousal) -2: Unconscious/semi-conscious, -1: Reduced awareness, 0: Nomal, 1: Increased alertness, 2: Markedly alert
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Stereotypy) 0: None, 1: Minor, 2: Moderate, 3: Sevear
Gait) U: No/minimal location, 0: Nomal, 1: Slight, 2: Moderate, 3: Markedly
Posture) N: Normal, F: Flattened, H: Hunched
Grooming) 0: None, 1: Occasional bouts (up to four), 2: Numerous (more than four)
Urination) 0: None, 1: Small amount, 2: Moderate amount, 3: Large/excessive amount
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Open field observation Period : F0 before mating

Generation : F0 Sex : Female Week : 2 Dose : BTetCA 100 mg/kg Species : Rat

Animal No.	Rearing	Defecation count
2101	10	0
2102	8	0
2103	6	0
2104	7	0
2105	9	0
2106	7	0
2107	9	0
2108	11	0
2109	6	0
2110	4	0
2111	7	0
2112	10	0
n	12	12
Mean	8	0
S.D.	2	0

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : F0 before mating

Generation : F0 Sex : Female Week : 2 Dose : BTetCA 300 mg/kg Species : Rat

Animal No.	Arousal	Convulsion	Abnormal behavior	Stereotypy	Gait	Posture	Grooming	Urination
3101	0	0	0	0	0	N	0	0
3102	0	0	0	0	0	N	0	0
3103	0	0	0	0	0	N	0	0
3104	0	0	0	0	0	N	0	0
3105	0	0	0	0	0	N	0	0
3106	0	0	0	0	0	N	0	0
3107	0	0	0	0	0	N	0	0
3108	0	0	0	0	0	N	0	0
3109	0	0	0	0	0	N	0	0
3110	0	0	0	0	0	N	0	0
3111	0	0	0	0	0	N	0	0
3112	0	0	0	0	0	N	0	0
n	12	12	12	12	12	12	12	12

Arousal) -2: Unconscious/semi-conscious, -1: Reduced awareness, 0: Nomal, 1: Increased alertness, 2: Markedly alert
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Stereotypy) 0: None, 1: Minor, 2: Moderate, 3: Sevear
Gait) U: No/minimal location, 0: Nomal, 1: Slight, 2: Moderate, 3: Markedly
Posture) N: Normal, F: Flattened, H: Hunched
Grooming) 0: None, 1: Occasional bouts (up to four), 2: Numerous (more than four)
Urination) 0: None, 1: Small amount, 2: Moderate amount, 3: Large/excessive amount
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Open field observation Period : F0 before mating

Generation : F0 Sex : Female Week : 2 Dose : BTetCA 300 mg/kg Species : Rat

Animal No.	Rearing	Defecation count
3101	9	0
3102	5	0
3103	3	0
3104	8	0
3105	9	0
3106	6	0
3107	5	0
3108	7	0
3109	9	0
3110	5	0
3111	9	0
3112	6	0
n	12	12
Mean	7	0
S.D.	2	0

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : F0 before mating

Generation : F0 Sex : Female Week : 2 Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Arousal	Convulsion	Abnormal behavior	Stereotypy	Gait	Posture	Grooming	Urination
4101	0	0	0	0	0	N	0	0
4102	0	0	0	0	0	N	0	0
4103	0	0	0	0	0	N	0	0
4104	0	0	0	0	0	N	0	0
4105	0	0	0	0	0	N	0	0
4106	0	0	0	0	0	N	0	0
4107	0	0	0	0	0	N	0	0
4108	0	0	0	0	0	N	0	0
4109	0	0	0	0	0	N	0	0
4110	0	0	0	0	0	N	0	0
4111	0	0	0	0	0	N	0	0
4112	0	0	0	0	0	N	0	0
n	12	12	12	12	12	12	12	12

Arousal) -2: Unconscious/semi-conscious, -1: Reduced awareness, 0: Nomal, 1: Increased alertness, 2: Markedly alert
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Stereotypy) 0: None, 1: Minor, 2: Moderate, 3: Sevear
Gait) U: No/minimal location, 0: Nomal, 1: Slight, 2: Moderate, 3: Markedly
Posture) N: Normal, F: Flattened, H: Hunched
Grooming) 0: None, 1: Occasional bouts (up to four), 2: Numerous (more than four)
Urination) 0: None, 1: Small amount, 2: Moderate amount, 3: Large/excessive amount
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Open field observation Period : F0 before mating

Generation : F0 Sex : Female Week : 2 Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Rearing	Defecation count
4101	9	0
4102	4	0
4103	5	0
4104	8	0
4105	6	0
4106	8	0
4107	10	0
4108	6	0
4109	11	0
4110	7	0
4111	5	0
4112	8	0
n	12	12
Mean	7	0
S.D.	2	0

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : F0 gestation

Generation : F0 Sex : Female Day : 1 Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Arousal	Convulsion	Abnormal behavior	Stereotypy	Gait	Posture	Grooming	Urination
1101	0	0	0	0	0	N	0	0
1102	0	0	0	0	0	N	0	0
1103	0	0	0	0	0	N	0	0
1104	0	0	0	0	0	N	0	0
1105	0	0	0	0	0	N	0	0
1106	0	0	0	0	0	N	0	0
1107	0	0	0	0	0	N	0	0
1108	0	0	0	0	0	N	0	0
1109	0	0	0	0	0	N	0	0
1110	0	0	0	0	0	N	0	0
1111	0	0	0	0	0	N	0	0
1112	0	0	0	0	0	N	0	0
n	12	12	12	12	12	12	12	12

Arousal) -2: Unconscious/semi-conscious, -1: Reduced awareness, 0: Nomal, 1: Increased alertness, 2: Markedly alert
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Stereotypy) 0: None, 1: Minor, 2: Moderate, 3: Sevear
Gait) U: No/minimal location, 0: Nomal, 1: Slight, 2: Moderate, 3: Markedly
Posture) N: Normal, F: Flattened, H: Hunched
Grooming) 0: None, 1: Occasional bouts (up to four), 2: Numerous (more than four)
Urination) 0: None, 1: Small amount, 2: Moderate amount, 3: Large/excessive amount
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Open field observation Period : F0 gestation

Generation : F0 Sex : Female Day : 1 Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Rearing	Defecation count
1101	4	0
1102	9	0
1103	8	0
1104	7	0
1105	7	0
1106	5	0
1107	6	0
1108	8	0
1109	2	0
1110	11	0
1111	9	0
1112	4	0
n	12	12
Mean	7	0
S.D.	3	0

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 2 - 211 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Open field observation Period : F0 gestation

Generation : F0 Sex : Female Day : 1 Dose : BTetCA 100 mg/kg Species : Rat

Animal No.	Arousal	Convulsion	Abnormal behavior	Stereotypy	Gait	Posture	Grooming	Urination
2101	0	0	0	0	0	N	0	0
2102	0	0	0	0	0	N	0	0
2103	0	0	0	0	0	N	0	0
2104	0	0	0	0	0	N	0	0
2105	0	0	0	0	0	N	0	0
2106	0	0	0	0	0	N	0	0
2107	0	0	0	0	0	N	0	0
2108	0	0	0	0	0	N	0	0
2109	0	0	0	0	0	N	0	0
2110	0	0	0	0	0	N	0	0
2111	0	0	0	0	0	N	0	0
2112	0	0	0	0	0	N	0	0
n	12	12	12	12	12	12	12	12

Arousal) -2: Unconscious/semi-conscious, -1: Reduced awareness, 0: Nomal, 1: Increased alertness, 2: Markedly alert
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Stereotypy) 0: None, 1: Minor, 2: Moderate, 3: Sevear
Gait) U: No/minimal location, 0: Nomal, 1: Slight, 2: Moderate, 3: Markedly
Posture) N: Normal, F: Flattened, H: Hunched
Grooming) 0: None, 1: Occasional bouts (up to four), 2: Numerous (more than four)
Urination) 0: None, 1: Small amount, 2: Moderate amount, 3: Large/excessive amount
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : F0 gestation

Generation : F0 Sex : Female Day : 1 Dose : BTetCA 100 mg/kg Species : Rat

Animal No.	Rearing	Defecation count
2101	10	0
2102	11	0
2103	6	0
2104	8	0
2105	9	0
2106	4	0
2107	8	0
2108	8	0
2109	6	0
2110	7	0
2111	3	0
2112	6	0
n	12	12
Mean	7	0
S.D.	2	0

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : F0 gestation

Generation : F0 Sex : Female Day : 1 Dose : BTetCA 300 mg/kg Species : Rat

Animal No.	Arousal	Convulsion	Abnormal behavior	Stereotypy	Gait	Posture	Grooming	Urination
3101	0	0	0	0	0	N	0	0
3102	0	0	0	0	0	N	0	0
3103	0	0	0	0	0	N	0	0
3104	0	0	0	0	0	N	0	0
3105	0	0	0	0	0	N	0	0
3106	0	0	0	0	0	N	0	1
3107	0	0	0	0	0	N	0	0
3108	0	0	0	0	0	N	0	0
3109	0	0	0	0	0	N	0	0
3110	0	0	0	0	0	N	0	0
3111	0	0	0	0	0	N	0	0
3112	0	0	0	0	0	N	0	0
n	12	12	12	12	12	12	12	12

Arousal) -2: Unconscious/semi-conscious, -1: Reduced awareness, 0: Nomal, 1: Increased alertness, 2: Markedly alert
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Stereotypy) 0: None, 1: Minor, 2: Moderate, 3: Sevear
Gait) U: No/minimal location, 0: Nomal, 1: Slight, 2: Moderate, 3: Markedly
Posture) N: Normal, F: Flattened, H: Hunched
Grooming) 0: None, 1: Occasional bouts (up to four), 2: Numerous (more than four)
Urination) 0: None, 1: Small amount, 2: Moderate amount, 3: Large/excessive amount
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Open field observation Period : F0 gestation

Generation : F0 Sex : Female Day : 1 Dose : BTetCA 300 mg/kg Species : Rat

Animal No.	Rearing	Defecation count
3101	12	0
3102	3	0
3103	7	0
3104	5	0
3105	10	0
3106	6	0
3107	7	0
3108	5	0
3109	7	0
3110	6	0
3111	9	0
3112	6	0
n	12	12
Mean	7	0
S.D.	2	0

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : F0 gestation

Generation : F0 Sex : Female Day : 1 Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Arousal	Convulsion	Abnormal behavior	Stereotypy	Gait	Posture	Grooming	Urination
4101	0	0	0	0	0	N	0	0
4102	0	0	0	0	0	N	0	0
4103	0	0	0	0	0	N	0	0
4104	0	0	0	0	0	N	0	0
4105	0	0	0	0	0	N	0	0
4106	0	0	0	0	0	N	0	0
4107	0	0	0	0	0	N	0	0
4108	0	0	0	0	0	N	0	0
4109	0	0	0	0	0	N	0	0
4110	0	0	0	0	0	N	0	0
4111	0	0	0	0	0	N	0	0
4112	0	0	0	0	0	N	0	0
n	12	12	12	12	12	12	12	12

Arousal) -2: Unconscious/semi-conscious, -1: Reduced awareness, 0: Nomal, 1: Increased alertness, 2: Markedly alert
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Stereotypy) 0: None, 1: Minor, 2: Moderate, 3: Sevear
Gait) U: No/minimal location, 0: Nomal, 1: Slight, 2: Moderate, 3: Markedly
Posture) N: Normal, F: Flattened, H: Hunched
Grooming) 0: None, 1: Occasional bouts (up to four), 2: Numerous (more than four)
Urination) 0: None, 1: Small amount, 2: Moderate amount, 3: Large/excessive amount
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : F0 gestation

Generation : F0 Sex : Female Day : 1 Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Rearing	Defecation count
4101	8	0
4102	4	0
4103	6	0
4104	6	0
4105	6	0
4106	8	0
4107	8	0
4108	8	0
4109	11	0
4110	3	0
4111	1	0
4112	6	0
n	12	12
Mean	6	0
S.D.	3	0

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : F0 gestation

Generation : F0 Sex : Female Day : 7 Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Arousal	Convulsion	Abnormal behavior	Stereotypy	Gait	Posture	Grooming	Urination
1101	0	0	0	0	0	N	0	0
1102	0	0	0	0	0	N	0	0
1103	0	0	0	0	0	N	0	0
1104	0	0	0	0	0	N	0	0
1105	0	0	0	0	0	N	0	0
1106	0	0	0	0	0	N	0	0
1107	0	0	0	0	0	N	0	0
1108	0	0	0	0	0	N	0	0
1109	0	0	0	0	0	N	0	0
1110	0	0	0	0	0	N	0	0
1111	0	0	0	0	0	N	0	0
1112	0	0	0	0	0	N	0	0
n	12	12	12	12	12	12	12	12

Arousal) -2: Unconscious/semi-conscious, -1: Reduced awareness, 0: Nomal, 1: Increased alertness, 2: Markedly alert
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Stereotypy) 0: None, 1: Minor, 2: Moderate, 3: Sevear
Gait) U: No/minimal location, 0: Nomal, 1: Slight, 2: Moderate, 3: Markedly
Posture) N: Normal, F: Flattened, H: Hunched
Grooming) 0: None, 1: Occasional bouts (up to four), 2: Numerous (more than four)
Urination) 0: None, 1: Small amount, 2: Moderate amount, 3: Large/excessive amount
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Open field observation Period : F0 gestation

Generation : F0 Sex : Female Day : 7 Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Rearing	Defecation count
1101	6	0
1102	7	0
1103	5	0
1104	6	0
1105	6	0
1106	3	0
1107	4	0
1108	10	0
1109	2	0
1110	11	0
1111	7	0
1112	2	0
n	12	12
Mean	6	0
S.D.	3	0

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : F0 gestation

Generation : F0 Sex : Female Day : 7 Dose : BTetCA 100 mg/kg Species : Rat

Animal No.	Arousal	Convulsion	Abnormal behavior	Stereotypy	Gait	Posture	Grooming	Urination
2101	0	0	0	0	0	N	0	0
2102	0	0	0	0	0	N	0	0
2103	0	0	0	0	0	N	0	0
2104	0	0	0	0	0	N	0	0
2105	0	0	0	0	0	N	0	0
2106	0	0	0	0	0	N	0	0
2107	0	0	0	0	0	N	0	0
2108	0	0	0	0	0	N	0	0
2109	0	0	0	0	0	N	0	0
2110	0	0	0	0	0	N	0	0
2111	0	0	0	0	0	N	0	0
2112	0	0	0	0	0	N	0	0
n	12	12	12	12	12	12	12	12

Arousal) -2: Unconscious/semi-conscious, -1: Reduced awareness, 0: Nomal, 1: Increased alertness, 2: Markedly alert
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Stereotypy) 0: None, 1: Minor, 2: Moderate, 3: Sevear
Gait) U: No/minimal location, 0: Nomal, 1: Slight, 2: Moderate, 3: Markedly
Posture) N: Normal, F: Flattened, H: Hunched
Grooming) 0: None, 1: Occasional bouts (up to four), 2: Numerous (more than four)
Urination) 0: None, 1: Small amount, 2: Moderate amount, 3: Large/excessive amount
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Open field observation Period : F0 gestation

Generation : F0 Sex : Female Day : 7 Dose : BTetCA 100 mg/kg Species : Rat

Animal No.	Rearing	Defecation count
2101	7	0
2102	8	0
2103	6	0
2104	5	0
2105	8	0
2106	4	0
2107	4	0
2108	4	0
2109	5	0
2110	5	0
2111	8	0
2112	7	0
n	12	12
Mean	6	0
S.D.	2	0

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : F0 gestation

Generation : F0 Sex : Female Day : 7 Dose : BTetCA 300 mg/kg Species : Rat

Animal No.	Arousal	Convulsion	Abnormal behavior	Stereotypy	Gait	Posture	Grooming	Urination
3101	0	0	0	0	0	N	0	0
3102	0	0	0	0	0	N	0	0
3103	0	0	0	0	0	N	0	0
3104	0	0	0	0	0	N	0	0
3105	0	0	0	0	0	N	0	0
3106	0	0	0	0	0	N	0	0
3107	0	0	0	0	0	N	0	0
3108	0	0	0	0	0	N	0	0
3109	0	0	0	0	0	N	0	0
3110	0	0	0	0	0	N	0	0
3111	0	0	0	0	0	N	0	0
3112	0	0	0	0	0	N	0	1
n	12	12	12	12	12	12	12	12

Arousal) -2: Unconscious/semi-conscious, -1: Reduced awareness, 0: Nomal, 1: Increased alertness, 2: Markedly alert
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Stereotypy) 0: None, 1: Minor, 2: Moderate, 3: Sevear
Gait) U: No/minimal location, 0: Nomal, 1: Slight, 2: Moderate, 3: Markedly
Posture) N: Normal, F: Flattened, H: Hunched
Grooming) 0: None, 1: Occasional bouts (up to four), 2: Numerous (more than four)
Urination) 0: None, 1: Small amount, 2: Moderate amount, 3: Large/excessive amount
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Open field observation Period : F0 gestation

Generation : F0 Sex : Female Day : 7 Dose : BTetCA 300 mg/kg Species : Rat

Animal No.	Rearing	Defecation count
3101	9	0
3102	5	0
3103	7	1
3104	5	0
3105	9	0
3106	5	0
3107	3	0
3108	5	0
3109	7	0
3110	4	0
3111	5	0
3112	6	0
n	12	12
Mean	6	0
S.D.	2	0

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : F0 gestation

Generation : F0 Sex : Female Day : 7 Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Arousal	Convulsion	Abnormal behavior	Stereotypy	Gait	Posture	Grooming	Urination
4101	0	0	0	0	0	N	0	0
4102	0	0	0	0	0	N	0	0
4103	0	0	0	0	0	N	0	0
4104	0	0	0	0	0	N	0	0
4105	0	0	0	0	0	N	0	0
4106	0	0	0	0	0	N	0	0
4107	0	0	0	0	0	N	0	0
4108	0	0	0	0	0	N	0	1
4109	0	0	0	0	0	N	0	0
4110	0	0	0	0	0	N	0	0
4111	0	0	0	0	0	N	0	0
4112	0	0	0	0	0	N	0	0
n	12	12	12	12	12	12	12	12

Arousal) -2: Unconscious/semi-conscious, -1: Reduced awareness, 0: Nomal, 1: Increased alertness, 2: Markedly alert
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Stereotypy) 0: None, 1: Minor, 2: Moderate, 3: Sevear
Gait) U: No/minimal location, 0: Nomal, 1: Slight, 2: Moderate, 3: Markedly
Posture) N: Normal, F: Flattened, H: Hunched
Grooming) 0: None, 1: Occasional bouts (up to four), 2: Numerous (more than four)
Urination) 0: None, 1: Small amount, 2: Moderate amount, 3: Large/excessive amount
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Open field observation Period : F0 gestation

Generation : F0 Sex : Female Day : 7 Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Rearing	Defecation count
4101	5	0
4102	4	0
4103	5	0
4104	6	0
4105	8	0
4106	9	0
4107	9	0
4108	3	0
4109	7	0
4110	5	0
4111	3	0
4112	5	0
n	12	12
Mean	6	0
S.D.	2	0

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : F0 gestation

Generation : F0 Sex : Female Day : 14 Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Arousal	Convulsion	Abnormal behavior	Stereotypy	Gait	Posture	Grooming	Urination
1101	0	0	0	0	0	N	0	0
1102	0	0	0	0	0	N	0	0
1103	0	0	0	0	0	N	0	0
1104	0	0	0	0	0	N	0	0
1105	0	0	0	0	0	N	0	0
1106	0	0	0	0	0	N	0	0
1107	0	0	0	0	0	N	0	0
1108	0	0	0	0	0	N	0	0
1109	0	0	0	0	0	N	0	0
1110	0	0	0	0	0	N	0	0
1111	0	0	0	0	0	N	0	0
1112	0	0	0	0	0	N	0	0
n	12	12	12	12	12	12	12	12

Arousal) -2: Unconscious/semi-conscious, -1: Reduced awareness, 0: Nomal, 1: Increased alertness, 2: Markedly alert
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Stereotypy) 0: None, 1: Minor, 2: Moderate, 3: Sevear
Gait) U: No/minimal location, 0: Nomal, 1: Slight, 2: Moderate, 3: Markedly
Posture) N: Normal, F: Flattened, H: Hunched
Grooming) 0: None, 1: Occasional bouts (up to four), 2: Numerous (more than four)
Urination) 0: None, 1: Small amount, 2: Moderate amount, 3: Large/excessive amount
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Open field observation Period : F0 gestation

Generation : F0 Sex : Female Day : 14 Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Rearing	Defecation count
1101	3	0
1102	5	0
1103	5	0
1104	7	0
1105	5	0
1106	3	0
1107	6	0
1108	7	0
1109	5	0
1110	4	0
1111	6	0
1112	5	0
n	12	12
Mean	5	0
S.D.	1	0

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : F0 gestation

Generation : F0 Sex : Female Day : 14 Dose : BTetCA 100 mg/kg Species : Rat

Animal No.	Arousal	Convulsion	Abnormal behavior	Stereotypy	Gait	Posture	Grooming	Urination
2101	0	0	0	0	0	N	0	0
2102	0	0	0	0	0	N	0	0
2103	0	0	0	0	0	N	0	0
2104	0	0	0	0	0	N	0	0
2105	0	0	0	0	0	N	0	0
2106	0	0	0	0	0	N	0	0
2107	0	0	0	0	0	N	0	0
2108	0	0	0	0	0	N	0	0
2109	0	0	0	0	0	N	0	0
2110	0	0	0	0	0	N	0	0
2111	0	0	0	0	0	N	0	0
2112	0	0	0	0	0	N	0	0
n	12	12	12	12	12	12	12	12

Arousal) -2: Unconscious/semi-conscious, -1: Reduced awareness, 0: Nomal, 1: Increased alertness, 2: Markedly alert
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Stereotypy) 0: None, 1: Minor, 2: Moderate, 3: Sevear
Gait) U: No/minimal location, 0: Nomal, 1: Slight, 2: Moderate, 3: Markedly
Posture) N: Normal, F: Flattened, H: Hunched
Grooming) 0: None, 1: Occasional bouts (up to four), 2: Numerous (more than four)
Urination) 0: None, 1: Small amount, 2: Moderate amount, 3: Large/excessive amount
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Open field observation Period : F0 gestation

Generation : F0 Sex : Female Day : 14 Dose : BTetCA 100 mg/kg Species : Rat

Animal No.	Rearing	Defecation count
2101	4	0
2102	7	0
2103	5	0
2104	5	0
2105	5	0
2106	5	0
2107	4	0
2108	7	0
2109	4	0
2110	8	0
2111	4	0
2112	9	0
n	12	12
Mean	6	0
S.D.	2	0

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : F0 gestation

Generation : F0 Sex : Female Day : 14 Dose : BTetCA 300 mg/kg Species : Rat

Animal No.	Arousal	Convulsion	Abnormal behavior	Stereotypy	Gait	Posture	Grooming	Urination
3101	0	0	0	0	0	N	0	0
3102	0	0	0	0	0	N	0	0
3103	0	0	0	0	0	N	0	0
3104	0	0	0	0	0	N	0	0
3105	0	0	0	0	0	N	0	0
3106	0	0	0	0	0	N	0	0
3107	0	0	0	0	0	N	0	0
3108	0	0	0	0	0	N	0	0
3109	0	0	0	0	0	N	0	0
3110	0	0	0	0	0	N	0	0
3111	0	0	0	0	0	N	0	0
3112	0	0	0	0	0	N	0	0
n	12	12	12	12	12	12	12	12

Arousal) -2: Unconscious/semi-conscious, -1: Reduced awareness, 0: Nomal, 1: Increased alertness, 2: Markedly alert
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Stereotypy) 0: None, 1: Minor, 2: Moderate, 3: Sevear
Gait) U: No/minimal location, 0: Nomal, 1: Slight, 2: Moderate, 3: Markedly
Posture) N: Normal, F: Flattened, H: Hunched
Grooming) 0: None, 1: Occasional bouts (up to four), 2: Numerous (more than four)
Urination) 0: None, 1: Small amount, 2: Moderate amount, 3: Large/excessive amount
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Open field observation Period : F0 gestation

Generation : F0 Sex : Female Day : 14 Dose : BTetCA 300 mg/kg Species : Rat

Animal No.	Rearing	Defecation count
3101	9	0
3102	1	0
3103	9	0
3104	6	0
3105	5	0
3106	4	0
3107	5	0
3108	6	0
3109	4	0
3110	3	0
3111	5	0
3112	7	0
n	12	12
Mean	5	0
S.D.	2	0

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : F0 gestation

Generation : F0 Sex : Female Day : 14 Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Arousal	Convulsion	Abnormal behavior	Stereotypy	Gait	Posture	Grooming	Urination
4101	0	0	0	0	0	N	0	0
4102	0	0	0	0	0	N	0	0
4103	0	0	0	0	0	N	0	0
4104	0	0	0	0	0	N	0	0
4105	0	0	0	0	0	N	0	0
4106	0	0	0	0	0	N	0	0
4107	0	0	0	0	0	N	0	0
4108	0	0	0	0	0	N	0	0
4109	0	0	0	0	0	N	0	0
4110	0	0	0	0	0	N	0	0
4111	0	0	0	0	0	N	0	0
4112	0	0	0	0	0	N	0	0
n	12	12	12	12	12	12	12	12

Arousal) -2: Unconscious/semi-conscious, -1: Reduced awareness, 0: Nomal, 1: Increased alertness, 2: Markedly alert
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Stereotypy) 0: None, 1: Minor, 2: Moderate, 3: Sevear
Gait) U: No/minimal location, 0: Nomal, 1: Slight, 2: Moderate, 3: Markedly
Posture) N: Normal, F: Flattened, H: Hunched
Grooming) 0: None, 1: Occasional bouts (up to four), 2: Numerous (more than four)
Urination) 0: None, 1: Small amount, 2: Moderate amount, 3: Large/excessive amount
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Open field observation Period : F0 gestation

Generation : F0 Sex : Female Day : 14 Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Rearing	Defecation count
4101	8	0
4102	3	0
4103	5	0
4104	3	0
4105	7	0
4106	4	0
4107	6	0
4108	3	0
4109	8	0
4110	4	0
4111	4	0
4112	5	0
n	12	12
Mean	5	0
S.D.	2	0

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : F0 gestation

Generation : F0 Sex : Female Day : 20 Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Arousal	Convulsion	Abnormal behavior	Stereotypy	Gait	Posture	Grooming	Urination
1101	0	0	0	0	0	N	0	0
1102	0	0	0	0	0	N	0	0
1103	0	0	0	0	0	N	0	0
1104	0	0	0	0	0	N	0	0
1105	0	0	0	0	0	N	0	0
1106	0	0	0	0	0	N	0	0
1107	0	0	0	0	0	N	0	0
1108	0	0	0	0	0	N	0	0
1109	0	0	0	0	0	N	0	1
1110	0	0	0	0	0	N	0	0
1111	0	0	0	0	0	N	0	0
1112	0	0	0	0	0	N	0	0
n	12	12	12	12	12	12	12	12

Arousal) -2: Unconscious/semi-conscious, -1: Reduced awareness, 0: Nomal, 1: Increased alertness, 2: Markedly alert
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Stereotypy) 0: None, 1: Minor, 2: Moderate, 3: Sevear
Gait) U: No/minimal location, 0: Nomal, 1: Slight, 2: Moderate, 3: Markedly
Posture) N: Normal, F: Flattened, H: Hunched
Grooming) 0: None, 1: Occasional bouts (up to four), 2: Numerous (more than four)
Urination) 0: None, 1: Small amount, 2: Moderate amount, 3: Large/excessive amount
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Open field observation Period : F0 gestation

Generation : F0 Sex : Female Day : 20 Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Rearing	Defecation count
1101	2	0
1102	4	0
1103	3	0
1104	4	0
1105	6	0
1106	3	0
1107	7	0
1108	5	0
1109	6	0
1110	6	0
1111	3	0
1112	3	0
n	12	12
Mean	4	0
S.D.	2	0

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : F0 gestation

Generation : F0 Sex : Female Day : 20 Dose : BTetCA 100 mg/kg Species : Rat

Animal No.	Arousal	Convulsion	Abnormal behavior	Stereotypy	Gait	Posture	Grooming	Urination
2101	0	0	0	0	0	N	0	0
2102	0	0	0	0	0	N	0	0
2103	0	0	0	0	0	N	0	0
2104	0	0	0	0	0	N	0	0
2105	0	0	0	0	0	N	0	0
2106	0	0	0	0	0	N	0	0
2107	0	0	0	0	0	N	0	0
2108	0	0	0	0	0	N	0	0
2109	0	0	0	0	0	N	0	0
2110	0	0	0	0	0	N	0	0
2111	0	0	0	0	0	N	0	0
2112	0	0	0	0	0	N	0	0
n	12	12	12	12	12	12	12	12

Arousal) -2: Unconscious/semi-conscious, -1: Reduced awareness, 0: Nomal, 1: Increased alertness, 2: Markedly alert
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Stereotypy) 0: None, 1: Minor, 2: Moderate, 3: Sevear
Gait) U: No/minimal location, 0: Nomal, 1: Slight, 2: Moderate, 3: Markedly
Posture) N: Normal, F: Flattened, H: Hunched
Grooming) 0: None, 1: Occasional bouts (up to four), 2: Numerous (more than four)
Urination) 0: None, 1: Small amount, 2: Moderate amount, 3: Large/excessive amount
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : F0 gestation

Generation : F0 Sex : Female Day : 20 Dose : BTetCA 100 mg/kg Species : Rat

Animal No.	Rearing	Defecation count
2101	5	0
2102	4	0
2103	1	0
2104	6	0
2105	4	0
2106	3	0
2107	2	0
2108	3	0
2109	3	0
2110	3	0
2111	2	0
2112	7	0
n	12	12
Mean	4	0
S.D.	2	0

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : F0 gestation

Generation : F0 Sex : Female Day : 20 Dose : BTetCA 300 mg/kg Species : Rat

Animal No.	Arousal	Convulsion	Abnormal behavior	Stereotypy	Gait	Posture	Grooming	Urination
3101	0	0	0	0	0	N	0	0
3102	0	0	0	0	0	N	0	0
3103	0	0	0	0	0	N	0	0
3104	0	0	0	0	0	N	0	0
3105	0	0	0	0	0	N	0	0
3106	0	0	0	0	0	N	0	0
3107	0	0	0	0	0	N	0	0
3108	0	0	0	0	0	N	0	0
3109	0	0	0	0	0	N	0	1
3110	0	0	0	0	0	N	0	0
3111	0	0	0	0	0	N	0	0
3112	0	0	0	0	0	N	0	0
n	12	12	12	12	12	12	12	12

Arousal) -2: Unconscious/semi-conscious, -1: Reduced awareness, 0: Nomal, 1: Increased alertness, 2: Markedly alert
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Stereotypy) 0: None, 1: Minor, 2: Moderate, 3: Sevear
Gait) U: No/minimal location, 0: Nomal, 1: Slight, 2: Moderate, 3: Markedly
Posture) N: Normal, F: Flattened, H: Hunched
Grooming) 0: None, 1: Occasional bouts (up to four), 2: Numerous (more than four)
Urination) 0: None, 1: Small amount, 2: Moderate amount, 3: Large/excessive amount
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : F0 gestation

Generation : F0 Sex : Female Day : 20 Dose : BTetCA 300 mg/kg Species : Rat

Animal No.	Rearing	Defecation count
3101	4	0
3102	1	0
3103	5	0
3104	3	0
3105	4	0
3106	3	0
3107	2	0
3108	2	0
3109	1	0
3110	6	0
3111	3	0
3112	5	0
n	12	12
Mean	3	0
S.D.	2	0

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : F0 gestation

Generation : F0 Sex : Female Day : 20 Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Arousal	Convulsion	Abnormal behavior	Stereotypy	Gait	Posture	Grooming	Urination
4101	0	0	0	0	0	N	0	1
4102	0	0	0	0	0	N	0	0
4103	0	0	0	0	0	N	0	0
4104	0	0	0	0	0	N	0	0
4105	0	0	0	0	0	N	0	0
4106	0	0	0	0	0	N	0	0
4107	0	0	0	0	0	N	0	0
4108	0	0	0	0	0	N	0	0
4109	0	0	0	0	0	N	0	0
4110	0	0	0	0	0	N	0	0
4111	0	0	0	0	0	N	0	0
4112	0	0	0	0	0	N	0	0
n	12	12	12	12	12	12	12	12

Arousal) -2: Unconscious/semi-conscious, -1: Reduced awareness, 0: Nomal, 1: Increased alertness, 2: Markedly alert
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Stereotypy) 0: None, 1: Minor, 2: Moderate, 3: Sevear
Gait) U: No/minimal location, 0: Nomal, 1: Slight, 2: Moderate, 3: Markedly
Posture) N: Normal, F: Flattened, H: Hunched
Grooming) 0: None, 1: Occasional bouts (up to four), 2: Numerous (more than four)
Urination) 0: None, 1: Small amount, 2: Moderate amount, 3: Large/excessive amount
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Open field observation Period : F0 gestation

Generation : F0 Sex : Female Day : 20 Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Rearing	Defecation count
4101	5	0
4102	5	0
4103	5	0
4104	5	0
4105	2	0
4106	3	2
4107	3	0
4108	5	0
4109	7	0
4110	5	0
4111	4	0
4112	3	0
n	12	12
Mean	4	0
S.D.	1	1

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : F0 lactation

Generation : F0 Sex : Female Day : 4 Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Arousal	Convulsion	Abnormal behavior	Stereotypy	Gait	Posture	Grooming	Urination
1101	0	0	0	0	0	N	0	0
1102	0	0	0	0	0	N	0	0
1103	0	0	0	0	0	N	0	0
1104	0	0	0	0	0	N	0	0
1105	0	0	0	0	0	N	0	0
1106	0	0	0	0	0	N	0	0
1107	0	0	0	0	0	N	0	0
1108	0	0	0	0	0	N	0	0
1109	0	0	0	0	0	N	0	1
1110	0	0	0	0	0	N	0	0
1111	0	0	0	0	0	N	0	0
1112	0	0	0	0	0	N	0	0
n	12	12	12	12	12	12	12	12

Arousal) -2: Unconscious/semi-conscious, -1: Reduced awareness, 0: Nomal, 1: Increased alertness, 2: Markedly alert
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Stereotypy) 0: None, 1: Minor, 2: Moderate, 3: Sevear
Gait) U: No/minimal location, 0: Nomal, 1: Slight, 2: Moderate, 3: Markedly
Posture) N: Normal, F: Flattened, H: Hunched
Grooming) 0: None, 1: Occasional bouts (up to four), 2: Numerous (more than four)
Urination) 0: None, 1: Small amount, 2: Moderate amount, 3: Large/excessive amount
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Open field observation Period : F0 lactation

Generation : F0 Sex : Female Day : 4 Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Rearing	Defecation count
1101	2	0
1102	5	0
1103	2	0
1104	7	0
1105	6	0
1106	5	0
1107	7	0
1108	6	0
1109	7	0
1110	6	0
1111	6	0
1112	6	0
n	12	12
Mean	5	0
S.D.	2	0

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : F0 lactation

Generation : F0 Sex : Female Day : 4 Dose : BTetCA 100 mg/kg Species : Rat

Animal No.	Arousal	Convulsion	Abnormal behavior	Stereotypy	Gait	Posture	Grooming	Urination
2101	0	0	0	0	0	N	0	0
2102	0	0	0	0	0	N	0	0
2103	0	0	0	0	0	N	0	0
2104	0	0	0	0	0	N	0	0
2105	0	0	0	0	0	N	0	0
2106	0	0	0	0	0	N	0	0
2107	0	0	0	0	0	N	0	0
2108	0	0	0	0	0	N	0	0
2109	0	0	0	0	0	N	0	0
2110	0	0	0	0	0	N	0	0
2111	0	0	0	0	0	N	0	0
2112	0	0	0	0	0	N	0	0
n	12	12	12	12	12	12	12	12

Arousal) -2: Unconscious/semi-conscious, -1: Reduced awareness, 0: Nomal, 1: Increased alertness, 2: Markedly alert
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Stereotypy) 0: None, 1: Minor, 2: Moderate, 3: Sevear
Gait) U: No/minimal location, 0: Nomal, 1: Slight, 2: Moderate, 3: Markedly
Posture) N: Normal, F: Flattened, H: Hunched
Grooming) 0: None, 1: Occasional bouts (up to four), 2: Numerous (more than four)
Urination) 0: None, 1: Small amount, 2: Moderate amount, 3: Large/excessive amount
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Open field observation Period : F0 lactation

Generation : F0 Sex : Female Day : 4 Dose : BTetCA 100 mg/kg Species : Rat

Animal No.	Rearing	Defecation count
2101	4	0
2102	7	0
2103	2	0
2104	7	0
2105	5	0
2106	5	0
2107	5	0
2108	5	0
2109	4	0
2110	9	0
2111	4	0
2112	6	0
n	12	12
Mean	5	0
S.D.	2	0

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : F0 lactation

Generation : F0 Sex : Female Day : 4 Dose : BTetCA 300 mg/kg Species : Rat

Animal No.	Arousal	Convulsion	Abnormal behavior	Stereotypy	Gait	Posture	Grooming	Urination
3101	0	0	0	0	0	N	0	0
3102	0	0	0	0	0	N	0	0
3103	0	0	0	0	0	N	0	0
3104	0	0	0	0	0	N	0	0
3105	0	0	0	0	0	N	0	0
3106	0	0	0	0	0	N	0	0
3107	0	0	0	0	0	N	0	0
3108	0	0	0	0	0	N	0	0
3109	0	0	0	0	0	N	0	0
3110	0	0	0	0	0	N	0	0
3111	0	0	0	0	0	N	0	0
3112	0	0	0	0	0	N	0	0
n	12	12	12	12	12	12	12	12

Arousal) -2: Unconscious/semi-conscious, -1: Reduced awareness, 0: Nomal, 1: Increased alertness, 2: Markedly alert
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Stereotypy) 0: None, 1: Minor, 2: Moderate, 3: Sevear
Gait) U: No/minimal location, 0: Nomal, 1: Slight, 2: Moderate, 3: Markedly
Posture) N: Normal, F: Flattened, H: Hunched
Grooming) 0: None, 1: Occasional bouts (up to four), 2: Numerous (more than four)
Urination) 0: None, 1: Small amount, 2: Moderate amount, 3: Large/excessive amount
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Open field observation Period : F0 lactation

Generation : F0 Sex : Female Day : 4 Dose : BTetCA 300 mg/kg Species : Rat

Animal No.	Rearing	Defecation count
3101	9	0
3102	2	0
3103	7	0
3104	6	0
3105	8	0
3106	2	0
3107	3	0
3108	4	0
3109	8	0
3110	7	0
3111	2	0
3112	6	0
n	12	12
Mean	5	0
S.D.	3	0

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : F0 lactation

Generation : F0 Sex : Female Day : 4 Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Arousal	Convulsion	Abnormal behavior	Stereotypy	Gait	Posture	Grooming	Urination
4101	0	0	0	0	0	N	0	0
4102	0	0	0	0	0	N	0	0
4103	0	0	0	0	0	N	0	0
4104	0	0	0	0	0	N	0	0
4105	0	0	0	0	0	N	0	0
4106	0	0	0	0	0	N	0	0
4107	0	0	0	0	0	N	0	0
4108	0	0	0	0	0	N	0	0
4109	0	0	0	0	0	N	0	0
4110	0	0	0	0	0	N	0	0
4111	0	0	0	0	0	N	0	0
4112	0	0	0	0	0	N	0	0
n	12	12	12	12	12	12	12	12

Arousal) -2: Unconscious/semi-conscious, -1: Reduced awareness, 0: Nomal, 1: Increased alertness, 2: Markedly alert
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Stereotypy) 0: None, 1: Minor, 2: Moderate, 3: Sevear
Gait) U: No/minimal location, 0: Nomal, 1: Slight, 2: Moderate, 3: Markedly
Posture) N: Normal, F: Flattened, H: Hunched
Grooming) 0: None, 1: Occasional bouts (up to four), 2: Numerous (more than four)
Urination) 0: None, 1: Small amount, 2: Moderate amount, 3: Large/excessive amount
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : F0 lactation

Generation : F0 Sex : Female Day : 4 Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Rearing	Defecation count
4101	4	0
4102	9	0
4103	5	0
4104	7	0
4105	6	0
4106	5	0
4107	5	0
4108	4	0
4109	9	0
4110	3	0
4111	6	0
4112	6	0
n	12	12
Mean	6	0
S.D.	2	0

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : Administration

Generation : F0 Sex : Female Week : 1 Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Arousal	Convulsion	Abnormal behavior	Stereotypy	Gait	Posture	Grooming	Urination
5101	0	0	0	0	0	N	0	0
5102	0	0	0	0	0	N	0	0
5103	0	0	0	0	0	N	0	0
5104	0	0	0	0	0	N	0	0
5105	0	0	0	0	0	N	0	0
5106	0	0	0	0	0	N	0	0
5107	0	0	0	0	0	N	0	0
5108	0	0	0	0	0	N	0	0
5109	0	0	0	0	0	N	0	0
5110	0	0	0	0	0	N	0	0
n	10	10	10	10	10	10	10	10

Arousal) -2: Unconscious/semi-conscious, -1: Reduced awareness, 0: Nomal, 1: Increased alertness, 2: Markedly alert
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Stereotypy) 0: None, 1: Minor, 2: Moderate, 3: Sevear
Gait) U: No/minimal location, 0: Nomal, 1: Slight, 2: Moderate, 3: Markedly
Posture) N: Normal, F: Flattened, H: Hunched
Grooming) 0: None, 1: Occasional bouts (up to four), 2: Numerous (more than four)
Urination) 0: None, 1: Small amount, 2: Moderate amount, 3: Large/excessive amount
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : Administration

Generation : F0 Sex : Female Week : 1 Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Rearing	Defecation count
5101	8	0
5102	4	0
5103	5	0
5104	8	0
5105	4	0
5106	11	0
5107	5	0
5108	6	0
5109	8	0
5110	6	0
n	10	10
Mean	7	0
S.D.	2	0

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : Administration

Generation : F0 Sex : Female Week : 1 Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Arousal	Convulsion	Abnormal behavior	Stereotypy	Gait	Posture	Grooming	Urination
6101	0	0	0	0	0	N	0	0
6102	0	0	0	0	0	N	0	0
6103	0	0	0	0	0	N	0	0
6104	0	0	0	0	0	N	0	0
6105	0	0	0	0	0	N	0	0
6106	0	0	0	0	0	N	0	0
6107	0	0	0	0	0	N	0	0
6108	0	0	0	0	0	N	0	0
6109	0	0	0	0	0	N	0	0
6110	0	0	0	0	0	N	0	0
n	10	10	10	10	10	10	10	10

Arousal) -2: Unconscious/semi-conscious, -1: Reduced awareness, 0: Nomal, 1: Increased alertness, 2: Markedly alert
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Stereotypy) 0: None, 1: Minor, 2: Moderate, 3: Sevear
Gait) U: No/minimal location, 0: Nomal, 1: Slight, 2: Moderate, 3: Markedly
Posture) N: Normal, F: Flattened, H: Hunched
Grooming) 0: None, 1: Occasional bouts (up to four), 2: Numerous (more than four)
Urination) 0: None, 1: Small amount, 2: Moderate amount, 3: Large/excessive amount
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : Administration

Generation : F0 Sex : Female Week : 1 Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Rearing	Defecation count
6101	8	0
6102	3	0
6103	6	0
6104	6	0
6105	5	0
6106	5	0
6107	4	0
6108	9	0
6109	10	0
6110	4	0
n	10	10
Mean	6	0
S.D.	2	0

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : Administration

Generation : F0 Sex : Female Week : 2 Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Arousal	Convulsion	Abnormal behavior	Stereotypy	Gait	Posture	Grooming	Urination
5101	0	0	0	0	0	N	0	0
5102	0	0	0	0	0	N	0	0
5103	0	0	0	0	0	N	0	0
5104	0	0	0	0	0	N	0	0
5105	0	0	0	0	0	N	0	0
5106	0	0	0	0	0	N	0	0
5107	0	0	0	0	0	N	0	0
5108	0	0	0	0	0	N	0	0
5109	0	0	0	0	0	N	0	0
5110	0	0	0	0	0	N	0	0
n	10	10	10	10	10	10	10	10

Arousal) -2: Unconscious/semi-conscious, -1: Reduced awareness, 0: Nomal, 1: Increased alertness, 2: Markedly alert
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Stereotypy) 0: None, 1: Minor, 2: Moderate, 3: Sevear
Gait) U: No/minimal location, 0: Nomal, 1: Slight, 2: Moderate, 3: Markedly
Posture) N: Normal, F: Flattened, H: Hunched
Grooming) 0: None, 1: Occasional bouts (up to four), 2: Numerous (more than four)
Urination) 0: None, 1: Small amount, 2: Moderate amount, 3: Large/excessive amount
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : Administration

Generation : F0 Sex : Female Week : 2 Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Rearing	Defecation count
5101	6	0
5102	9	0
5103	6	0
5104	8	0
5105	7	0
5106	7	0
5107	6	0
5108	8	0
5109	9	0
5110	7	0
n	10	10
Mean	7	0
S.D.	1	0

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : Administration

Generation : F0 Sex : Female Week : 2 Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Arousal	Convulsion	Abnormal behavior	Stereotypy	Gait	Posture	Grooming	Urination
6101	0	0	0	0	0	N	0	0
6102	0	0	0	0	0	N	0	0
6103	0	0	0	0	0	N	0	0
6104	0	0	0	0	0	N	0	0
6105	0	0	0	0	0	N	0	0
6106	0	0	0	0	0	N	0	0
6107	0	0	0	0	0	N	0	0
6108	0	0	0	0	0	N	0	0
6109	0	0	0	0	0	N	0	0
6110	0	0	0	0	0	N	0	1
n	10	10	10	10	10	10	10	10

Arousal) -2: Unconscious/semi-conscious, -1: Reduced awareness, 0: Nomal, 1: Increased alertness, 2: Markedly alert
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Stereotypy) 0: None, 1: Minor, 2: Moderate, 3: Sevear
Gait) U: No/minimal location, 0: Nomal, 1: Slight, 2: Moderate, 3: Markedly
Posture) N: Normal, F: Flattened, H: Hunched
Grooming) 0: None, 1: Occasional bouts (up to four), 2: Numerous (more than four)
Urination) 0: None, 1: Small amount, 2: Moderate amount, 3: Large/excessive amount
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : Administration

Generation : F0 Sex : Female Week : 2 Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Rearing	Defecation count
6101	4	0
6102	6	0
6103	7	0
6104	7	0
6105	9	0
6106	6	0
6107	9	0
6108	10	0
6109	7	0
6110	7	0
n	10	10
Mean	7	0
S.D.	2	0

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : Administration

Generation : F0 Sex : Female Week : 3 Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Arousal	Convulsion	Abnormal behavior	Stereotypy	Gait	Posture	Grooming	Urination
5101	0	0	0	0	0	N	0	0
5102	0	0	0	0	0	N	0	0
5103	0	0	0	0	0	N	0	0
5104	0	0	0	0	0	N	0	0
5105	0	0	0	0	0	N	0	0
5106	0	0	0	0	0	N	0	0
5107	0	0	0	0	0	N	0	0
5108	0	0	0	0	0	N	0	0
5109	0	0	0	0	0	N	0	0
5110	0	0	0	0	0	N	0	1
n	10	10	10	10	10	10	10	10

Arousal) -2: Unconscious/semi-conscious, -1: Reduced awareness, 0: Nomal, 1: Increased alertness, 2: Markedly alert
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Stereotypy) 0: None, 1: Minor, 2: Moderate, 3: Sevear
Gait) U: No/minimal location, 0: Nomal, 1: Slight, 2: Moderate, 3: Markedly
Posture) N: Normal, F: Flattened, H: Hunched
Grooming) 0: None, 1: Occasional bouts (up to four), 2: Numerous (more than four)
Urination) 0: None, 1: Small amount, 2: Moderate amount, 3: Large/excessive amount
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : Administration

Generation : F0 Sex : Female Week : 3 Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Rearing	Defecation count
5101	5	0
5102	9	0
5103	11	0
5104	8	0
5105	13	0
5106	10	0
5107	8	0
5108	6	0
5109	7	0
5110	5	0
n	10	10
Mean	8	0
S.D.	3	0

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : Administration

Generation : F0 Sex : Female Week : 3 Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Arousal	Convulsion	Abnormal behavior	Stereotypy	Gait	Posture	Grooming	Urination
6101	0	0	0	0	0	N	0	0
6102	0	0	0	0	0	N	0	0
6103	0	0	0	0	0	N	0	0
6104	0	0	0	0	0	N	0	0
6105	0	0	0	0	0	N	0	0
6106	0	0	0	0	0	N	0	0
6107	0	0	0	0	0	N	0	0
6108	0	0	0	0	0	N	0	0
6109	0	0	0	0	0	N	0	0
6110	0	0	0	0	0	N	0	0
n	10	10	10	10	10	10	10	10

Arousal) -2: Unconscious/semi-conscious, -1: Reduced awareness, 0: Nomal, 1: Increased alertness, 2: Markedly alert
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Stereotypy) 0: None, 1: Minor, 2: Moderate, 3: Sevear
Gait) U: No/minimal location, 0: Nomal, 1: Slight, 2: Moderate, 3: Markedly
Posture) N: Normal, F: Flattened, H: Hunched
Grooming) 0: None, 1: Occasional bouts (up to four), 2: Numerous (more than four)
Urination) 0: None, 1: Small amount, 2: Moderate amount, 3: Large/excessive amount
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : Administration

Generation : F0 Sex : Female Week : 3 Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Rearing	Defecation count
6101	8	0
6102	6	0
6103	6	0
6104	5	0
6105	10	0
6106	6	0
6107	9	0
6108	10	0
6109	9	0
6110	5	0
n	10	10
Mean	7	0
S.D.	2	0

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : Administration

Generation : F0 Sex : Female Week : 4 Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Arousal	Convulsion	Abnormal behavior	Stereotypy	Gait	Posture	Grooming	Urination
5101	0	0	0	0	0	N	0	0
5102	0	0	0	0	0	N	0	0
5103	0	0	0	0	0	N	0	0
5104	0	0	0	0	0	N	0	0
5105	0	0	0	0	0	N	0	0
5106	0	0	0	0	0	N	0	0
5107	0	0	0	0	0	N	0	0
5108	0	0	0	0	0	N	0	0
5109	0	0	0	0	0	N	0	0
5110	0	0	0	0	0	N	0	0
n	10	10	10	10	10	10	10	10

Arousal) -2: Unconscious/semi-conscious, -1: Reduced awareness, 0: Nomal, 1: Increased alertness, 2: Markedly alert
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Stereotypy) 0: None, 1: Minor, 2: Moderate, 3: Sevear
Gait) U: No/minimal location, 0: Nomal, 1: Slight, 2: Moderate, 3: Markedly
Posture) N: Normal, F: Flattened, H: Hunched
Grooming) 0: None, 1: Occasional bouts (up to four), 2: Numerous (more than four)
Urination) 0: None, 1: Small amount, 2: Moderate amount, 3: Large/excessive amount
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : Administration

Generation : F0 Sex : Female Week : 4 Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Rearing	Defecation count
5101	5	0
5102	9	0
5103	5	0
5104	8	0
5105	8	0
5106	15	0
5107	9	0
5108	9	0
5109	4	0
5110	10	0
n	10	10
Mean	8	0
S.D.	3	0

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : Administration

Generation : F0 Sex : Female Week : 4 Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Arousal	Convulsion	Abnormal behavior	Stereotypy	Gait	Posture	Grooming	Urination
6101	0	0	0	0	0	N	0	0
6102	0	0	0	0	0	N	0	0
6103	0	0	0	0	0	N	0	0
6104	0	0	0	0	0	N	0	0
6105	0	0	0	0	0	N	0	0
6106	0	0	0	0	0	N	0	0
6107	0	0	0	0	0	N	0	0
6108	0	0	0	0	0	N	0	0
6109	0	0	0	0	0	N	0	0
6110	0	0	0	0	0	N	0	0
n	10	10	10	10	10	10	10	10

Arousal) -2: Unconscious/semi-conscious, -1: Reduced awareness, 0: Nomal, 1: Increased alertness, 2: Markedly alert
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Stereotypy) 0: None, 1: Minor, 2: Moderate, 3: Sevear
Gait) U: No/minimal location, 0: Nomal, 1: Slight, 2: Moderate, 3: Markedly
Posture) N: Normal, F: Flattened, H: Hunched
Grooming) 0: None, 1: Occasional bouts (up to four), 2: Numerous (more than four)
Urination) 0: None, 1: Small amount, 2: Moderate amount, 3: Large/excessive amount
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : Administration

Generation : F0 Sex : Female Week : 4 Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Rearing	Defecation count
6101	9	0
6102	7	0
6103	12	0
6104	8	0
6105	5	0
6106	5	0
6107	11	0
6108	8	0
6109	7	0
6110	6	0
n	10	10
Mean	8	0
S.D.	2	0

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : Administration

Generation : F0 Sex : Female Week : 5 Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Arousal	Convulsion	Abnormal behavior	Stereotypy	Gait	Posture	Grooming	Urination
5101	0	0	0	0	0	N	0	0
5102	0	0	0	0	0	N	0	0
5103	0	0	0	0	0	N	0	0
5104	0	0	0	0	0	N	0	0
5105	0	0	0	0	0	N	0	0
5106	0	0	0	0	0	N	0	0
5107	0	0	0	0	0	N	0	0
5108	0	0	0	0	0	N	0	0
5109	0	0	0	0	0	N	0	0
5110	0	0	0	0	0	N	0	0
n	10	10	10	10	10	10	10	10

Arousal) -2: Unconscious/semi-conscious, -1: Reduced awareness, 0: Nomal, 1: Increased alertness, 2: Markedly alert
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Stereotypy) 0: None, 1: Minor, 2: Moderate, 3: Sevear
Gait) U: No/minimal location, 0: Nomal, 1: Slight, 2: Moderate, 3: Markedly
Posture) N: Normal, F: Flattened, H: Hunched
Grooming) 0: None, 1: Occasional bouts (up to four), 2: Numerous (more than four)
Urination) 0: None, 1: Small amount, 2: Moderate amount, 3: Large/excessive amount
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : Administration

Generation : F0 Sex : Female Week : 5 Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Rearing	Defecation count
5101	9	0
5102	8	0
5103	10	0
5104	10	0
5105	7	0
5106	9	0
5107	6	0
5108	11	0
5109	6	0
5110	8	0
n	10	10
Mean	8	0
S.D.	2	0

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : Administration

Generation : F0 Sex : Female Week : 5 Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Arousal	Convulsion	Abnormal behavior	Stereotypy	Gait	Posture	Grooming	Urination
6101	0	0	0	0	0	N	0	0
6102	0	0	0	0	0	N	0	0
6103	0	0	0	0	0	N	0	0
6104	0	0	0	0	0	N	0	0
6105	0	0	0	0	0	N	0	0
6106	0	0	0	0	0	N	0	0
6107	0	0	0	0	0	N	0	0
6108	0	0	0	0	0	N	0	0
6109	0	0	0	0	0	N	0	0
6110	0	0	0	0	0	N	0	0
n	10	10	10	10	10	10	10	10

Arousal) -2: Unconscious/semi-conscious, -1: Reduced awareness, 0: Nomal, 1: Increased alertness, 2: Markedly alert
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Stereotypy) 0: None, 1: Minor, 2: Moderate, 3: Sevear
Gait) U: No/minimal location, 0: Nomal, 1: Slight, 2: Moderate, 3: Markedly
Posture) N: Normal, F: Flattened, H: Hunched
Grooming) 0: None, 1: Occasional bouts (up to four), 2: Numerous (more than four)
Urination) 0: None, 1: Small amount, 2: Moderate amount, 3: Large/excessive amount
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : Administration

Generation : F0 Sex : Female Week : 5 Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Rearing	Defecation count
6101	8	0
6102	7	0
6103	7	0
6104	7	0
6105	9	0
6106	7	0
6107	14	0
6108	8	0
6109	8	0
6110	5	0
n	10	10
Mean	8	0
S.D.	2	0

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : Administration

Generation : F0 Sex : Female Week : 6 Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Arousal	Convulsion	Abnormal behavior	Stereotypy	Gait	Posture	Grooming	Urination
5101	0	0	0	0	0	N	0	0
5102	0	0	0	0	0	N	0	0
5103	0	0	0	0	0	N	0	0
5104	0	0	0	0	0	N	0	0
5105	0	0	0	0	0	N	0	0
5106	0	0	0	0	0	N	0	0
5107	0	0	0	0	0	N	0	0
5108	0	0	0	0	0	N	0	0
5109	0	0	0	0	0	N	0	0
5110	0	0	0	0	0	N	0	0
n	10	10	10	10	10	10	10	10

Arousal) -2: Unconscious/semi-conscious, -1: Reduced awareness, 0: Nomal, 1: Increased alertness, 2: Markedly alert
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Stereotypy) 0: None, 1: Minor, 2: Moderate, 3: Sevear
Gait) U: No/minimal location, 0: Nomal, 1: Slight, 2: Moderate, 3: Markedly
Posture) N: Normal, F: Flattened, H: Hunched
Grooming) 0: None, 1: Occasional bouts (up to four), 2: Numerous (more than four)
Urination) 0: None, 1: Small amount, 2: Moderate amount, 3: Large/excessive amount
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : Administration

Generation : F0 Sex : Female Week : 6 Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Rearing	Defecation count
5101	13	0
5102	16	0
5103	12	0
5104	8	0
5105	7	0
5106	11	0
5107	6	0
5108	6	0
5109	7	0
5110	8	0
n	10	10
Mean	9	0
S.D.	3	0

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : Administration

Generation : F0 Sex : Female Week : 6 Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Arousal	Convulsion	Abnormal behavior	Stereotypy	Gait	Posture	Grooming	Urination
6101	0	0	0	0	0	N	0	0
6102	0	0	0	0	0	N	0	0
6103	0	0	0	0	0	N	0	0
6104	0	0	0	0	0	N	0	0
6105	0	0	0	0	0	N	0	0
6106	0	0	0	0	0	N	0	0
6107	0	0	0	0	0	N	0	0
6108	0	0	0	0	0	N	0	0
6109	0	0	0	0	0	N	0	0
6110	0	0	0	0	0	N	0	0
n	10	10	10	10	10	10	10	10

Arousal) -2: Unconscious/semi-conscious, -1: Reduced awareness, 0: Nomal, 1: Increased alertness, 2: Markedly alert
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Stereotypy) 0: None, 1: Minor, 2: Moderate, 3: Sevear
Gait) U: No/minimal location, 0: Nomal, 1: Slight, 2: Moderate, 3: Markedly
Posture) N: Normal, F: Flattened, H: Hunched
Grooming) 0: None, 1: Occasional bouts (up to four), 2: Numerous (more than four)
Urination) 0: None, 1: Small amount, 2: Moderate amount, 3: Large/excessive amount
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : Administration

Generation : F0 Sex : Female Week : 6 Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Rearing	Defecation count
6101	10	0
6102	6	0
6103	12	0
6104	6	0
6105	8	0
6106	5	0
6107	9	0
6108	10	0
6109	7	0
6110	5	0
n	10	10
Mean	8	0
S.D.	2	0

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : Recovery

Generation : F0 Sex : Male Week : 1 Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Arousal	Convulsion	Abnormal behavior	Stereotypy	Gait	Posture	Grooming	Urination
1008	0	0	0	0	0	N	0	1
1009	0	0	0	0	0	N	0	0
1010	0	0	0	0	0	N	0	0
1011	0	0	0	0	0	N	0	0
1012	0	0	0	0	0	N	0	0
n	5	5	5	5	5	5	5	5

Arousal) -2: Unconscious/semi-conscious, -1: Reduced awareness, 0: Nomal, 1: Increased alertness, 2: Markedly alert
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Stereotypy) 0: None, 1: Minor, 2: Moderate, 3: Sevear
Gait) U: No/minimal location, 0: Nomal, 1: Slight, 2: Moderate, 3: Markedly
Posture) N: Normal, F: Flattened, H: Hunched
Grooming) 0: None, 1: Occasional bouts (up to four), 2: Numerous (more than four)
Urination) 0: None, 1: Small amount, 2: Moderate amount, 3: Large/excessive amount
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : Recovery

Generation : F0 Sex : Male Week : 1 Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Rearing	Defecation count
1008	5	0
1009	6	0
1010	4	0
1011	5	0
1012	4	0
n	5	5
Mean	5	0
S.D.	1	0

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : Recovery

Generation : F0 Sex : Male Week : 1 Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Arousal	Convulsion	Abnormal behavior	Stereotypy	Gait	Posture	Grooming	Urination
4008	0	0	0	0	0	N	0	0
4009	0	0	0	0	0	N	0	0
4010	0	0	0	0	0	N	0	0
4011	0	0	0	0	0	N	0	0
4012	0	0	0	0	0	N	0	0
n	5	5	5	5	5	5	5	5

Arousal) -2: Unconscious/semi-conscious, -1: Reduced awareness, 0: Nomal, 1: Increased alertness, 2: Markedly alert
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Stereotypy) 0: None, 1: Minor, 2: Moderate, 3: Sevear
Gait) U: No/minimal location, 0: Nomal, 1: Slight, 2: Moderate, 3: Markedly
Posture) N: Normal, F: Flattened, H: Hunched
Grooming) 0: None, 1: Occasional bouts (up to four), 2: Numerous (more than four)
Urination) 0: None, 1: Small amount, 2: Moderate amount, 3: Large/excessive amount
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : Recovery

Generation : F0 Sex : Male Week : 1 Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Rearing	Defecation count
4008	1	0
4009	6	0
4010	5	0
4011	2	0
4012	6	0
n	5	5
Mean	4	0
S.D.	2	0

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : Recovery

Generation : F0 Sex : Male Week : 2 Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Arousal	Convulsion	Abnormal behavior	Stereotypy	Gait	Posture	Grooming	Urination
1008	0	0	0	0	0	N	0	0
1009	0	0	0	0	0	N	0	0
1010	0	0	0	0	0	N	0	0
1011	0	0	0	0	0	N	0	1
1012	0	0	0	0	0	N	0	0
n	5	5	5	5	5	5	5	5

Arousal) -2: Unconscious/semi-conscious, -1: Reduced awareness, 0: Nomal, 1: Increased alertness, 2: Markedly alert
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Stereotypy) 0: None, 1: Minor, 2: Moderate, 3: Sevear
Gait) U: No/minimal location, 0: Nomal, 1: Slight, 2: Moderate, 3: Markedly
Posture) N: Normal, F: Flattened, H: Hunched
Grooming) 0: None, 1: Occasional bouts (up to four), 2: Numerous (more than four)
Urination) 0: None, 1: Small amount, 2: Moderate amount, 3: Large/excessive amount
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : Recovery

Generation : F0 Sex : Male Week : 2 Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Rearing	Defecation count
1008	6	0
1009	4	0
1010	3	0
1011	6	0
1012	6	0
n	5	5
Mean	5	0
S.D.	1	0

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : Recovery

Generation : F0 Sex : Male Week : 2 Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Arousal	Convulsion	Abnormal behavior	Stereotypy	Gait	Posture	Grooming	Urination
4008	0	0	0	0	0	N	0	0
4009	0	0	0	0	0	N	0	0
4010	0	0	0	0	0	N	0	1
4011	0	0	0	0	0	N	0	0
4012	0	0	0	0	0	N	0	0
n	5	5	5	5	5	5	5	5

Arousal) -2: Unconscious/semi-conscious, -1: Reduced awareness, 0: Nomal, 1: Increased alertness, 2: Markedly alert
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Stereotypy) 0: None, 1: Minor, 2: Moderate, 3: Sevear
Gait) U: No/minimal location, 0: Nomal, 1: Slight, 2: Moderate, 3: Markedly
Posture) N: Normal, F: Flattened, H: Hunched
Grooming) 0: None, 1: Occasional bouts (up to four), 2: Numerous (more than four)
Urination) 0: None, 1: Small amount, 2: Moderate amount, 3: Large/excessive amount
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : Recovery

Generation : F0 Sex : Male Week : 2 Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Rearing	Defecation count
4008	4	0
4009	8	0
4010	7	0
4011	5	0
4012	3	0
n	5	5
Mean	5	0
S.D.	2	0

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : Recovery

Generation : F0 Sex : Female Week : 1 Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Arousal	Convulsion	Abnormal behavior	Stereotypy	Gait	Posture	Grooming	Urination
5106	0	0	0	0	0	N	0	0
5107	0	0	0	0	0	N	0	0
5108	0	0	0	0	0	N	0	0
5109	0	0	0	0	0	N	0	0
5110	0	0	0	0	0	N	0	0
n	5	5	5	5	5	5	5	5

Arousal) -2: Unconscious/semi-conscious, -1: Reduced awareness, 0: Nomal, 1: Increased alertness, 2: Markedly alert
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Stereotypy) 0: None, 1: Minor, 2: Moderate, 3: Sevear
Gait) U: No/minimal location, 0: Nomal, 1: Slight, 2: Moderate, 3: Markedly
Posture) N: Normal, F: Flattened, H: Hunched
Grooming) 0: None, 1: Occasional bouts (up to four), 2: Numerous (more than four)
Urination) 0: None, 1: Small amount, 2: Moderate amount, 3: Large/excessive amount
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : Recovery

Generation : F0 Sex : Female Week : 1 Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Rearing	Defecation count
5106	10	0
5107	6	0
5108	8	0
5109	8	0
5110	5	0
n	5	5
Mean	7	0
S.D.	2	0

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : Recovery

Generation : F0 Sex : Female Week : 1 Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Arousal	Convulsion	Abnormal behavior	Stereotypy	Gait	Posture	Grooming	Urination
6106	0	0	0	0	0	N	0	0
6107	0	0	0	0	0	N	0	0
6108	0	0	0	0	0	N	0	0
6109	0	0	0	0	0	N	0	0
6110	0	0	0	0	0	N	0	0
n	5	5	5	5	5	5	5	5

Arousal) -2: Unconscious/semi-conscious, -1: Reduced awareness, 0: Nomal, 1: Increased alertness, 2: Markedly alert
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Stereotypy) 0: None, 1: Minor, 2: Moderate, 3: Sevear
Gait) U: No/minimal location, 0: Nomal, 1: Slight, 2: Moderate, 3: Markedly
Posture) N: Normal, F: Flattened, H: Hunched
Grooming) 0: None, 1: Occasional bouts (up to four), 2: Numerous (more than four)
Urination) 0: None, 1: Small amount, 2: Moderate amount, 3: Large/excessive amount
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : Recovery

Generation : F0 Sex : Female Week : 1 Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Rearing	Defecation count
6106	7	0
6107	10	0
6108	9	0
6109	9	0
6110	6	0
n	5	5
Mean	8	0
S.D.	2	0

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : Recovery

Generation : F0 Sex : Female Week : 2 Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Arousal	Convulsion	Abnormal behavior	Stereotypy	Gait	Posture	Grooming	Urination
5106	0	0	0	0	0	N	0	0
5107	0	0	0	0	0	N	0	0
5108	0	0	0	0	0	N	0	0
5109	0	0	0	0	0	N	0	0
5110	0	0	0	0	0	N	0	0
n	5	5	5	5	5	5	5	5

Arousal) -2: Unconscious/semi-conscious, -1: Reduced awareness, 0: Nomal, 1: Increased alertness, 2: Markedly alert
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Stereotypy) 0: None, 1: Minor, 2: Moderate, 3: Sevear
Gait) U: No/minimal location, 0: Nomal, 1: Slight, 2: Moderate, 3: Markedly
Posture) N: Normal, F: Flattened, H: Hunched
Grooming) 0: None, 1: Occasional bouts (up to four), 2: Numerous (more than four)
Urination) 0: None, 1: Small amount, 2: Moderate amount, 3: Large/excessive amount
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Open field observation Period : Recovery

Generation : F0 Sex : Female Week : 2 Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Rearing	Defecation count
5106	10	0
5107	9	0
5108	9	0
5109	7	0
5110	1	0
n	5	5
Mean	7	0
S.D.	4	0

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : Recovery

Generation : F0 Sex : Female Week : 2 Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Arousal	Convulsion	Abnormal behavior	Stereotypy	Gait	Posture	Grooming	Urination
6106	0	0	0	0	0	N	0	0
6107	0	0	0	0	0	N	0	0
6108	0	0	0	0	0	N	0	0
6109	0	0	0	0	0	N	0	0
6110	0	0	0	0	0	N	0	0
n	5	5	5	5	5	5	5	5

Arousal) -2: Unconscious/semi-conscious, -1: Reduced awareness, 0: Nomal, 1: Increased alertness, 2: Markedly alert
Convulsion) 0: None, 1: Minor, 2: Moderate, 3: Severe
Abnormal behavior) 0: None, 1: Minor, 2: Moderate, 3: Severe
Stereotypy) 0: None, 1: Minor, 2: Moderate, 3: Sevear
Gait) U: No/minimal location, 0: Nomal, 1: Slight, 2: Moderate, 3: Markedly
Posture) N: Normal, F: Flattened, H: Hunched
Grooming) 0: None, 1: Occasional bouts (up to four), 2: Numerous (more than four)
Urination) 0: None, 1: Small amount, 2: Moderate amount, 3: Large/excessive amount
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Open field observation

Period : Recovery

Generation : F0 Sex : Female Week : 2 Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Rearing	Defecation count
6106	5	0
6107	9	0
6108	9	0
6109	6	0
6110	4	0
n	5	5
Mean	7	0
S.D.	2	0

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Manipulative test

Period : F0 mating

Generation : F0 Sex : Male Week : 6 Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Auditory response	Approach response	Touch response	Tail pinch response	Pupillary reflex
1008	0	0	0	0	P
1009	0	0	0	0	P
1010	0	0	0	0	P
1011	0	0	0	0	P
1012	0	0	0	0	P
n	5	5	5	5	5

Auditory response) -2: None, -1: Weak, 0: Normal, 1: Exaggerate
Approach response) -1: No reaction/ignores, 0: Normal, 1: Abnormality fearful/aggressive reaction
Touch response) -1: No reaction/ignores, 0: Normal, 1: Abnormality fearful/aggressive reaction
Tail pinch response) -2: None, -1: Weak, 0: Normal, 1: Exaggerate
Pupillary reflex) P: Pass, both, F: Failed, neither, L: Left pupil responds, R: Right pupil responds
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Manipulative test Period : F0 mating
Generation : F0 Sex : Male Week : 6 Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Aerial right-ing reflex	Landing foot splay mm
1008	0	105
1009	0	78
1010	0	116
1011	0	71
1012	0	112
n	5	5
Mean	0	96
S.D.	0	21

Aerial righting reflex) Total score
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Manipulative test

Period : F0 mating

Generation : F0 Sex : Male Week : 6 Dose : BTetCA 100 mg/kg Species : Rat

Animal No.	Auditory response	Approach response	Touch response	Tail pinch response	Pupillary reflex
2008	0	0	0	0	P
2009	0	0	0	0	P
2010	0	0	0	0	P
2011	0	0	0	0	P
2012	0	0	0	0	P
n	5	5	5	5	5

Auditory response) -2: None, -1: Weak, 0: Normal, 1: Exaggerate
Approach response) -1: No reaction/ignores, 0: Normal, 1: Abnormality fearful/aggressive reaction
Touch response) -1: No reaction/ignores, 0: Normal, 1: Abnormality fearful/aggressive reaction
Tail pinch response) -2: None, -1: Weak, 0: Normal, 1: Exaggerate
Pupillary reflex) P: Pass, both, F: Failed, neither, L: Left pupil responds, R: Right pupil responds
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Manipulative test Period : F0 mating
Generation : F0 Sex : Male Week : 6 Dose : BTetCA 100 mg/kg Species : Rat

Animal No.	Aerial righting reflex	Landing foot splay mm
2008	0	71
2009	0	102
2010	0	82
2011	0	80
2012	0	118
n	5	5
Mean	0	91
S.D.	0	19

Aerial righting reflex) Total score
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Manipulative test

Period : F0 mating

Generation : F0 Sex : Male Week : 6 Dose : BTetCA 300 mg/kg Species : Rat

Animal No.	Auditory response	Approach response	Touch response	Tail pinch response	Pupillary reflex
3008	0	0	0	0	P
3009	0	0	0	0	P
3010	0	0	0	0	P
3011	0	0	0	0	P
3012	0	0	0	0	P
n	5	5	5	5	5

Auditory response) -2: None, -1: Weak, 0: Normal, 1: Exaggerate
Approach response) -1: No reaction/ignores, 0: Normal, 1: Abnormality fearful/aggressive reaction
Touch response) -1: No reaction/ignores, 0: Normal, 1: Abnormality fearful/aggressive reaction
Tail pinch response) -2: None, -1: Weak, 0: Normal, 1: Exaggerate
Pupillary reflex) P: Pass, both, F: Failed, neither, L: Left pupil responds, R: Right pupil responds
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Manipulative test

Generation : F0 Sex : Male Week : 6 Period : F0 mating

Dose : BTetCA 300 mg/kg Species : Rat

Animal No.	Aerial righting reflex	Landing foot splay mm
3008	0	82
3009	0	82
3010	0	106
3011	0	108
3012	0	100
n	5	5
Mean	0	96
S.D.	0	13

Aerial righting reflex) Total score

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Manipulative test

Period : F0 mating

Generation : F0 Sex : Male Week : 6 Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Auditory response	Approach response	Touch response	Tail pinch response	Pupillary reflex
4008	0	0	0	0	P
4009	0	0	0	0	P
4010	0	0	0	0	P
4011	0	0	0	0	P
4012	0	0	0	0	P
n	5	5	5	5	5

Auditory response) -2: None, -1: Weak, 0: Normal, 1: Exaggerate
Approach response) -1: No reaction/ignores, 0: Normal, 1: Abnormality fearful/aggressive reaction
Touch response) -1: No reaction/ignores, 0: Normal, 1: Abnormality fearful/aggressive reaction
Tail pinch response) -2: None, -1: Weak, 0: Normal, 1: Exaggerate
Pupillary reflex) P: Pass, both, F: Failed, neither, L: Left pupil responds, R: Right pupil responds
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Manipulative test

Generation : F0 Sex : Male Week : 6 Period : F0 mating Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Aerial righting reflex	Landing foot splay mm
4008	0	86
4009	0	78
4010	0	86
4011	0	74
4012	0	102
n	5	5
Mean	0	85
S.D.	0	11

Aerial righting reflex) Total score

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Manipulative test

Period : F0 lactation

Generation : F0 Sex : Female Day : 4 Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Auditory response	Approach response	Touch response	Tail pinch response	Pupillary reflex
1104	0	0	0	0	P
1105	0	0	0	0	P
1107	0	0	0	0	P
1109	0	0	0	0	P
1111	0	0	0	0	P
n	5	5	5	5	5

Auditory response) -2: None, -1: Weak, 0: Normal, 1: Exaggerate
Approach response) -1: No reaction/ignores, 0: Normal, 1: Abnormality fearful/aggressive reaction
Touch response) -1: No reaction/ignores, 0: Normal, 1: Abnormality fearful/aggressive reaction
Tail pinch response) -2: None, -1: Weak, 0: Normal, 1: Exaggerate
Pupillary reflex) P: Pass, both, F: Failed, neither, L: Left pupil responds, R: Right pupil responds
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Manipulative test

Generation : F0 Sex : Female Day : 4 Period : F0 lactation Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Aerial righting reflex	Landing foot splay mm
1104	0	80
1105	0	40
1107	0	65
1109	0	100
1111	0	54
n	5	5
Mean	0	68
S.D.	0	23

Aerial righting reflex) Total score

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Manipulative test

Period : F0 lactation

Generation : F0 Sex : Female Day : 4 Dose : BTetCA 100 mg/kg Species : Rat

Animal No.	Auditory response	Approach response	Touch response	Tail pinch response	Pupillary reflex
2104	0	0	0	0	P
2105	0	0	0	0	P
2106	0	0	0	0	P
2109	0	0	0	0	P
2110	0	0	0	0	P
n	5	5	5	5	5

Auditory response) -2: None, -1: Weak, 0: Normal, 1: Exaggerate
Approach response) -1: No reaction/ignores, 0: Normal, 1: Abnormality fearful/aggressive reaction
Touch response) -1: No reaction/ignores, 0: Normal, 1: Abnormality fearful/aggressive reaction
Tail pinch response) -2: None, -1: Weak, 0: Normal, 1: Exaggerate
Pupillary reflex) P: Pass, both, F: Failed, neither, L: Left pupil responds, R: Right pupil responds
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Manipulative test

Generation : F0 Sex : Female Day : 4 Period : F0 lactation

Dose : BTetCA 100 mg/kg Species : Rat

Animal No.	Aerial right-ing reflex	Landing foot splay mm
2104	0	65
2105	0	74
2106	0	52
2109	0	54
2110	0	72
n	5	5
Mean	0	63
S.D.	0	10

Aerial righting reflex) Total score

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 2 - 301 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Manipulative test Period : F0 lactation

Generation : F0 Sex : Female Day : 4 Dose : BTetCA 300 mg/kg Species : Rat

Animal No.	Auditory response	Approach response	Touch response	Tail pinch response	Pupillary reflex
3101	0	0	0	0	P
3102	0	0	0	0	P
3104	0	0	0	0	P
3105	0	0	0	0	P
3109	0	0	0	0	P
n	5	5	5	5	5

Auditory response) -2: None, -1: Weak, 0: Normal, 1: Exaggerate
Approach response) -1: No reaction/ignores, 0: Normal, 1: Abnormality fearful/aggressive reaction
Touch response) -1: No reaction/ignores, 0: Normal, 1: Abnormality fearful/aggressive reaction
Tail pinch response) -2: None, -1: Weak, 0: Normal, 1: Exaggerate
Pupillary reflex) P: Pass, both, F: Failed, neither, L: Left pupil responds, R: Right pupil responds
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Manipulative test

Generation : F0 Sex : Female Day : 4 Period : F0 lactation

Dose : BTetCA 300 mg/kg Species : Rat

Animal No.	Aerial righting reflex	Landing foot splay mm
3101	0	38
3102	0	50
3104	0	81
3105	0	49
3109	0	63
n	5	5
Mean	0	56
S.D.	0	16

Aerial righting reflex) Total score

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Manipulative test Period : F0 lactation
Generation : F0 Sex : Female Day : 4 Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Auditory response	Approach response	Touch response	Tail pinch response	Pupillary reflex
4102	0	0	0	0	P
4103	0	0	0	0	P
4104	0	0	0	0	P
4105	0	0	0	0	P
4111	0	0	0	0	P
n	5	5	5	5	5

Auditory response) -2: None, -1: Weak, 0: Normal, 1: Exaggerate
Approach response) -1: No reaction/ignores, 0: Normal, 1: Abnormality fearful/aggressive reaction
Touch response) -1: No reaction/ignores, 0: Normal, 1: Abnormality fearful/aggressive reaction
Tail pinch response) -2: None, -1: Weak, 0: Normal, 1: Exaggerate
Pupillary reflex) P: Pass, both, F: Failed, neither, L: Left pupil responds, R: Right pupil responds
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Manipulative test

Generation : F0 Sex : Female Day : 4 Period : F0 lactation

Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Aerial righting reflex	Landing foot splay mm
4102	0	60
4103	0	72
4104	0	59
4105	0	45
4111	0	92
n	5	5
Mean	0	66
S.D.	0	18

Aerial righting reflex) Total score

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Manipulative test
Period : Administration
Generation : F0 Sex : Female Week : 6 Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Auditory response	Approach response	Touch response	Tail pinch response	Pupillary reflex
5106	0	0	0	0	P
5107	0	0	0	0	P
5108	0	0	0	0	P
5109	0	0	0	0	P
5110	0	0	0	0	P
n	5	5	5	5	5

Auditory response) -2: None, -1: Weak, 0: Normal, 1: Exaggerate
Approach response) -1: No reaction/ignores, 0: Normal, 1: Abnormality fearful/aggressive reaction
Touch response) -1: No reaction/ignores, 0: Normal, 1: Abnormality fearful/aggressive reaction
Tail pinch response) -2: None, -1: Weak, 0: Normal, 1: Exaggerate
Pupillary reflex) P: Pass, both, F: Failed, neither, L: Left pupil responds, R: Right pupil responds
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Manipulative test

Generation : F0 Sex : Female Week : 6 Period : Administration Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Aerial righting reflex	Landing foot splay mm
5106	0	55
5107	0	80
5108	0	57
5109	0	59
5110	0	99
n	5	5
Mean	0	70
S.D.	0	19

Aerial righting reflex) Total score

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Manipulative test Period : Administration

Generation : F0 Sex : Female Week : 6 Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Auditory response	Approach response	Touch response	Tail pinch response	Pupillary reflex
6106	0	0	0	0	P
6107	0	0	0	0	P
6108	0	0	0	0	P
6109	0	0	0	0	P
6110	0	0	0	0	P
n	5	5	5	5	5

Auditory response) -2: None, -1: Weak, 0: Normal, 1: Exaggerate
Approach response) -1: No reaction/ignores, 0: Normal, 1: Abnormality fearful/aggressive reaction
Touch response) -1: No reaction/ignores, 0: Normal, 1: Abnormality fearful/aggressive reaction
Tail pinch response) -2: None, -1: Weak, 0: Normal, 1: Exaggerate
Pupillary reflex) P: Pass, both, F: Failed, neither, L: Left pupil responds, R: Right pupil responds
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Manipulative test Period : Administration
Generation : F0 Sex : Female Week : 6 Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Aerial righting reflex	Landing foot splay mm
6106	0	109
6107	0	79
6108	0	48
6109	0	61
6110	0	50
n	5	5
Mean	0	69
S.D.	0	25

Aerial righting reflex) Total score
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Manipulative test

Period : Recovery

Generation : F0 Sex : Male Week : 2 Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Auditory response	Approach response	Touch response	Tail pinch response	Pupillary reflex
1008	0	0	0	0	P
1009	0	0	0	0	P
1010	0	0	0	0	P
1011	0	0	0	0	P
1012	0	0	0	0	P
n	5	5	5	5	5

Auditory response) -2: None, -1: Weak, 0: Normal, 1: Exaggerate
Approach response) -1: No reaction/ignores, 0: Normal, 1: Abnormality fearful/aggressive reaction
Touch response) -1: No reaction/ignores, 0: Normal, 1: Abnormality fearful/aggressive reaction
Tail pinch response) -2: None, -1: Weak, 0: Normal, 1: Exaggerate
Pupillary reflex) P: Pass, both, F: Failed, neither, L: Left pupil responds, R: Right pupil responds
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Manipulative test

Generation : F0 Sex : Male Week : 2 Period : Recovery

Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Aerial righting reflex	Landing foot splay mm
1008	0	118
1009	0	79
1010	0	64
1011	0	83
1012	0	120
n	5	5
Mean	0	93
S.D.	0	25

Aerial righting reflex) Total score

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Manipulative test

Period : Recovery

Generation : F0 Sex : Male Week : 2 Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Auditory response	Approach response	Touch response	Tail pinch response	Pupillary reflex
4008	0	0	0	0	P
4009	0	0	0	0	P
4010	0	0	0	0	P
4011	0	0	0	0	P
4012	0	0	0	0	P
n	5	5	5	5	5

Auditory response) -2: None, -1: Weak, 0: Normal, 1: Exaggerate
Approach response) -1: No reaction/ignores, 0: Normal, 1: Abnormality fearful/aggressive reaction
Touch response) -1: No reaction/ignores, 0: Normal, 1: Abnormality fearful/aggressive reaction
Tail pinch response) -2: None, -1: Weak, 0: Normal, 1: Exaggerate
Pupillary reflex) P: Pass, both, F: Failed, neither, L: Left pupil responds, R: Right pupil responds
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Manipulative test Period : Recovery
Generation : F0 Sex : Male Week : 2 Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Aerial righting reflex	Landing foot splay mm
4008	0	66
4009	0	86
4010	0	64
4011	0	60
4012	0	71
n	5	5
Mean	0	69
S.D.	0	10

Aerial righting reflex) Total score
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Manipulative test

Period : Recovery

Generation : F0 Sex : Female Week : 2 Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Auditory response	Approach response	Touch response	Tail pinch response	Pupillary reflex
5106	0	0	0	0	P
5107	0	0	0	0	P
5108	0	0	0	0	P
5109	0	0	0	0	P
5110	0	0	0	0	P
n	5	5	5	5	5

Auditory response) -2: None, -1: Weak, 0: Normal, 1: Exaggerate
Approach response) -1: No reaction/ignores, 0: Normal, 1: Abnormality fearful/aggressive reaction
Touch response) -1: No reaction/ignores, 0: Normal, 1: Abnormality fearful/aggressive reaction
Tail pinch response) -2: None, -1: Weak, 0: Normal, 1: Exaggerate
Pupillary reflex) P: Pass, both, F: Failed, neither, L: Left pupil responds, R: Right pupil responds
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Manipulative test
Generation : F0 Sex : Female Week : 2 Period : Recovery
Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Aerial righting reflex	Landing foot splay mm
5106	0	57
5107	0	79
5108	0	58
5109	0	60
5110	0	64
n	5	5
Mean	0	64
S.D.	0	9

Aerial righting reflex) Total score
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Manipulative test

Period : Recovery

Generation : F0 Sex : Female Week : 2 Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Auditory response	Approach response	Touch response	Tail pinch response	Pupillary reflex
6106	0	0	0	0	P
6107	0	0	0	0	P
6108	0	0	0	0	P
6109	0	0	0	0	P
6110	0	0	0	0	P
n	5	5	5	5	5

Auditory response) -2: None, -1: Weak, 0: Normal, 1: Exaggerate
Approach response) -1: No reaction/ignores, 0: Normal, 1: Abnormality fearful/aggressive reaction
Touch response) -1: No reaction/ignores, 0: Normal, 1: Abnormality fearful/aggressive reaction
Tail pinch response) -2: None, -1: Weak, 0: Normal, 1: Exaggerate
Pupillary reflex) P: Pass, both, F: Failed, neither, L: Left pupil responds, R: Right pupil responds
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Manipulative test

Generation : F0 Sex : Female Week : 2 Period : Recovery

Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Aerial righting reflex	Landing foot splay mm
6106	0	92
6107	0	51
6108	0	26
6109	0	54
6110	0	64
n	5	5
Mean	0	57
S.D.	0	24

Aerial righting reflex) Total score

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Grip strength

Generation : F0 Sex : Male Week : 6 Period : F0 mating Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Grip strength of fore limb g	Grip strength of hind limb g
1008	1431	1027
1009	1987	1147
1010	2017	1243
1011	1622	886
1012	1257	793
n	5	5
Mean	1663	1019
S.D.	336	184

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Grip strength

Period : F0 mating

Generation : F0 Sex : Male Week : 6 Dose : BTetCA 100 mg/kg Species : Rat

Animal No.	Grip strength of fore limb g	Grip strength of hind limb g
2008	1954	1546
2009	1860	1360
2010	1618	1266
2011	1877	1539
2012	1953	1089
n	5	5
Mean	1852	1360
S.D.	138	193

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Grip strength

Period : F0 mating

Generation : F0 Sex : Male Week : 6 Dose : BTetCA 300 mg/kg Species : Rat

Animal No.	Grip strength of fore limb g	Grip strength of hind limb g
3008	1775	1240
3009	1700	1328
3010	1819	773
3011	1991	1486
3012	1678	985
n	5	5
Mean	1793	1162
S.D.	125	283

& : Modified data

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Grip strength

Period : F0 mating

Generation : F0 Sex : Male Week : 6 Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Grip strength of fore limb g	Grip strength of hind limb g
4008	1804	1023
4009	1340	844
4010	1912	1526
4011	1554	1001
4012	1314	894
n	5	5
Mean	1585	1058
S.D.	269	272

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Grip strength

Period : F0 lactation

Generation : F0 Sex : Female Day : 4 Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Grip strength of fore limb g	Grip strength of hind limb g
1104	1045	1071
1105	1195	565
1107	1221	922
1109	1462	1023
1111	1366	990
n	5	5
Mean	1258	914
S.D.	161	203

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Grip strength

Generation : F0 Sex : Female Day : 4 Period : F0 lactation

Dose : BTetCA 100 mg/kg Species : Rat

Animal No.	Grip strength of fore limb g	Grip strength of hind limb g
2104	1100	720
2105	1152	1056
2106	1291	900
2109	1473	949
2110	1324	920
n	5	5
Mean	1268	909
S.D.	148	122

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Grip strength

Period : F0 lactation

Generation : F0 Sex : Female Day : 4 Dose : BTetCA 300 mg/kg Species : Rat

Animal No.	Grip strength of fore limb g	Grip strength of hind limb g
3101	1062	625
3102	1330	673
3104	1404	919
3105	1569	1310
3109	1608	961
n	5	5
Mean	1395	898
S.D.	218	274

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Grip strength

Generation : F0 Sex : Female Day : 4 Period : F0 lactation

Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Grip strength of fore limb g	Grip strength of hind limb g
4102	1419	901
4103	1211	951
4104	1211	880
4105	946	1036
4111	1308	980
n	5	5
Mean	1219	950
S.D.	175	62

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Grip strength

Period : Administration

Generation : F0 Sex : Female Week : 6 Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Grip strength of fore limb g	Grip strength of hind limb g
5106	1148	637
5107	1204	961
5108	1181	1005
5109	1205	911
5110	1214	915
n	5	5
Mean	1190	886
S.D.	27	144

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Grip strength

Period : Administration

Generation : F0 Sex : Female Week : 6 Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Grip strength of fore limb g	Grip strength of hind limb g
6106	1516	1212
6107	1228	1118
6108	1055	769
6109	1351	834
6110	1304	1109
n	5	5
Mean	1291	1008
S.D.	169	194

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Grip strength

Period : Recovery

Generation : F0 Sex : Male Week : 2 Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Grip strength of fore limb g	Grip strength of hind limb g
1008	1548	847
1009	1193	1142
1010	2183	1085
1011	2415	839
1012	1559	753
n	5	5
Mean	1780	933
S.D.	503	170

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Grip strength

Period : Recovery

Generation : F0 Sex : Male Week : 2 Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Grip strength of fore limb g	Grip strength of hind limb g
4008	1858	923
4009	1629	630
4010	1984	982
4011	1644	942
4012	1273	872
n	5	5
Mean	1678	870
S.D.	271	140

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Grip strength

Period : Recovery

Generation : F0 Sex : Female Week : 2 Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Grip strength of fore limb g	Grip strength of hind limb g
5106	1064	642
5107	1133	802
5108	1260	748
5109	1199	747
5110	1071	778
n	5	5
Mean	1145	743
S.D.	84	61

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Grip strength

Period : Recovery

Generation : F0 Sex : Female Week : 2 Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Grip strength of fore limb g	Grip strength of hind limb g
6106	1239	760
6107	870	762
6108	1041	498
6109	1284	442
6110	1379	860
n	5	5
Mean	1163	664
S.D.	205	183

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Motor activity

Period : F0 mating

Generation : F0 Sex : Male Week : 6 Dose : BTetCA 0 mg/kg Species : Rat

	0'-10'	10'-20'	20'-30'	30'-40'	40'-50'	50'-60'	Total(0'-60')
Animal No.	Count	Count	Count	Count	Count	Count	Count
1008	436	360	156	215	28	4	1199
1009	456	437	401	180	264	313	2051
1010	432	364	261	311	213	129	1710
1011	388	227	328	218	44	120	1325
1012	391	323	303	294	306	301	1918
n	5	5	5	5	5	5	5
Mean	421	342	290	244	171	173	1641
S.D.	30	77	90	56	128	132	369

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Motor activity

Period : F0 mating

Generation : F0 Sex : Male Week : 6 Dose : BTetCA 100 mg/kg Species : Rat

	0'-10'	10'-20'	20'-30'	30'-40'	40'-50'	50'-60'	Total(0'-60')
Animal No.	Count	Count	Count	Count	Count	Count	Count
2008	331	245	241	249	293	166	1525
2009	368	339	174	310	387	260	1838
2010	59	47	0	164	20	16	306
2011	256	127	62	325	366	232	1368
2012	439	370	223	209	59	242	1542
n	5	5	5	5	5	5	5
Mean	291	226	140	251	225	183	1316
S.D.	145	138	105	68	173	100	590

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Motor activity

Period : F0 mating

Generation : F0 Sex : Male Week : 6 Dose : BTetCA 300 mg/kg Species : Rat

	0'-10'	10'-20'	20'-30'	30'-40'	40'-50'	50'-60'	Total(0'-60')
Animal No.	Count	Count	Count	Count	Count	Count	Count
3008	338	291	320	269	272	245	1735
3009	276	214	165	81	55	1	792
3010	289	211	208	152	137	54	1051
3011	470	360	362	383	241	32	1848
3012	409	301	2	268	0	6	986
n	5	5	5	5	5	5	5
Mean	356	275	211	231	141	68	1282
S.D.	82	63	142	117	117	101	476

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Motor activity

Period : F0 mating

Generation : F0 Sex : Male Week : 6 Dose : BTetCA 1000 mg/kg Species : Rat

	0'-10'	10'-20'	20'-30'	30'-40'	40'-50'	50'-60'	Total(0'-60')
Animal No.	Count	Count	Count	Count	Count	Count	Count
4008	386	363	389	270	241	132	1781
4009	339	309	146	206	231	4	1235
4010	359	110	173	328	355	169	1494
4011	399	396	58	330	281	201	1665
4012	440	356	76	298	297	211	1678
n	5	5	5	5	5	5	5
Mean	385	307	168	286	281	143	1571
S.D.	39	114	132	51	50	84	214

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Motor activity

Period : F0 lactation

Generation : F0 Sex : Female Day : 4 Dose : BTetCA 0 mg/kg Species : Rat

	0'-10'	10'-20'	20'-30'	30'-40'	40'-50'	50'-60'	Total(0'-60')
Animal No.	Count	Count	Count	Count	Count	Count	Count
1104	158	48	42	351	64	4	667
1105	219	55	217	249	143	70	953
1107	380	361	283	398	259	149	1830
1109	435	383	282	36	146	276	1558
1111	295	232	149	68	67	0	811
n	5	5	5	5	5	5	5
Mean	297	216	195	220	136	100	1164
S.D.	113	161	102	163	79	116	504

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Motor activity

Period : F0 lactation

Generation : F0 Sex : Female Day : 4 Dose : BTetCA 100 mg/kg Species : Rat

	0'-10'	10'-20'	20'-30'	30'-40'	40'-50'	50'-60'	Total(0'-60')
Animal No.	Count	Count	Count	Count	Count	Count	Count
2104	267	169	102	156	153	125	972
2105	266	39	184	35	36	8	568
2106	429	411	383	345	281	332	2181
2109	261	194	134	194	214	149	1146
2110	317	85	131	140	144	100	917
n	5	5	5	5	5	5	5
Mean	308	180	187	174	166	143	1157
S.D.	71	144	114	112	91	118	610

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Motor activity

Generation : F0 Sex : Female Day : 4 Period : F0 lactation Dose : BTetCA 300 mg/kg Species : Rat

	0'-10'	10'-20'	20'-30'	30'-40'	40'-50'	50'-60'	Total(0'-60')
Animal No.	Count	Count	Count	Count	Count	Count	Count
3101	192	229	102	55	36	7	621
3102	224	98	143	15	43	155	678
3104	262	131	112	151	115	165	936
3105	318	57	86	170	83	2	716
3109	360	277	341	260	262	230	1730
n	5	5	5	5	5	5	5
Mean	271	158	157	130	108	112	936
S.D.	68	92	105	97	92	102	460

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Motor activity

Period : F0 lactation

Generation : F0 Sex : Female Day : 4 Dose : BTetCA 1000 mg/kg Species : Rat

	0'-10'	10'-20'	20'-30'	30'-40'	40'-50'	50'-60'	Total(0'-60')
Animal No.	Count	Count	Count	Count	Count	Count	Count
4102	140	210	262	238	280	243	1373
4103	327	276	188	132	145	123	1191
4104	278	90	86	15	45	8	522
4105	329	70	154	204	2	5	764
4111	251	47	5	4	1	10	318
n	5	5	5	5	5	5	5
Mean	265	139	139	119	95	78	834
S.D.	77	99	98	107	119	105	443

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Motor activity

Period : Administration

Generation : F0 Sex : Female Week : 6 Dose : BTetCA 0 mg/kg Species : Rat

	0'-10'	10'-20'	20'-30'	30'-40'	40'-50'	50'-60'	Total(0'-60')
Animal No.	Count	Count	Count	Count	Count	Count	Count
5106	351	213	265	317	312	287	1745
5107	429	343	400	505	418	102	2197
5108	430	337	169	217	44	26	1223
5109	455	281	314	312	278	238	1878
5110	485	350	31	407	258	141	1672
n	5	5	5	5	5	5	5
Mean	430	305	236	352	262	159	1743
S.D.	50	58	142	109	137	105	353

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Motor activity

Period : Administration

Generation : F0 Sex : Female Week : 6 Dose : BTetCA 1000 mg/kg Species : Rat

	0'-10'	10'-20'	20'-30'	30'-40'	40'-50'	50'-60'	Total(0'-60')
Animal No.	Count	Count	Count	Count	Count	Count	Count
6106	355	286	250	148	227	181	1447
6107	394	183	13	180	294	15	1079
6108	466	304	305	31	24	5	1135
6109	356	225	115	0	208	27	931
6110	338	199	296	61	1	53	948
n	5	5	5	5	5	5	5
Mean	382	239	196	84	151	56	1108
S.D.	51	53	127	77	130	72	208

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Motor activity

Period : Recovery

Generation : F0 Sex : Male Week : 2 Dose : BTetCA 0 mg/kg Species : Rat

	0'-10'	10'-20'	20'-30'	30'-40'	40'-50'	50'-60'	Total(0'-60')
Animal No.	Count	Count	Count	Count	Count	Count	Count
1008	350	285	154	193	28	2	1012
1009	426	363	317	139	209	278	1732
1010	489	359	373	341	307	201	2070
1011	385	327	304	163	118	49	1346
1012	383	359	378	357	363	355	2195
n	5	5	5	5	5	5	5
Mean	407	339	305	239	205	177	1671
S.D.	53	33	91	103	136	150	494

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Motor activity

Period : Recovery

Generation : F0 Sex : Male Week : 2 Dose : BTetCA 1000 mg/kg Species : Rat

	0'-10'	10'-20'	20'-30'	30'-40'	40'-50'	50'-60'	Total(0'-60')
Animal No.	Count	Count	Count	Count	Count	Count	Count
4008	361	277	357	201	230	272	1698
4009	371	330	158	137	215	223	1434
4010	407	327	324	296	290	253	1897
4011	357	228	276	141	238	159	1399
4012	474	183	157	175	296	51	1336
n	5	5	5	5	5	5	5
Mean	394	269	254	190	254	192	1553
S.D.	49	64	93	65	37	90	237

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Motor activity

Period : Recovery

Generation : F0 Sex : Female Week : 2 Dose : BTetCA 0 mg/kg Species : Rat

	0'-10'	10'-20'	20'-30'	30'-40'	40'-50'	50'-60'	Total(0'-60')
Animal No.	Count	Count	Count	Count	Count	Count	Count
5106	303	158	214	229	291	277	1472
5107	365	381	46	219	263	258	1532
5108	367	235	49	193	95	23	962
5109	386	279	219	240	145	263	1532
5110	369	273	166	141	116	247	1312
n	5	5	5	5	5	5	5
Mean	358	265	139	204	182	214	1362
S.D.	32	81	86	39	89	107	241

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Motor activity

Period : Recovery

Generation : F0 Sex : Female Week : 2 Dose : BTetCA 1000 mg/kg Species : Rat

	0'-10'	10'-20'	20'-30'	30'-40'	40'-50'	50'-60'	Total(0'-60')
Animal No.	Count	Count	Count	Count	Count	Count	Count
6106	312	241	361	223	128	148	1413
6107	433	400	330	235	254	316	1968
6108	383	282	211	108	161	81	1226
6109	364	290	200	99	282	370	1605
6110	363	234	31	138	101	67	934
n	5	5	5	5	5	5	5
Mean	371	289	227	161	185	196	1429
S.D.	44	67	130	64	79	139	390

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 3 - 1 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Body weight Period : F0 before mating Day 1-15, F0 mating Day 15-43

Sex : Male Dose : BTetCA 0 mg/kg Unit : g Species : Rat

Animal No.	/Day 1	8	15	22	29	36	42	Body weight gain
1001	424	459	493	519	538	566	580	156
1002	408	439	461	499	521	548	570	162
1003	399	424	439	457	474	498	508	109
1004	383	413	437	448	461	480	487	104
1005	423	455	472	499	514	534	550	127
1006	405	440	455	471	495	510	523	118
1007	390	425	456	474	512	534	554	164
1008	398	434	458	485	508	521	527	129
1009	401	445	472	502	531	554	552	151
1010	411	448	464	476	492	507	504	93
1011	406	437	460	481	502	512	521	115
1012	427	460	493	512	539	554	556	129
n	12	12	12	12	12	12	12	12
Mean	406	440	463	485	507	527	536	130
S.D.	14	15	17	22	24	26	29	24

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 3 - 2 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Body weight Period : F0 before mating Day 1-15, F0 mating Day 15-43

Sex : Male Dose : BTetCA 100 mg/kg Unit : g Species : Rat

Animal No.	/Day 1	8	15	22	29	36	42	Body weight gain
2001	428	470	505	531	571	601	628	200
2002	402	422	437	446	470	492	513	111
2003	416	446	469	492	516	542	561	145
2004	391	421	442	457	471	493	486	95
2005	411	445	468	493	514	525	527	116
2006	402	440	460	466	493	509	519	117
2007	400	436	451	467	491	506	512	112
2008	424	469	492	514	534	553	571	147
2009	392	419	451	464	490	513	524	132
2010	415	446	467	488	515	535	551	136
2011	410	443	468	494	522	543	552	142
2012	383	415	439	459	491	512	522	139
n	12	12	12	12	12	12	12	12
Mean	406	439	462	481	507	527	539	133
S.D.	14	18	21	25	28	31	37	27

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 3 - 3 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Body weight Period : F0 before mating Day 1-15, F0 mating Day 15-43

Sex : Male Dose : BTetCA 300 mg/kg Unit : g Species : Rat

Animal No.	/Day 1	8	15	22	29	36	42	Body weight gain
3001	422	450	466	475	508	524	534	112
3002	417	449	465	481	499	509	513	96
3003	403	432	451	474	497	514	542	139
3004	389	430	447	417	445	466	480	91
3005	429	465	479	486	508	537	551	122
3006	401	440	464	479	509	532	542	141
3007	407	445	474	497	527	552	565	158
3008	388	419	449	468	490	504	517	129
3009	414	446	470	495	520	540	556	142
3010	408	459	494	504	538	563	561	153
3011	426	456	478	471	498	523	535	109
3012	401	424	454	450	479	498	506	105
n	12	12	12	12	12	12	12	12
Mean	409	443	466	475	502	522	534	125
S.D.	13	14	14	23	24	26	25	22

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 3 - 4 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Body weight Period : F0 before mating Day 1-15, F0 mating Day 15-43

Sex : Male Dose : BTetCA 1000 mg/kg Unit : g Species : Rat

Animal No.	/Day 1	8	15	22	29	36	42	Body weight gain
4001	394	408	431	442	473	451	478	84
4002	422	452	475	490	524	553	557	135
4003	407	439	454	469	491	496	505	98
4004	415	440	457	476	496	509	515	100
4005	391	404	423	439	457	471	476	85
4006	406	445	455	474	500	521	533	127
4007	400	425	439	461	488	500	513	113
4008	402	420	412	430	435	458	440	38
4009	397	404	412	381	409	431	442	45
4010	425	462	467	480	497	514	511	86
4011	388	421	424	429	460	475	478	90
4012	430	467	484	493	523	539	552	122
n	12	12	12	12	12	12	12	12
Mean	406	432	444	455	479	493	500	94
S.D.	14	22	24	32	34	37	38	30

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 3 - 5 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Body weight Period : F0 before mating Day 1-15

Sex : Female Dose : BTetCA 0 mg/kg Unit : g Species : Rat

Animal No.	/Day 1	8	15	Body weight gain
1101	213	229	237	24
1102	222	233	242	20
1103	218	240	246	28
1104	215	233	237	22
1105	223	228	243	20
1106	211	233	241	30
1107	229	255	265	36
1108	221	225	227	6
1109	225	246	249	24
1110	237	247	254	17
1111	246	253	266	20
1112	236	246	261	25
n	12	12	12	12
Mean	225	239	247	23
S.D.	11	10	12	7

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 3 - 6 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Body weight Period : F0 before mating Day 1-15

Sex : Female Dose : BTetCA 100 mg/kg Unit : g Species : Rat

Animal No.	/Day 1	8	15	Body weight gain
2101	219	234	247	28
2102	222	227	229	7
2103	218	218	218	0
2104	212	222	233	21
2105	241	251	267	26
2106	242	259	280	38
2107	204	225	235	31
2108	234	252	255	21
2109	225	230	244	19
2110	228	228	236	8
2111	202	216	218	16
2112	237	257	270	33
n	12	12	12	12
Mean	224	235	244	21
S.D.	13	16	20	11

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 3 - 7 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Body weight Period : F0 before mating Day 1-15

Sex : Female Dose : BTetCA 300 mg/kg Unit : g Species : Rat

Animal No.	/Day 1	8	15	Body weight gain
3101	212	235	238	26
3102	223	243	254	31
3103	221	232	228	7
3104	214	221	239	25
3105	210	228	234	24
3106	219	225	231	12
3107	218	228	242	24
3108	228	247	252	24
3109	252	258	265	13
3110	222	228	234	12
3111	199	213	216	17
3112	248	263	262	14
n	12	12	12	12
Mean	222	235	241	19
S.D.	15	15	14	7

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 3 - 8 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Body weight Period : F0 before mating Day 1-15

Sex : Female Dose : BTetCA 1000 mg/kg Unit : g Species : Rat

Animal No.	/Day 1	8	15	Body weight gain
4101	229	255	263	34
4102	235	239	253	18
4103	223	230	245	22
4104	218	242	248	30
4105	213	230	238	25
4106	223	226	241	18
4107	226	230	239	13
4108	197	204	213	16
4109	230	230	243	13
4110	231	246	259	28
4111	242	245	253	11
4112	244	260	265	21
n	12	12	12	12
Mean	226	236	247	21
S.D.	13	15	14	7

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 3 - 9 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Body weight Period : F0 gestation Day 0-25

Sex : Female Dose : BTetCA 0 mg/kg Unit : g Species : Rat

Animal No.	/Day 0	7	14	20	Body weight gain
1101	250	283	315	402	152
1102	241	265	292	373	132
1103	245	288	321	406	161
1104	244	279	311	394	150
1105	252	292	330	412	160
1106	250	294	327	401	151
1107	272	311	345	408	136
1108	240	270	303	376	136
1109	252	293	318	397	145
1110	268	303	346	433	165
1111	271	308	343	422	151
1112	265	308	345	445	180
n	12	12	12	12	12
Mean	254	291	325	406	152
S.D.	12	15	18	21	14

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 3 - 10 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Body weight Period : F0 gestation Day 0-25

Sex : Female Dose : BTetCA 100 mg/kg Unit : g Species : Rat

Animal No.	/Day 0	7	14	20	Body weight gain
2101	264	299	335	407	143
2102	244	268	297	377	133
2103	229	265	305	396	167
2104	240	266	310	391	151
2105	273	305	344	426	153
2106	283	319	361	445	162
2107	239	270	309	390	151
2108	266	285	324	409	143
2109	252	282	319	383	131
2110	251	292	323	408	157
2111	225	266	284	361	136
2112	280	312	340	415	135
n	12	12	12	12	12
Mean	254	286	321	401	147
S.D.	19	19	22	23	12

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 3 - 11 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Body weight Period : F0 gestation Day 0-25

Sex : Female Dose : BTetCA 300 mg/kg Unit : g Species : Rat

Animal No.	/Day 0	7	14	20	Body weight gain
3101	240	274	309	392	152
3102	256	299	337	412	156
3103	243	278	311	385	142
3104	242	285	334	423	181
3105	237	289	333	416	179
3106	242	284	328	406	164
3107	242	282	310	374	132
3108	265	298	328	385	120
3109	268	318	363	452	184
3110	237	273	307	381	144
3111	228	260	295	371	143
3112	277	309	342	425	148
n	12	12	12	12	12
Mean	248	287	325	402	154
S.D.	15	16	19	25	20

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 3 - 12 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Body weight Period : F0 gestation Day 0-25

Sex : Female Dose : BTetCA 1000 mg/kg Unit : g Species : Rat

Animal No.	/Day 0	7	14	20	Body weight gain
4101	267	298	322	367	100
4102	251	302	334	396	145
4103	251	288	311	396	145
4104	253	284	327	403	150
4105	234	271	299	360	126
4106	245	298	327	403	158
4107	243	282	323	396	153
4108	224	255	281	351	127
4109	247	280	317	399	152
4110	267	303	348	421	154
4111	254	294	339	423	169
4112	270	294	333	409	139
n	12	12	12	12	12
Mean	251	287	322	394	143
S.D.	14	14	18	23	18

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 3 - 13 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Body weight Period : F0 lactation Day 0-5

Sex : Female Dose : BTetCA 0 mg/kg Unit : g Species : Rat

Animal No.	/Day 0	4	Body weight gain
1101	301	300	-1
1102	275	281	6
1103	332	321	-11
1104	310	304	-6
1105	319	327	8
1106	308	331	23
1107	350	325	-25
1108	290	291	1
1109	318	307	-11
1110	339	336	-3
1111	314	332	18
1112	322	347	25
n	12	12	12
Mean	315	317	2
S.D.	21	20	15

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 3 - 14 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Body weight Period : F0 lactation Day 0-5

Sex : Female Dose : BTetCA 100 mg/kg Unit : g Species : Rat

Animal No.	/Day 0	4	Body weight gain
2101	338	335	-3
2102	297	296	-1
2103	284	290	6
2104	298	302	4
2105	341	339	-2
2106	353	361	8
2107	300	295	-5
2108	313	326	13
2109	309	326	17
2110	325	303	-22
2111	297	269	-28
2112	323	324	1
n	12	12	12
Mean	315	314	-1
S.D.	21	26	13

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 3 - 15 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Body weight Period : F0 lactation Day 0-5

Sex : Female Dose : BTetCA 300 mg/kg Unit : g Species : Rat

Animal No.	/Day 0	4	Body weight gain
3101	305	307	2
3102	349	339	-10
3103	303	315	12
3104	317	342	25
3105	322	334	12
3106	332	316	-16
3107	291	314	23
3108	279	302	23
3109	376	363	-13
3110	313	292	-21
3111	303	303	0
3112	343	332	-11
n	12	12	12
Mean	319	322	2
S.D.	27	21	17

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 3 - 16 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Body weight Period : F0 lactation Day 0-5

Sex : Female Dose : BTetCA 1000 mg/kg Unit : g Species : Rat

Animal No.	/Day 0	4	Body weight gain
4101	342	333	-9
4102	303	329	26
4103	306	326	20
4104	306	323	17
4105	293	297	4
4106	313	308	-5
4107	313	327	14
4108	261	272	11
4109	323	329	6
4110	346	345	-1
4111	348	328	-20
4112	336	323	-13
n	12	12	12
Mean	316	320	4
S.D.	25	19	14

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 3 - 17 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Body weight Period : Administration

Sex : Female Dose : BTetCA 0 mg/kg Unit : g Species : Rat

Animal No.	/Day 1	8	15	22	29	36	42	Body weight gain
5101	205	225	233	232	244	251	249	44
5102	235	242	263	260	274	282	298	63
5103	221	248	259	267	268	285	291	70
5104	218	224	228	236	248	248	258	40
5105	217	234	237	250	259	258	257	40
5106	206	219	228	232	244	250	255	49
5107	219	229	239	230	255	256	266	47
5108	211	227	234	239	243	250	255	44
5109	229	245	258	270	271	288	293	64
5110	221	238	245	259	274	276	279	58
n	10	10	10	10	10	10	10	10
Mean	218	233	242	248	258	264	270	52
S.D.	9	10	13	16	13	16	18	11

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 3 - 18 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Body weight Period : Administration

Sex : Female Dose : BTetCA 1000 mg/kg Unit : g Species : Rat

Animal No.	/Day 1	8	15	22	29	36	42	Body weight gain
6101	218	233	236	242	245	251	247	29
6102	228	254	261	272	281	295	303	75
6103	208	224	226	233	241	244	247	39
6104	220	235	238	253	253	261	261	41
6105	215	244	252	267	269	278	289	74
6106	244	251	276	278	290	293	299	55
6107	218	230	236	246	259	261	272	54
6108	202	218	229	247	278	280	269	67
6109	204	211	215	225	237	240	245	41
6110	225	248	253	265	264	275	276	51
n	10	10	10	10	10	10	10	10
Mean	218	235	242	253	262	268	271	53
S.D.	12	14	18	17	18	19	21	16

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 3 - 19 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Body weight Period : Recovery Day 1-15

Sex : Male Dose : BTetCA 0 mg/kg Unit : g Species : Rat

Animal No.	/Day 1	8	14	Body weight gain
1008	522	542	546	24
1009	554	562	560	6
1010	506	521	526	20
1011	528	543	546	18
1012	557	581	575	18
n	5	5	5	5
Mean	533	550	551	17
S.D.	22	23	18	7

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Body weight

Period : Recovery Day 1-15

Sex : Male

Dose : BTetCA 1000 mg/kg

Unit : g

Species : Rat

Animal No.	/Day 1	8	14	Body weight gain
4008	434	482	506	72
4009	438	480	486	48
4010	509	534	548	39
4011	484	507	515	31
4012	558	593	600	42
n	5	5	5	5
Mean	485	519	531	46
S.D.	52	47	45	16

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 3 - 21 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Body weight Period : Recovery Day 1-15

Sex : Female Dose : BTetCA 0 mg/kg Unit : g Species : Rat

Animal No.	/Day 1	8	14	Body weight gain
5106	247	263	265	18
5107	267	267	259	-8
5108	260	264	271	11
5109	281	287	282	1
5110	278	281	280	2
n	5	5	5	5
Mean	267	272	271	5
S.D.	14	11	10	10

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 3 - 22 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Body weight Period : Recovery Day 1-15

Sex : Female Dose : BTetCA 1000 mg/kg Unit : g Species : Rat

Animal No.	/Day 1	8	14	Body weight gain
6106	294	296	296	2
6107	264	278	284	20
6108	270	268	273	3
6109	243	250	252	9
6110	273	283	281	8
n	5	5	5	5
Mean	269	275	277	8
S.D.	18	17	16	7

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 4 - 1 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Food consumption Period : F0 before mating Day 1-15, F0 mating Day 15-43

Sex : Male Dose : BTetCA 0 mg/kg Unit : g Species : Rat

Animal No.	/Day 2	8	15	30	36	42	Total food consumption
1001	19	20	21	25	23	19	127
1002	21	20	22	22	23	20	128
1003	19	20	17	18	19	18	111
1004	21	23	21	21	19	17	122
1005	22	21	19	22	18	21	123
1006	20	19	19	17	18	19	112
1007	16	21	23	20	18	18	116
1008	23	21	22	19	20	19	124
1009	19	22	24	23	22	19	129
1010	20	22	21	17	20	18	118
1011	23	22	17	16	17	19	114
1012	23	22	22	20	18	19	124
n	12	12	12	12	12	12	12
Mean	21	21	21	20	20	19	121
S.D.	2	1	2	3	2	1	6

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 4 - 2 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Food consumption Period : F0 before mating Day 1-15, F0 mating Day 15-43

Sex : Male Dose : BTetCA 100 mg/kg Unit : g Species : Rat

Animal No.	/Day 2	8	15	30	36	42	Total food consumption
2001	20	24	23	23	25	26	141
2002	21	20	16	16	18	20	111
2003	21	21	21	23	22	24	132
2004	20	20	18	19	21	18	116
2005	21	21	21	22	22	25	132
2006	19	22	19	18	17	19	114
2007	18	25	19	19	20	20	121
2008	23	26	22	20	24	23	138
2009	21	20	21	22	22	22	128
2010	19	19	17	22	22	19	118
2011	21	24	24	23	24	22	138
2012	15	21	18	19	20	19	112
n	12	12	12	12	12	12	12
Mean	20	22	20	21	21	21	125
S.D.	2	2	2	2	2	3	11

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 4 - 3 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Food consumption Period : F0 before mating Day 1-15, F0 mating Day 15-43

Sex : Male Dose : BTetCA 300 mg/kg Unit : g Species : Rat

Animal No.	/Day 2	8	15	30	36	42	Total food consumption
3001	20	24	21	22	22	23	132
3002	23	22	22	22	20	18	127
3003	20	22	23	21	21	22	129
3004	23	23	21	20	20	23	130
3005	24	25	25	25	26	22	147
3006	20	23	22	23	23	22	133
3007	23	27	25	21	23	20	139
3008	19	23	23	19	20	16	120
3009	20	22	21	21	21	20	125
3010	23	27	27	21	21	18	137
3011	23	23	21	20	21	21	129
3012	19	23	21	20	19	18	120
n	12	12	12	12	12	12	12
Mean	21	24	23	21	21	20	131
S.D.	2	2	2	2	2	2	8

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 4 - 4 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Food consumption Period : F0 before mating Day 1-15, F0 mating Day 15-43

Sex : Male Dose : BTetCA 1000 mg/kg Unit : g Species : Rat

Animal No.	/Day 2	8	15	30	36	42	Total food consumption
4001	14	22	21	21	19	24	121
4002	16	22	24	23	23	21	129
4003	17	26	27	22	25	25	142
4004	22	22	22	18	20	20	124
4005	17	22	22	19	22	19	121
4006	19	23	24	20	20	19	125
4007	18	22	25	18	23	24	130
4008	20	25	15	18	23	12	113
4009	19	22	20	27	20	21	129
4010	20	24	25	21	23	19	132
4011	20	21	20	16	18	17	112
4012	21	28	25	23	25	23	145
n	12	12	12	12	12	12	12
Mean	19	23	23	21	22	20	127
S.D.	2	2	3	3	2	4	10

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 4 - 5 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Food consumption Period : F0 before mating Day 1-15

Sex : Female Dose : BTetCA 0 mg/kg Unit : g Species : Rat

Animal No.	/Day 2	8	15	Total food consumption
1101	17	17	14	48
1102	10	16	15	41
1103	10	17	16	43
1104	13	17	13	43
1105	13	12	17	42
1106	11	14	16	41
1107	16	16	21	53
1108	13	14	11	38
1109	15	16	14	45
1110	10	16	15	41
1111	14	11	16	41
1112	11	14	17	42
n	12	12	12	12
Mean	13	15	15	43
S.D.	2	2	2	4

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 4 - 6 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Food consumption Period : F0 before mating Day 1-15

Sex : Female Dose : BTetCA 100 mg/kg Unit : g Species : Rat

Animal No.	/Day 2	8	15	Total food consumption
2101	12	13	14	39
2102	11	13	10	34
2103	13	14	10	37
2104	13	14	14	41
2105	10	11	17	38
2106	15	16	19	50
2107	11	14	15	40
2108	13	13	15	41
2109	13	12	16	41
2110	15	11	18	44
2111	8	14	13	35
2112	14	15	18	47
n	12	12	12	12
Mean	12	13	15	41
S.D.	2	1	3	5

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 4 - 7 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Food consumption Period : F0 before mating Day 1-15

Sex : Female Dose : BTetCA 300 mg/kg Unit : g Species : Rat

Animal No.	/Day 2	8	15	Total food consumption
3101	12	15	15	42
3102	13	13	15	41
3103	13	13	11	37
3104	11	11	16	38
3105	11	15	16	42
3106	10	15	12	37
3107	13	12	16	41
3108	16	17	17	50
3109	17	14	16	47
3110	12	16	16	44
3111	9	13	12	34
3112	14	15	11	40
n	12	12	12	12
Mean	13	14	14	41
S.D.	2	2	2	4

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 4 - 8 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Food consumption Period : F0 before mating Day 1-15

Sex : Female Dose : BTetCA 1000 mg/kg Unit : g Species : Rat

Animal No.	/Day 2	8	15	Total food consumption
4101	12	17	16	45
4102	12	14	17	43
4103	13	14	14	41
4104	11	16	16	43
4105	10	15	13	38
4106	12	12	15	39
4107	11	15	14	40
4108	10	16	15	41
4109	11	15	17	43
4110	9	21	18	48
4111	15	14	17	46
4112	12	16	14	42
n	12	12	12	12
Mean	12	15	16	42
S.D.	2	2	2	3

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 4 - 9 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Food consumption Period : F0 gestation Day 0-25

Sex : Female Dose : BTetCA 0 mg/kg Unit : g Species : Rat

Animal No.	/Day 1	7	14	20	Total food consumption
1101	13	18	15	14	60
1102	13	15	17	18	63
1103	15	23	17	21	76
1104	16	17	18	21	72
1105	18	17	20	20	75
1106	16	21	17	21	75
1107	16	19	19	18	72
1108	17	21	21	22	81
1109	18	24	22	22	86
1110	14	19	22	26	81
1111	21	21	20	18	80
1112	17	21	21	26	85
n	12	12	12	12	12
Mean	16	20	19	21	76
S.D.	2	3	2	3	8

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 4 - 10 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Food consumption Period : F0 gestation Day 0-25

Sex : Female Dose : BTetCA 100 mg/kg Unit : g Species : Rat

Animal No.	/Day 1	7	14	20	Total food consumption
2101	17	22	21	20	80
2102	14	18	20	18	70
2103	15	20	15	21	71
2104	17	18	22	23	80
2105	12	16	19	18	65
2106	20	23	23	23	89
2107	14	18	18	21	71
2108	12	11	15	24	62
2109	20	23	22	18	83
2110	17	22	19	20	78
2111	10	20	17	19	66
2112	15	19	16	17	67
n	12	12	12	12	12
Mean	15	19	19	20	74
S.D.	3	3	3	2	8

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 4 - 11 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Food consumption Period : F0 gestation Day 0-25

Sex : Female Dose : BTetCA 300 mg/kg Unit : g Species : Rat

Animal No.	/Day 1	7	14	20	Total food consumption
3101	17	18	20	22	77
3102	15	19	19	23	76
3103	17	19	16	22	74
3104	17	19	19	21	76
3105	17	23	24	24	88
3106	15	21	23	23	82
3107	18	21	21	12	72
3108	18	20	20	12	70
3109	15	24	23	25	87
3110	17	18	19	18	72
3111	12	18	18	20	68
3112	16	19	19	21	75
n	12	12	12	12	12
Mean	16	20	20	20	76
S.D.	2	2	2	4	6

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 4 - 12 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Food consumption Period : F0 gestation Day 0-25

Sex : Female Dose : BTetCA 1000 mg/kg Unit : g Species : Rat

Animal No.	/Day 1	7	14	20	Total food consumption
4101	14	21	20	19	74
4102	19	20	19	19	77
4103	20	19	22	23	84
4104	17	18	20	24	79
4105	8	15	16	19	58
4106	18	22	21	22	83
4107	14	19	23	25	81
4108	15	20	16	21	72
4109	16	19	23	24	82
4110	12	25	25	11	73
4111	20	18	19	19	76
4112	19	15	21	22	77
n	12	12	12	12	12
Mean	16	19	20	21	76
S.D.	4	3	3	4	7

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 4 - 13 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Food consumption Period : F0 lactation Day 0-5

Sex : Female Dose : BTetCA 0 mg/kg Unit : g Species : Rat

Animal No.	/Day 2	4	Total food consumption
1101	22	37	59
1102	18	32	50
1103	21	32	53
1104	26	33	59
1105	24	23	47
1106	30	42	72
1107	12	26	38
1108	25	35	60
1109	18	30	48
1110	23	38	61
1111	27	41	68
1112	31	51	82
n	12	12	12
Mean	23	35	58
S.D.	5	8	12

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 4 - 14 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Food consumption Period : F0 lactation Day 0-5

Sex : Female Dose : BTetCA 100 mg/kg Unit : g Species : Rat

Animal No.	/Day 2	4	Total food consumption
2101	23	32	55
2102	21	36	57
2103	18	32	50
2104	23	36	59
2105	23	33	56
2106	25	37	62
2107	17	28	45
2108	18	39	57
2109	26	43	69
2110	15	33	48
2111	18	26	44
2112	22	31	53
n	12	12	12
Mean	21	34	55
S.D.	3	5	7

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 4 - 15 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Food consumption Period : F0 lactation Day 0-5

Sex : Female Dose : BTetCA 300 mg/kg Unit : g Species : Rat

Animal No.	/Day 2	4	Total food consumption
3101	26	34	60
3102	25	36	61
3103	23	37	60
3104	28	40	68
3105	30	38	68
3106	20	31	51
3107	31	38	69
3108	31	42	73
3109	18	35	53
3110	19	29	48
3111	26	33	59
3112	26	34	60
n	12	12	12
Mean	25	36	61
S.D.	4	4	8

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 4 - 16 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Food consumption Period : F0 lactation Day 0-5

Sex : Female Dose : BTetCA 1000 mg/kg Unit : g Species : Rat

Animal No.	/Day 2	4	Total food consumption
4101	13	25	38
4102	31	38	69
4103	30	46	76
4104	26	41	67
4105	23	36	59
4106	20	31	51
4107	31	35	66
4108	26	36	62
4109	24	38	62
4110	18	33	51
4111	17	28	45
4112	15	28	43
n	12	12	12
Mean	23	35	57
S.D.	6	6	12

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 4 - 17 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Food consumption Period : Administration

Sex : Female Dose : BTetCA 0 mg/kg Unit : g Species : Rat

Animal No.	/Day 2	8	15	30	36	42	Total food consumption
5101	7	13	12	14	11	10	67
5102	13	12	19	15	17	16	92
5103	15	14	17	12	16	12	86
5104	11	12	12	13	12	12	72
5105	11	18	19	18	15	13	94
5106	7	13	14	14	12	12	72
5107	12	14	16	13	15	12	82
5108	12	14	16	13	13	12	80
5109	14	16	17	15	17	16	95
5110	15	17	15	15	14	16	92
n	10	10	10	10	10	10	10
Mean	12	14	16	14	14	13	83
S.D.	3	2	2	2	2	2	10

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 4 - 18 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Food consumption Period : Administration

Sex : Female Dose : BTetCA 1000 mg/kg Unit : g Species : Rat

Animal No.	/Day 2	8	15	30	36	42	Total food consumption
6101	10	16	17	17	13	12	85
6102	9	16	16	14	15	12	82
6103	12	15	13	11	13	13	77
6104	11	15	11	11	16	11	75
6105	13	16	16	13	16	19	93
6106	12	13	16	16	13	19	89
6107	11	17	14	16	15	18	91
6108	9	13	13	18	10	11	74
6109	11	14	13	13	13	15	79
6110	12	15	13	13	16	21	90
n	10	10	10	10	10	10	10
Mean	11	15	14	14	14	15	84
S.D.	1	1	2	2	2	4	7

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 4 - 19 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Food consumption Period : Recovery Day 1-15

Sex : Male Dose : BTetCA 0 mg/kg Unit : g Species : Rat

Animal No.	/Day 2	8	14	Total food consumption
1008	19	27	24	70
1009	24	25	25	74
1010	21	24	25	70
1011	21	23	22	66
1012	24	25	25	74
n	5	5	5	5
Mean	22	25	24	71
S.D.	2	1	1	3

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 4 - 20 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Food consumption Period : Recovery Day 1-15

Sex : Male Dose : BTetCA 1000 mg/kg Unit : g Species : Rat

Animal No.	/Day 2	8	14	Total food consumption
4008	26	29	27	82
4009	24	28	20	72
4010	25	29	27	81
4011	24	27	22	73
4012	32	31	29	92
n	5	5	5	5
Mean	26	29	25	80
S.D.	3	1	4	8

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 4 - 21 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Food consumption Period : Recovery Day 1-15

Sex : Female Dose : BTetCA 0 mg/kg Unit : g Species : Rat

Animal No.	/Day 2	8	14	Total food consumption
5106	14	27	16	57
5107	15	14	12	41
5108	15	19	19	53
5109	15	18	16	49
5110	20	21	18	59
n	5	5	5	5
Mean	16	20	16	52
S.D.	2	5	3	7

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 4 - 22 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Food consumption Period : Recovery Day 1-15

Sex : Female Dose : BTetCA 1000 mg/kg Unit : g Species : Rat

Animal No.	/Day 2	8	14	Total food consumption
6106	14	16	17	47
6107	17	21	16	54
6108	15	15	17	47
6109	17	17	16	50
6110	14	19	19	52
n	5	5	5	5
Mean	15	18	17	50
S.D.	2	2	1	3

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 5 - 1 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Urinalysis Stage : Week 6 of administration

Sex : Male Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	pH	Protein	Ketones	Glucose	Occult Blood	Bilirubin	Urobilinogen	Color
1008	8.0	-	+/-	-	+/-	-	+/-	Y
1009	7.0	+/-	1+	-	+/-	-	+/-	Y
1010	8.0	1+	1+	-	+/-	1+	+/-	Y
1011	7.0	1+	1+	-	+/-	-	+/-	Y
1012	7.5	+/-	+/-	-	+/-	-	+/-	Y
n	5	5	5	5	5	5	5	5

Protein) -:Negative , +/-:15 , 1+:30 , 2+:100 , 3+:≥300 mg/dL
Ketones) -:Negative , +/-:5 , 1+:15 , 2+:40 , 3+:80 mg/dL
Glucose) -:Negative , 1+:100 , 2+:250 , 3+:500 , 4+:≥1000 mg/dL
Occult Blood) -:Negative , +/-:0.015 , 1+:0.062 , 2+:0.135 , 3+:0.405 mg/dL
Bilirubin) -:Negative , 1+:0.8 , 2+:1.6 , 3+:3.2 mg/dL
Urobilinogen) +/-:0.1 - 1.0 , 1+:2.0 , 2+:4.0 , 3+:≥8.0 Ehrlich U/dL
Color LY: Light Yellow Y: Yellow DY: Dark Yellow BR: Brown RE: Red RB: Reddish brown WH: White BL: Blue CL: Colorless OT: Other
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 5 - 2 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Urinalysis Stage : Week 6 of administration

Sex : Male Dose : BTetCA 100 mg/kg Species : Rat

Animal No.	pH	Protein	Ketones	Glucose	Occult Blood	Bilirubin	Urobilinogen	Color
2008	7.5	+/-	1+	-	+/-	-	+/-	Y
2009	6.5	-	1+	-	+/-	-	+/-	Y
2010	8.0	+/-	1+	-	+/-	-	+/-	Y
2011	8.5	1+	2+	-	-	-	+/-	Y
2012	8.5	-	+/-	-	+/-	-	+/-	Y
n	5	5	5	5	5	5	5	5

Protein) -:Negative , +/-:15 , 1+:30 , 2+:100 , 3+:≥300 mg/dL
Ketones) -:Negative , +/-:5 , 1+:15 , 2+:40 , 3+:80 mg/dL
Glucose) -:Negative , 1+:100 , 2+:250 , 3+:500 , 4+:≥1000 mg/dL
Occult Blood) -:Negative , +/-:0.015 , 1+:0.062 , 2+:0.135 , 3+:0.405 mg/dL
Bilirubin) -:Negative , 1+:0.8 , 2+:1.6 , 3+:3.2 mg/dL
Urobilinogen) +/-:0.1 - 1.0 , 1+:2.0 , 2+:4.0 , 3+:≥8.0 Ehrlich U/dL
Color LY: Light Yellow Y: Yellow DY: Dark Yellow BR: Brown RE: Red RB: Reddish brown WH: White BL: Blue CL: Colorless OT: Other
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 5 - 3 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Urinalysis Stage : Week 6 of administration

Sex : Male Dose : BTetCA 300 mg/kg Species : Rat

Animal No.	pH	Protein	Ketones	Glucose	Occult Blood	Bilirubin	Urobilinogen	Color
3008	6.0	2+	1+	-	-	1+	+/-	Y
3009	6.5	+/-	1+	-	-	-	+/-	Y
3010	6.0	+/-	+/-	-	2+	1+	+/-	Y
3011	8.0	+/-	+/-	-	+/-	-	+/-	Y
3012	>=9.0	1+	2+	1+	-	1+	+/-	Y
n	5	5	5	5	5	5	5	5

Protein) -:Negative , +/-:15 , 1+:30 , 2+:100 , 3+:≥300 mg/dL
Ketones) -:Negative , +/-:5 , 1+:15 , 2+:40 , 3+:80 mg/dL
Glucose) -:Negative , 1+:100 , 2+:250 , 3+:500 , 4+:≥1000 mg/dL
Occult Blood) -:Negative , +/-:0.015 , 1+:0.062 , 2+:0.135 , 3+:0.405 mg/dL
Bilirubin) -:Negative , 1+:0.8 , 2+:1.6 , 3+:3.2 mg/dL
Urobilinogen) +/-:0.1 - 1.0 , 1+:2.0 , 2+:4.0 , 3+:≥8.0 Ehrlich U/dL
Color LY: Light Yellow Y: Yellow DY: Dark Yellow BR: Brown RE: Red RB: Reddish brown WH: White BL: Blue CL: Colorless OT: Other
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 5 - 4 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Urinalysis Stage : Week 6 of administration

Sex : Male Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	pH	Protein	Ketones	Glucose	Occult Blood	Bilirubin	Urobilinogen	Color
4008	7.0	-	-	-	+/-	-	+/-	Y
4009	6.5	-	-	-	+/-	-	+/-	Y
4010	6.5	-	-	-	+/-	-	+/-	Y
4011	6.5	1+	-	-	+/-	-	+/-	Y
4012	6.5	+/-	+/-	-	+/-	-	+/-	Y
n	5	5	5	5	5	5	5	5

Protein) -:Negative , +/-:15 , 1+:30 , 2+:100 , 3+:≥300 mg/dL
Ketones) -:Negative , +/-:5 , 1+:15 , 2+:40 , 3+:80 mg/dL
Glucose) -:Negative , 1+:100 , 2+:250 , 3+:500 , 4+:≥1000 mg/dL
Occult Blood) -:Negative , +/-:0.015 , 1+:0.062 , 2+:0.135 , 3+:0.405 mg/dL
Bilirubin) -:Negative , 1+:0.8 , 2+:1.6 , 3+:3.2 mg/dL
Urobilinogen) +/-:0.1 - 1.0 , 1+:2.0 , 2+:4.0 , 3+:≥8.0 Ehrlich U/dL
Color LY: Light Yellow Y: Yellow DY: Dark Yellow BR: Brown RE: Red RB: Reddish brown WH: White BL: Blue CL: Colorless OT: Other
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 5 - 5 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Urinalysis Stage : Week 6 of administration

Sex : Male Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	RBC	WBC	Squamous epithelial cells	Small round epithelial cells	Cast	Crystal phosphate salts	Crystal calcium oxalate
1008	-	-	+/-	-	-	+/-	-
1009	-	+/-	+/-	-	-	-	-
1010	-	-	+/-	-	-	-	-
1011	-	-	+/-	-	-	-	-
1012	-	-	+/-	-	-	-	-
n	5	5	5	5	5	5	5

RBC) -:Negative , +/-:Slight , 1+:Mild , 2+:Moderate , 3+:Severe
WBC) -:Negative , +/-:Slight , 1+:Mild , 2+:Moderate , 3+:Severe
Squamous epithelial cells) -:Negative , +/-:Slight , 1+:Mild , 2+:Moderate , 3+:Severe
Small round epithelial cells) -:Negative , +/-:Slight , 1+:Mild , 2+:Moderate , 3+:Severe
Cast) -:Negative , +/-:Slight , 1+:Mild , 2+:Moderate , 3+:Severe
Crystal phosphate salts) -:Negative , +/-:Slight , 1+:Mild , 2+:Moderate , 3+:Severe
Crystal calcium oxalate) -:Negative , +/-:Slight , 1+:Mild , 2+:Moderate , 3+:Severe
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 5 - 6 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Urinalysis Stage : Week 6 of administration

Sex : Male Dose : BTetCA 100 mg/kg Species : Rat

Animal No.	RBC	WBC	Squamous epithelial cells	Small round epithelial cells	Cast	Crystal phosphate salts	Crystal calcium oxalate
2008	-	-	+/-	-	-	+/-	-
2009	-	-	+/-	-	-	-	-
2010	-	-	+/-	-	-	+/-	-
2011	-	-	+/-	-	-	+/-	-
2012	-	-	+/-	-	-	+/-	-
n	5	5	5	5	5	5	5

RBC) -:Negative , +/-:Slight , 1+:Mild , 2+:Moderate , 3+:Severe
WBC) -:Negative , +/-:Slight , 1+:Mild , 2+:Moderate , 3+:Severe
Squamous epithelial cells) -:Negative , +/-:Slight , 1+:Mild , 2+:Moderate , 3+:Severe
Small round epithelial cells) -:Negative , +/-:Slight , 1+:Mild , 2+:Moderate , 3+:Severe
Cast) -:Negative , +/-:Slight , 1+:Mild , 2+:Moderate , 3+:Severe
Crystal phosphate salts) -:Negative , +/-:Slight , 1+:Mild , 2+:Moderate , 3+:Severe
Crystal calcium oxalate) -:Negative , +/-:Slight , 1+:Mild , 2+:Moderate , 3+:Severe
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 5 - 7 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Urinalysis Stage : Week 6 of administration

Sex : Male Dose : BTetCA 300 mg/kg Species : Rat

Animal No.	RBC	WBC	Squamous epithelial cells	Small round epithelial cells	Cast	Crystal phosphate salts	Crystal calcium oxalate
3008	-	-	+/-	-	-	+/-	-
3009	-	-	+/-	-	-	+/-	-
3010	-	-	+/-	-	-	+/-	-
3011	-	+/-	+/-	-	-	+/-	-
3012	-	-	+/-	-	-	+/-	-
n	5	5	5	5	5	5	5

RBC) -:Negative , +/-:Slight , 1+:Mild , 2+:Moderate , 3+:Severe
WBC) -:Negative , +/-:Slight , 1+:Mild , 2+:Moderate , 3+:Severe
Squamous epithelial cells) -:Negative , +/-:Slight , 1+:Mild , 2+:Moderate , 3+:Severe
Small round epithelial cells) -:Negative , +/-:Slight , 1+:Mild , 2+:Moderate , 3+:Severe
Cast) -:Negative , +/-:Slight , 1+:Mild , 2+:Moderate , 3+:Severe
Crystal phosphate salts) -:Negative , +/-:Slight , 1+:Mild , 2+:Moderate , 3+:Severe
Crystal calcium oxalate) -:Negative , +/-:Slight , 1+:Mild , 2+:Moderate , 3+:Severe
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 5 - 8 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Urinalysis Stage : Week 6 of administration

Sex : Male Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	RBC	WBC	Squamous epithelial cells	Small round epithelial cells	Cast	Crystal phosphate salts	Crystal calcium oxalate
4008	-	-	+/-	-	-	+/-	-
4009	-	-	+/-	-	-	-	-
4010	-	-	+/-	-	-	-	-
4011	-	-	+/-	-	-	-	-
4012	-	-	+/-	-	-	-	-
n	5	5	5	5	5	5	5

RBC) -:Negative , +/-:Slight , 1+:Mild , 2+:Moderate , 3+:Severe
WBC) -:Negative , +/-:Slight , 1+:Mild , 2+:Moderate , 3+:Severe
Squamous epithelial cells) -:Negative , +/-:Slight , 1+:Mild , 2+:Moderate , 3+:Severe
Small round epithelial cells) -:Negative , +/-:Slight , 1+:Mild , 2+:Moderate , 3+:Severe
Cast) -:Negative , +/-:Slight , 1+:Mild , 2+:Moderate , 3+:Severe
Crystal phosphate salts) -:Negative , +/-:Slight , 1+:Mild , 2+:Moderate , 3+:Severe
Crystal calcium oxalate) -:Negative , +/-:Slight , 1+:Mild , 2+:Moderate , 3+:Severe
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 5 - 9 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Urinalysis Stage : Week 6 of administration

Sex : Male Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Urine volume mL/24h	Osmotic pressure mOsm/kg	U-Na mmol/24h	U-K mmol/24h	U-Cl mmol/24h
1008	17.5	1130	1.5	3.1	2.0
1009	8.4	1908	1.1	2.5	1.6
1010	8.4	1684	0.6	2.2	1.2
1011	7.8	1824	0.9	2.2	1.6
1012	10.2	1698	1.0	2.7	1.4
n	5	5	5	5	5
Mean	10.5	1649	1.0	2.5	1.6
S.D.	4.0	304	0.3	0.4	0.3

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 5 - 10 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Urinalysis Stage : Week 6 of administration

Sex : Male Dose : BTetCA 100 mg/kg Species : Rat

Animal No.	Urine volume mL/24h	Osmotic pressure mOsm/kg	U-Na mmol/24h	U-K mmol/24h	U-Cl mmol/24h
2008	9.8	2316	1.0	3.4	2.4
2009	9.2	1924	0.9	2.8	1.8
2010	11.9	1572	1.4	2.9	2.3
2011	7.8	2392	1.7	2.7	2.0
2012	14.3	1842	1.5	4.4	2.9
n	5	5	5	5	5
Mean	10.6	2009	1.3	3.2	2.3
S.D.	2.5	342	0.3	0.7	0.4

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 5 - 11 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Urinalysis Stage : Week 6 of administration

Sex : Male Dose : BTetCA 300 mg/kg Species : Rat

Animal No.	Urine volume mL/24h	Osmotic pressure mOsm/kg	U-Na mmol/24h	U-K mmol/24h	U-Cl mmol/24h
3008	4.7	3044	0.3	2.2	1.5
3009	12.0	1856	0.9	3.6	2.3
3010	7.3	2338	0.1	2.5	1.5
3011	11.4	1696	1.0	3.1	2.3
3012	7.3	1806	0.5	2.1	1.4
n	5	5	5	5	5
Mean	8.5	2148	0.6	2.7	1.8
S.D.	3.1	558	0.4	0.6	0.5

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 5 - 12 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Urinalysis Stage : Week 6 of administration

Sex : Male Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Urine volume mL/24h	Osmotic pressure mOsm/kg	U-Na mmol/24h	U-K mmol/24h	U-Cl mmol/24h
4008	14.8	1524	0.7	2.7	2.1
4009	16.6	986	0.2	1.3	1.8
4010	22.3	1104	0.1	1.4	3.0
4011	8.2	2090	0.1	1.1	1.8
4012	9.5	1430	0.8	1.1	1.1
n	5	5	5	5	5
Mean	14.3	1427	0.4	1.5	2.0
S.D.	5.7	432	0.3	0.7	0.7

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 5 - 13 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Urinalysis Stage : Week 6 of administration

Sex : Female Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	pH	Protein	Ketones	Glucose	Occult Blood	Bilirubin	Urobilinogen	Color
5106	7.0	-	+/-	-	-	-	+/-	Y
5107	6.5	-	-	-	-	-	+/-	Y
5108	7.5	-	-	-	-	-	+/-	Y
5109	8.5	-	-	-	-	-	+/-	Y
5110	6.5	-	-	-	-	-	+/-	Y
n	5	5	5	5	5	5	5	5

Protein) -:Negative , +/-:15 , 1+:30 , 2+:100 , 3+:≥300 mg/dL
Ketones) -:Negative , +/-:5 , 1+:15 , 2+:40 , 3+:80 mg/dL
Glucose) -:Negative , 1+:100 , 2+:250 , 3+:500 , 4+:≥1000 mg/dL
Occult Blood) -:Negative , +/-:0.015 , 1+:0.062 , 2+:0.135 , 3+:0.405 mg/dL
Bilirubin) -:Negative , 1+:0.8 , 2+:1.6 , 3+:3.2 mg/dL
Urobilinogen) +/-:0.1 - 1.0 , 1+:2.0 , 2+:4.0 , 3+:≥8.0 Ehrlich U/dL
Color LY: Light Yellow Y: Yellow DY: Dark Yellow BR: Brown RE: Red RB: Reddish brown WH: White BL: Blue CL: Colorless OT: Other
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 5 - 14 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Urinalysis Stage : Week 6 of administration

Sex : Female Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	pH	Protein	Ketones	Glucose	Occult Blood	Bilirubin	Urobilinogen	Color
6106	6.0	-	-	-	-	-	+/-	Y
6107	6.5	-	-	-	-	-	+/-	Y
6108	6.0	-	-	-	-	-	+/-	Y
6109	6.5	-	-	-	-	-	+/-	Y
6110	6.0	-	-	-	-	-	+/-	Y
n	5	5	5	5	5	5	5	5

Protein) -:Negative , +/-:15 , 1+:30 , 2+:100 , 3+:≥300 mg/dL
Ketones) -:Negative , +/-:5 , 1+:15 , 2+:40 , 3+:80 mg/dL
Glucose) -:Negative , 1+:100 , 2+:250 , 3+:500 , 4+:≥1000 mg/dL
Occult Blood) -:Negative , +/-:0.015 , 1+:0.062 , 2+:0.135 , 3+:0.405 mg/dL
Bilirubin) -:Negative , 1+:0.8 , 2+:1.6 , 3+:3.2 mg/dL
Urobilinogen) +/-:0.1 - 1.0 , 1+:2.0 , 2+:4.0 , 3+:≥8.0 Ehrlich U/dL
Color LY: Light Yellow Y: Yellow DY: Dark Yellow BR: Brown RE: Red RB: Reddish brown WH: White BL: Blue CL: Colorless OT: Other
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Urinalysis

Stage : Week 6 of administration

Sex : Female

Dose : BTetCA 0 mg/kg

Species : Rat

Animal No.	RBC	WBC	Squamous epithelial cells	Small round epithelial cells	Cast	Crystal phosphate salts	Crystal calcium oxalate
5106	-	-	+/-	-	-	-	-
5107	-	-	+/-	-	-	-	-
5108	-	-	+/-	-	-	-	-
5109	-	-	+/-	-	-	-	-
5110	-	-	+/-	-	-	-	-
n	5	5	5	5	5	5	5

RBC) -:Negative , +/-:Slight , 1+:Mild , 2+:Moderate , 3+:Severe
WBC) -:Negative , +/-:Slight , 1+:Mild , 2+:Moderate , 3+:Severe
Squamous epithelial cells) -:Negative , +/-:Slight , 1+:Mild , 2+:Moderate , 3+:Severe
Small round epithelial cells) -:Negative , +/-:Slight , 1+:Mild , 2+:Moderate , 3+:Severe
Cast) -:Negative , +/-:Slight , 1+:Mild , 2+:Moderate , 3+:Severe
Crystal phosphate salts) -:Negative , +/-:Slight , 1+:Mild , 2+:Moderate , 3+:Severe
Crystal calcium oxalate) -:Negative , +/-:Slight , 1+:Mild , 2+:Moderate , 3+:Severe
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Urinalysis

Stage : Week 6 of administration

Sex : Female

Dose : BTetCA 1000 mg/kg

Species : Rat

Animal No.	RBC	WBC	Squamous epithelial cells	Small round epithelial cells	Cast	Crystal phosphate salts	Crystal calcium oxalate
6106	-	-	+/-	-	-	-	-
6107	-	-	+/-	-	-	-	-
6108	-	-	+/-	-	-	+/-	-
6109	-	-	+/-	-	-	-	-
6110	-	-	+/-	-	-	+/-	-
n	5	5	5	5	5	5	5

RBC) -:Negative , +/-:Slight , 1+:Mild , 2+:Moderate , 3+:Severe
WBC) -:Negative , +/-:Slight , 1+:Mild , 2+:Moderate , 3+:Severe
Squamous epithelial cells) -:Negative , +/-:Slight , 1+:Mild , 2+:Moderate , 3+:Severe
Small round epithelial cells) -:Negative , +/-:Slight , 1+:Mild , 2+:Moderate , 3+:Severe
Cast) -:Negative , +/-:Slight , 1+:Mild , 2+:Moderate , 3+:Severe
Crystal phosphate salts) -:Negative , +/-:Slight , 1+:Mild , 2+:Moderate , 3+:Severe
Crystal calcium oxalate) -:Negative , +/-:Slight , 1+:Mild , 2+:Moderate , 3+:Severe
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 5 - 17 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Urinalysis Stage : Week 6 of administration

Sex : Female Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Urine volume mL/24h	Osmotic pressure mOsm/kg	U-Na mmol/24h	U-K mmol/24h	U-Cl mmol/24h
5106	1.5	3172	0.5	0.7	0.5
5107	5.4	1746	0.4	1.5	1.0
5108	8.3	1572	1.0	2.1	1.5
5109	15.3	970	1.3	2.0	1.5
5110	10.3	1474	1.2	2.3	1.6
n	5	5	5	5	5
Mean	8.2	1787	0.9	1.7	1.2
S.D.	5.2	826	0.4	0.6	0.5

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Urinalysis

Stage : Week 6 of administration

Sex : Female

Dose : BTetCA 1000 mg/kg

Species : Rat

Animal No.	Urine volume mL/24h	Osmotic pressure mOsm/kg	U-Na mmol/24h	U-K mmol/24h	U-Cl mmol/24h
6106	13.6	1320	1.3	2.4	2.4
6107	2.8	3466	0.1	1.2	0.9
6108	2.0	2376	0.0	0.3	0.5
6109	2.4	2988	0.0	0.9	0.6
6110	8.2	1120	0.2	0.4	0.8
n	5	5	5	5	5
Mean	5.8	2254	0.3	1.0	1.0
S.D.	5.0	1022	0.6	0.8	0.8

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 5 - 19 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Urinalysis Stage : Week 2 of recovery

Sex : Male Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	pH	Protein	Ketones	Glucose	Occult Blood	Bilirubin	Urobilinogen	Color
1008	7.5	-	-	-	+/-	-	+/-	Y
1009	>=9.0	+/-	+/-	-	+/-	-	+/-	Y
1010	>=9.0	+/-	1+	-	+/-	-	+/-	Y
1011	7.0	+/-	-	-	+/-	-	+/-	Y
1012	8.0	+/-	-	-	+/-	-	+/-	Y
n	5	5	5	5	5	5	5	5

Protein) -:Negative , +/-:15 , 1+:30 , 2+:100 , 3+:≥300 mg/dL
Ketones) -:Negative , +/-:5 , 1+:15 , 2+:40 , 3+:80 mg/dL
Glucose) -:Negative , 1+:100 , 2+:250 , 3+:500 , 4+:≥1000 mg/dL
Occult Blood) -:Negative , +/-:0.015 , 1+:0.062 , 2+:0.135 , 3+:0.405 mg/dL
Bilirubin) -:Negative , 1+:0.8 , 2+:1.6 , 3+:3.2 mg/dL
Urobilinogen) +/-:0.1 - 1.0 , 1+:2.0 , 2+:4.0 , 3+:≥8.0 Ehrlich U/dL
Color LY: Light Yellow Y: Yellow DY: Dark Yellow BR: Brown RE: Red RB: Reddish brown WH: White BL: Blue CL: Colorless OT: Other
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 5 - 20 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Urinalysis Stage : Week 2 of recovery

Sex : Male Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	pH	Protein	Ketones	Glucose	Occult Blood	Bilirubin	Urobilinogen	Color
4008	8.5	-	1+	-	+/-	-	+/-	Y
4009	8.5	+/-	-	-	+/-	-	+/-	Y
4010	8.5	-	+/-	-	1+	-	+/-	Y
4011	8.5	-	1+	-	+/-	-	+/-	Y
4012	8.5	+/-	+/-	-	+/-	-	+/-	Y
n	5	5	5	5	5	5	5	5

Protein) -:Negative , +/-:15 , 1+:30 , 2+:100 , 3+:≥300 mg/dL
Ketones) -:Negative , +/-:5 , 1+:15 , 2+:40 , 3+:80 mg/dL
Glucose) -:Negative , 1+:100 , 2+:250 , 3+:500 , 4+:≥1000 mg/dL
Occult Blood) -:Negative , +/-:0.015 , 1+:0.062 , 2+:0.135 , 3+:0.405 mg/dL
Bilirubin) -:Negative , 1+:0.8 , 2+:1.6 , 3+:3.2 mg/dL
Urobilinogen) +/-:0.1 - 1.0 , 1+:2.0 , 2+:4.0 , 3+:≥8.0 Ehrlich U/dL
Color LY: Light Yellow Y: Yellow DY: Dark Yellow BR: Brown RE: Red RB: Reddish brown WH: White BL: Blue CL: Colorless OT: Other
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 5 - 21 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Urinalysis Stage : Week 2 of recovery

Sex : Male Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	RBC	WBC	Squamous epithelial cells	Small round epithelial cells	Cast	Crystal phosphate salts	Crystal calcium oxalate
1008	-	-	+/-	-	-	-	-
1009	-	-	+/-	-	-	-	-
1010	-	-	+/-	-	-	+/-	-
1011	-	-	+/-	-	-	-	-
1012	-	-	+/-	-	-	-	-
n	5	5	5	5	5	5	5

RBC) -:Negative , +/-:Slight , 1+:Mild , 2+:Moderate , 3+:Severe
WBC) -:Negative , +/-:Slight , 1+:Mild , 2+:Moderate , 3+:Severe
Squamous epithelial cells) -:Negative , +/-:Slight , 1+:Mild , 2+:Moderate , 3+:Severe
Small round epithelial cells) -:Negative , +/-:Slight , 1+:Mild , 2+:Moderate , 3+:Severe
Cast) -:Negative , +/-:Slight , 1+:Mild , 2+:Moderate , 3+:Severe
Crystal phosphate salts) -:Negative , +/-:Slight , 1+:Mild , 2+:Moderate , 3+:Severe
Crystal calcium oxalate) -:Negative , +/-:Slight , 1+:Mild , 2+:Moderate , 3+:Severe
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Urinalysis
Sex : Male
Stage : Week 2 of recovery
Dose : BTetCA 1000 mg/kg
Species : Rat

Animal No.	RBC	WBC	Squamous epithelial cells	Small round epithelial cells	Cast	Crystal phosphate salts	Crystal calcium oxalate
4008	-	-	+/-	-	-	-	-
4009	-	-	+/-	-	-	-	-
4010	-	-	+/-	-	-	-	-
4011	-	-	+/-	-	-	+/-	-
4012	-	-	+/-	-	-	+/-	-
n	5	5	5	5	5	5	5

RBC) -:Negative , +/-:Slight , 1+:Mild , 2+:Moderate , 3+:Severe
WBC) -:Negative , +/-:Slight , 1+:Mild , 2+:Moderate , 3+:Severe
Squamous epithelial cells) -:Negative , +/-:Slight , 1+:Mild , 2+:Moderate , 3+:Severe
Small round epithelial cells) -:Negative , +/-:Slight , 1+:Mild , 2+:Moderate , 3+:Severe
Cast) -:Negative , +/-:Slight , 1+:Mild , 2+:Moderate , 3+:Severe
Crystal phosphate salts) -:Negative , +/-:Slight , 1+:Mild , 2+:Moderate , 3+:Severe
Crystal calcium oxalate) -:Negative , +/-:Slight , 1+:Mild , 2+:Moderate , 3+:Severe
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Urinalysis

Stage : Week 2 of recovery

Sex : Male

Dose : BTetCA 0 mg/kg

Species : Rat

Animal No.	Urine volume mL/24h	Osmotic pressure mOsm/kg	U-Na mmol/24h	U-K mmol/24h	U-Cl mmol/24h
1008	24.2	1158	2.2	4.0	2.7
1009	20.2	1350	2.3	3.7	2.9
1010	9.2	2162	1.5	3.1	2.2
1011	14.1	2238	2.1	4.9	3.2
1012	14.6	2224	2.0	5.2	2.9
n	5	5	5	5	5
Mean	16.5	1826	2.0	4.2	2.8
S.D.	5.8	528	0.3	0.9	0.4

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Urinalysis

Stage : Week 2 of recovery

Sex : Male

Dose : BTetCA 1000 mg/kg

Species : Rat

Animal No.	Urine volume mL/24h	Osmotic pressure mOsm/kg	U-Na mmol/24h	U-K mmol/24h	U-Cl mmol/24h
4008	13.4	2050	1.8	4.6	2.9
4009	18.8	1598	2.1	4.8	3.0
4010	29.9	1266	2.6	5.3	3.5
4011	12.4	2050	1.9	3.8	2.5
4012	15.7	2168	2.7	5.1	3.5
n	5	5	5	5	5
Mean	18.0	1826	2.2	4.7	3.1
S.D.	7.1	382	0.4	0.6	0.4

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Urinalysis Stage : Week 2 of recovery

Sex : Female Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	pH	Protein	Ketones	Glucose	Occult Blood	Bilirubin	Urobilinogen	Color
5106	>=9.0	-	-	-	-	-	+/-	Y
5107	>=9.0	-	-	-	1+	-	+/-	Y
5108	8.0	-	-	-	-	-	+/-	Y
5109	6.5	-	-	-	-	-	+/-	Y
5110	7.5	-	-	-	-	-	+/-	Y
n	5	5	5	5	5	5	5	5

Protein) -:Negative , +/-:15 , 1+:30 , 2+:100 , 3+:≥300 mg/dL
Ketones) -:Negative , +/-:5 , 1+:15 , 2+:40 , 3+:80 mg/dL
Glucose) -:Negative , 1+:100 , 2+:250 , 3+:500 , 4+:≥1000 mg/dL
Occult Blood) -:Negative , +/-:0.015 , 1+:0.062 , 2+:0.135 , 3+:0.405 mg/dL
Bilirubin) -:Negative , 1+:0.8 , 2+:1.6 , 3+:3.2 mg/dL
Urobilinogen) +/-:0.1 - 1.0 , 1+:2.0 , 2+:4.0 , 3+:≥8.0 Ehrlich U/dL
Color LY: Light Yellow Y: Yellow DY: Dark Yellow BR: Brown RE: Red RB: Reddish brown WH: White BL: Blue CL: Colorless OT: Other
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Urinalysis
Stage : Week 2 of recovery
Sex : Female
Dose : BTetCA 1000 mg/kg
Species : Rat

Animal No.	pH	Protein	Ketones	Glucose	Occult Blood	Bilirubin	Urobilinogen	Color
6106	>=9.0	-	-	-	-	-	+/-	Y
6107	8.5	1+	1+	-	-	1+	+/-	Y
6108	8.5	-	+/-	-	-	-	+/-	Y
6109	8.0	+/-	+/-	-	-	-	+/-	Y
6110	6.5	+/-	+/-	-	-	-	+/-	Y
n	5	5	5	5	5	5	5	5

Protein) -:Negative , +/-:15 , 1+:30 , 2+:100 , 3+:≥300 mg/dL
Ketones) -:Negative , +/-:5 , 1+:15 , 2+:40 , 3+:80 mg/dL
Glucose) -:Negative , 1+:100 , 2+:250 , 3+:500 , 4+:≥1000 mg/dL
Occult Blood) -:Negative , +/-:0.015 , 1+:0.062 , 2+:0.135 , 3+:0.405 mg/dL
Bilirubin) -:Negative , 1+:0.8 , 2+:1.6 , 3+:3.2 mg/dL
Urobilinogen) +/-:0.1 - 1.0 , 1+:2.0 , 2+:4.0 , 3+:≥8.0 Ehrlich U/dL
Color LY: Light Yellow Y: Yellow DY: Dark Yellow BR: Brown RE: Red RB: Reddish brown WH: White BL: Blue CL: Colorless OT: Other
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Urinalysis

Stage : Week 2 of recovery

Sex : Female

Dose : BTetCA 0 mg/kg

Species : Rat

Animal No.	RBC	WBC	Squamous epithelial cells	Small round epithelial cells	Cast	Crystal phosphate salts	Crystal calcium oxalate
5106	-	-	+/-	-	-	-	-
5107	-	-	+/-	-	-	-	+/-
5108	-	-	+/-	-	-	-	-
5109	-	-	+/-	-	-	+/-	-
5110	-	-	+/-	-	-	-	-
n	5	5	5	5	5	5	5

RBC) -:Negative , +/-:Slight , 1+:Mild , 2+:Moderate , 3+:Severe
WBC) -:Negative , +/-:Slight , 1+:Mild , 2+:Moderate , 3+:Severe
Squamous epithelial cells) -:Negative , +/-:Slight , 1+:Mild , 2+:Moderate , 3+:Severe
Small round epithelial cells) -:Negative , +/-:Slight , 1+:Mild , 2+:Moderate , 3+:Severe
Cast) -:Negative , +/-:Slight , 1+:Mild , 2+:Moderate , 3+:Severe
Crystal phosphate salts) -:Negative , +/-:Slight , 1+:Mild , 2+:Moderate , 3+:Severe
Crystal calcium oxalate) -:Negative , +/-:Slight , 1+:Mild , 2+:Moderate , 3+:Severe
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Urinalysis

Stage : Week 2 of recovery

Sex : Female

Dose : BTetCA 1000 mg/kg

Species : Rat

Animal No.	RBC	WBC	Squamous epithelial cells	Small round epithelial cells	Cast	Crystal phosphate salts	Crystal calcium oxalate
6106	-	-	+/-	-	-	+/-	-
6107	-	-	+/-	-	-	-	-
6108	-	-	+/-	-	-	-	-
6109	-	-	+/-	-	-	-	-
6110	-	-	+/-	-	-	-	-
n	5	5	5	5	5	5	5

RBC) -:Negative , +/-:Slight , 1+:Mild , 2+:Moderate , 3+:Severe
WBC) -:Negative , +/-:Slight , 1+:Mild , 2+:Moderate , 3+:Severe
Squamous epithelial cells) -:Negative , +/-:Slight , 1+:Mild , 2+:Moderate , 3+:Severe
Small round epithelial cells) -:Negative , +/-:Slight , 1+:Mild , 2+:Moderate , 3+:Severe
Cast) -:Negative , +/-:Slight , 1+:Mild , 2+:Moderate , 3+:Severe
Crystal phosphate salts) -:Negative , +/-:Slight , 1+:Mild , 2+:Moderate , 3+:Severe
Crystal calcium oxalate) -:Negative , +/-:Slight , 1+:Mild , 2+:Moderate , 3+:Severe
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Urinalysis

Stage : Week 2 of recovery

Sex : Female

Dose : BTetCA 0 mg/kg

Species : Rat

Animal No.	Urine volume mL/24h	Osmotic pressure mOsm/kg	U-Na mmol/24h	U-K mmol/24h	U-Cl mmol/24h
5106	3.8	1956	0.6	1.1	0.8
5107	3.7	2634	0.7	1.4	0.9
5108	4.6	2356	0.8	1.5	1.1
5109	14.1	1324	1.7	2.6	1.9
5110	12.4	1556	1.6	2.7	2.0
n	5	5	5	5	5
Mean	7.7	1965	1.1	1.9	1.3
S.D.	5.1	543	0.5	0.7	0.6

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Urinalysis

Stage : Week 2 of recovery

Sex : Female

Dose : BTetCA 1000 mg/kg

Species : Rat

Animal No.	Urine volume mL/24h	Osmotic pressure mOsm/kg	U-Na mmol/24h	U-K mmol/24h	U-Cl mmol/24h
6106	5.0	2740	1.2	1.9	1.5
6107	7.5	2402	1.3	2.6	1.8
6108	3.6	2340	0.6	1.2	0.8
6109	11.1	1848	1.6	3.1	2.1
6110	4.1	2580	0.9	1.4	1.0
n	5	5	5	5	5
Mean	6.3	2382	1.1	2.0	1.4
S.D.	3.1	337	0.4	0.8	0.5

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 6 - 1 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Hematology Stage : End of administration

Sex : Male Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	RBC $10^4/\mu L$	HGB g/dL	HCT %	MCV fL	MCH pg	MCHC g/dL	RETIC %	PLT $10^4/\mu L$	WBC $10^2/\mu L$	LYMP %	NEUT %
1001	802	14.4	42.4	52.9	18.0	34.0	2.1	106.0	92.5	76.8	18.9
1002	839	14.7	43.1	51.3	17.5	34.1	2.1	119.4	120.8	71.2	24.8
1003	862	15.3	44.6	51.7	17.8	34.4	2.0	109.7	60.2	78.7	15.0
1004	840	15.7	45.1	53.7	18.7	34.9	1.7	89.8	60.8	77.6	17.6
1005	845	15.5	46.4	54.9	18.4	33.4	1.9	85.2	43.0	66.7	27.5
n	5	5	5	5	5	5	5	5	5	5	5
Mean	838	15.1	44.3	52.9	18.1	34.2	2.0	102.0	75.5	74.2	20.8
S.D.	22	0.5	1.6	1.5	0.5	0.6	0.2	14.2	31.0	5.1	5.2

Animal No.	EOS %	BASO %	MONO %	LUC %	#LYMP $10^2/\mu L$	#NEUT $10^2/\mu L$	#EOS $10^2/\mu L$	#BASO $10^2/\mu L$	#MONO $10^2/\mu L$	#LUC $10^2/\mu L$	PT s
1001	0.8	0.2	2.8	0.5	71.0	17.4	0.8	0.2	2.6	0.4	12.4
1002	1.1	0.4	2.2	0.5	86.0	29.9	1.3	0.4	2.7	0.6	11.6
1003	1.1	0.4	4.2	0.6	47.4	9.0	0.6	0.2	2.5	0.3	13.1
1004	0.8	0.2	3.2	0.6	47.2	10.7	0.5	0.1	1.9	0.3	12.4
1005	1.6	0.1	3.4	0.6	28.7	11.8	0.7	0.0	1.5	0.3	13.4
n	5	5	5	5	5	5	5	5	5	5	5
Mean	1.1	0.3	3.2	0.6	56.1	15.8	0.8	0.2	2.2	0.4	12.6
S.D.	0.3	0.1	0.7	0.1	22.5	8.5	0.3	0.1	0.5	0.1	0.7

Animal No.	APTT s	FIB mg/dL
1001	15.5	291
1002	17.7	254
1003	17.8	296
1004	14.2	263
1005	19.0	245
n	5	5
Mean	16.8	270
S.D.	1.9	23

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 6 - 2 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Hematology Stage : End of administration

Sex : Male Dose : BTetCA 100 mg/kg Species : Rat

Animal No.	RBC $10^4/\mu L$	HGB g/dL	HCT %	MCV fL	MCH pg	MCHC g/dL	RETIC %	PLT $10^4/\mu L$	WBC $10^2/\mu L$	LYMP %	NEUT %
2001	826	15.1	44.2	53.5	18.3	34.3	2.1	120.1	79.6	84.0	10.0
2002	827	15.2	45.6	55.2	18.4	33.3	2.1	99.3	66.1	82.6	13.8
2003	856	14.8	43.6	51.0	17.3	33.9	2.3	100.9	83.5	71.5	21.6
2004	808	14.7	43.3	53.7	18.2	34.0	2.0	89.0	75.0	75.3	18.2
2005	849	15.2	44.1	52.0	18.0	34.5	1.6	98.3	97.5	73.1	18.7
n	5	5	5	5	5	5	5	5	5	5	5
Mean	833	15.0	44.2	53.1	18.0	34.0	2.0	101.5	80.3	77.3	16.5
S.D.	19	0.2	0.9	1.6	0.4	0.5	0.3	11.4	11.6	5.7	4.6

Animal No.	EOS %	BASO %	MONO %	LUC %	#LYMP $10^2/\mu L$	#NEUT $10^2/\mu L$	#EOS $10^2/\mu L$	#BASO $10^2/\mu L$	#MONO $10^2/\mu L$	#LUC $10^2/\mu L$	PT s
2001	1.1	0.3	3.7	0.9	66.9	8.0	0.9	0.2	2.9	0.7	11.9
2002	1.4	0.3	1.5	0.5	54.6	9.1	0.9	0.2	1.0	0.3	12.5
2003	3.1	0.2	3.4	0.3	59.7	18.0	2.6	0.2	2.8	0.2	12.1
2004	3.4	0.2	2.3	0.7	56.5	13.6	2.5	0.1	1.7	0.6	12.1
2005	3.3	0.3	3.7	0.8	71.3	18.3	3.2	0.3	3.6	0.8	13.1
n	5	5	5	5	5	5	5	5	5	5	5
Mean	2.5	0.3	2.9	0.6	61.8	13.4	2.0	0.2	2.4	0.5	12.3
S.D.	1.1	0.1	1.0	0.2	7.1	4.8	1.1	0.1	1.0	0.3	0.5

Animal No.	APTT s	FIB mg/dL
2001	15.2	365
2002	15.8	274
2003	15.1	227
2004	15.1	227
2005	16.8	330
n	5	5
Mean	15.6	285
S.D.	0.7	62

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Hematology Stage : End of administration
Sex : Male Dose : BTetCA 300 mg/kg Species : Rat

Animal No.	RBC $10^4/\mu L$	HGB g/dL	HCT %	MCV fL	MCH pg	MCHC g/dL	RETIC %	PLT $10^4/\mu L$	WBC $10^2/\mu L$	LYMP %	NEUT %
3001	835	15.5	45.8	54.9	18.6	33.8	2.1	104.7	99.9	80.3	14.4
3002	794	15.1	44.1	55.6	19.0	34.2	2.5	106.7	84.2	82.0	12.4
3003	773	14.5	43.3	56.1	18.8	33.5	2.9	104.8	90.6	62.2	30.1
3004	856	16.0	47.5	55.4	18.6	33.6	1.9	98.8	91.6	73.5	21.7
3005	897	15.6	45.8	51.1	17.4	34.0	2.0	90.0	73.0	70.4	23.5
n	5	5	5	5	5	5	5	5	5	5	5
Mean	831	15.3	45.3	54.6	18.5	33.8	2.3	101.0	87.9	73.7	20.4
S.D.	49	0.6	1.6	2.0	0.6	0.3	0.4	6.8	10.0	8.0	7.2

Animal No.	EOS %	BASO %	MONO %	LUC %	#LYMP $10^2/\mu L$	#NEUT $10^2/\mu L$	#EOS $10^2/\mu L$	#BASO $10^2/\mu L$	#MONO $10^2/\mu L$	#LUC $10^2/\mu L$	PT s
3001	1.8	0.3	2.5	0.6	80.3	14.4	1.8	0.3	2.5	0.6	11.1
3002	2.1	0.3	2.3	0.8	69.0	10.5	1.8	0.3	1.9	0.7	12.4
3003	3.7	0.2	3.2	0.7	56.3	27.2	3.3	0.2	2.9	0.6	12.0
3004	1.4	0.3	2.5	0.7	67.3	19.9	1.3	0.2	2.3	0.6	12.8
3005	2.0	0.2	3.4	0.5	51.4	17.2	1.4	0.2	2.5	0.4	13.4
n	5	5	5	5	5	5	5	5	5	5	5
Mean	2.2	0.3	2.8	0.7	64.9	17.8	1.9	0.2	2.4	0.6	12.3
S.D.	0.9	0.1	0.5	0.1	11.4	6.3	0.8	0.1	0.4	0.1	0.9

Animal No.	APTT s	FIB mg/dL
3001	16.6	255
3002	16.9	291
3003	16.9	259
3004	18.1	274
3005	19.8	248
n	5	5
Mean	17.7	265
S.D.	1.3	17

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 6 - 4 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Hematology Stage : End of administration

Sex : Male Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	RBC $10^4/\mu L$	HGB g/dL	HCT %	MCV fL	MCH pg	MCHC g/dL	RETIC %	PLT $10^4/\mu L$	WBC $10^2/\mu L$	LYMP %	NEUT %
4001	849	14.3	42.4	49.9	16.8	33.7	2.4	100.7	73.8	74.8	21.1
4002	818	15.0	43.1	52.6	18.3	34.8	2.1	93.6	70.3	68.5	25.1
4003	830	15.7	45.9	55.4	18.9	34.2	3.1	96.9	70.2	77.8	15.0
4004	834	15.5	45.5	54.6	18.6	34.0	2.1	69.7	82.2	70.8	24.8
4005	848	15.6	45.9	54.2	18.4	34.0	1.5	91.7	77.4	74.5	21.4
n	5	5	5	5	5	5	5	5	5	5	5
Mean	836	15.2	44.6	53.3	18.2	34.1	2.2	90.5	74.8	73.3	21.5
S.D.	13	0.6	1.7	2.2	0.8	0.4	0.6	12.1	5.1	3.6	4.1

Animal No.	EOS %	BASO %	MONO %	LUC %	#LYMP $10^2/\mu L$	#NEUT $10^2/\mu L$	#EOS $10^2/\mu L$	#BASO $10^2/\mu L$	#MONO $10^2/\mu L$	#LUC $10^2/\mu L$	PT s
4001	1.6	0.2	2.1	0.2	55.2	15.6	1.2	0.1	1.6	0.2	15.0
4002	2.3	0.3	3.5	0.2	48.2	17.6	1.6	0.2	2.5	0.2	11.7
4003	2.1	0.3	4.3	0.5	54.6	10.5	1.5	0.2	3.0	0.4	12.2
4004	1.0	0.2	2.5	0.8	58.2	20.4	0.8	0.1	2.0	0.6	12.4
4005	0.6	0.2	2.6	0.8	57.7	16.6	0.4	0.1	2.0	0.6	14.3
n	5	5	5	5	5	5	5	5	5	5	5
Mean	1.5	0.2	3.0	0.5	54.8	16.1	1.1	0.1	2.2	0.4	13.1
S.D.	0.7	0.1	0.9	0.3	4.0	3.6	0.5	0.1	0.5	0.2	1.4

Animal No.	APTT s	FIB mg/dL
4001	18.9	341
4002	14.7	312
4003	16.8	253
4004	19.7	312
4005	18.3	285
n	5	5
Mean	17.7	301
S.D.	2.0	33

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 6 - 5 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Hematology Stage : Lactation day 5

Sex : Female Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	RBC $10^4/\mu L$	HGB g/dL	HCT %	MCV fL	MCH pg	MCHC g/dL	RETIC %	PLT $10^4/\mu L$	WBC $10^2/\mu L$	LYMP %	NEUT %
1104	667	13.3	38.3	57.3	19.9	34.6	6.3	116.1	129.3	55.1	40.2
1105	669	13.4	39.8	59.4	20.1	33.7	6.3	116.6	118.3	65.5	29.8
1107	646	12.8	37.0	57.2	19.7	34.5	4.1	122.6	98.9	73.0	21.5
1109	561	12.0	35.4	63.1	21.4	33.8	11.1	182.5	77.5	63.3	31.9
1111	685	13.5	39.5	57.7	19.7	34.1	6.1	137.5	128.8	71.1	24.1
n	5	5	5	5	5	5	5	5	5	5	5
Mean	646	13.0	38.0	58.9	20.2	34.1	6.8	135.1	110.6	65.6	29.5
S.D.	49	0.6	1.8	2.5	0.7	0.4	2.6	27.9	22.2	7.1	7.3

Animal No.	EOS %	BASO %	MONO %	LUC %	#LYMP $10^2/\mu L$	#NEUT $10^2/\mu L$	#EOS $10^2/\mu L$	#BASO $10^2/\mu L$	#MONO $10^2/\mu L$	#LUC $10^2/\mu L$	PT s
1104	0.7	0.2	3.3	0.4	71.3	52.0	1.0	0.3	4.2	0.5	11.0
1105	0.7	0.3	3.3	0.5	77.5	35.2	0.8	0.3	4.0	0.5	11.8
1107	0.6	0.2	3.8	0.9	72.3	21.3	0.6	0.2	3.8	0.9	13.5
1109	0.4	0.1	4.0	0.4	49.1	24.7	0.3	0.1	3.1	0.3	8.8
1111	0.4	0.3	3.5	0.6	91.5	31.0	0.5	0.4	4.6	0.8	12.1
n	5	5	5	5	5	5	5	5	5	5	5
Mean	0.6	0.2	3.6	0.6	72.3	32.8	0.6	0.3	3.9	0.6	11.4
S.D.	0.2	0.1	0.3	0.2	15.3	12.0	0.3	0.1	0.6	0.2	1.7

Animal No.	APTT s	FIB mg/dL
1104	12.9	243
1105	12.6	265
1107	17.0	277
1109	9.0	275
1111	12.8	294
n	5	5
Mean	12.9	271
S.D.	2.8	19

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Hematology

Stage : Lactation day 5

Sex : Female

Dose : BTetCA 100 mg/kg

Species : Rat

Animal No.	RBC $10^4/\mu L$	HGB g/dL	HCT %	MCV fL	MCH pg	MCHC g/dL	RETIC %	PLT $10^4/\mu L$	WBC $10^2/\mu L$	LYMP %	NEUT %
2104	696	13.7	39.8	57.1	19.7	34.5	5.2	127.8	106.3	55.0	40.8
2105	641	12.3	37.1	57.9	19.2	33.3	8.1	152.7	74.4	62.0	34.1
2106	703	12.8	38.2	54.2	18.2	33.6	6.0	137.0	141.3	56.5	36.4
2109	643	12.8	37.9	58.9	19.9	33.8	5.6	133.6	93.0	65.4	27.4
2110	598	12.0	35.8	60.0	20.1	33.4	9.5	141.3	122.9	60.5	35.6
n	5	5	5	5	5	5	5	5	5	5	5
Mean	656	12.7	37.8	57.6	19.4	33.7	6.9	138.5	107.6	59.9	34.9
S.D.	43	0.6	1.5	2.2	0.8	0.5	1.8	9.4	25.9	4.2	4.9

Animal No.	EOS %	BASO %	MONO %	LUC %	#LYMP $10^2/\mu L$	#NEUT $10^2/\mu L$	#EOS $10^2/\mu L$	#BASO $10^2/\mu L$	#MONO $10^2/\mu L$	#LUC $10^2/\mu L$	PT s
2104	0.5	0.2	2.9	0.4	58.5	43.4	0.6	0.3	3.1	0.5	11.3
2105	0.7	0.1	2.7	0.5	46.1	25.4	0.5	0.1	2.0	0.3	13.1
2106	0.9	0.2	4.9	1.1	79.9	51.4	1.3	0.3	6.9	1.5	9.7
2109	1.4	0.2	4.5	1.1	60.8	25.5	1.3	0.2	4.2	1.0	12.9
2110	0.4	0.1	2.9	0.5	74.4	43.7	0.5	0.2	3.5	0.6	11.7
n	5	5	5	5	5	5	5	5	5	5	5
Mean	0.8	0.2	3.6	0.7	63.9	37.9	0.8	0.2	3.9	0.8	11.7
S.D.	0.4	0.1	1.0	0.3	13.4	11.8	0.4	0.1	1.8	0.5	1.4

Animal No.	APTT s	FIB mg/dL
2104	12.5	235
2105	13.1	330
2106	11.6	291
2109	15.2	257
2110	13.0	269
n	5	5
Mean	13.1	276
S.D.	1.3	36

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 6 - 7 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Hematology Stage : Lactation day 5

Sex : Female Dose : BTetCA 300 mg/kg Species : Rat

Animal No.	RBC $10^4/\mu L$	HGB g/dL	HCT %	MCV fL	MCH pg	MCHC g/dL	RETIC %	PLT $10^4/\mu L$	WBC $10^2/\mu L$	LYMP %	NEUT %
3101	615	12.5	37.6	61.1	20.3	33.2	9.1	138.3	125.0	66.3	29.0
3102	685	13.1	40.1	58.5	19.2	32.8	6.4	142.9	130.2	66.0	26.8
3104	703	14.1	43.0	61.2	20.0	32.7	7.3	122.1	106.8	65.9	28.2
3105	676	13.1	40.1	59.3	19.3	32.6	6.1	122.7	69.9	59.0	37.7
3109	653	12.7	37.7	57.8	19.5	33.8	5.2	156.2	116.6	56.1	37.4
n	5	5	5	5	5	5	5	5	5	5	5
Mean	666	13.1	39.7	59.6	19.7	33.0	6.8	136.4	109.7	62.7	31.8
S.D.	34	0.6	2.2	1.5	0.5	0.5	1.5	14.4	23.9	4.8	5.3

Animal No.	EOS %	BASO %	MONO %	LUC %	#LYMP $10^2/\mu L$	#NEUT $10^2/\mu L$	#EOS $10^2/\mu L$	#BASO $10^2/\mu L$	#MONO $10^2/\mu L$	#LUC $10^2/\mu L$	PT s
3101	0.7	0.2	2.6	1.1	82.9	36.3	0.9	0.3	3.3	1.4	10.9
3102	0.6	0.4	4.5	1.8	85.9	34.8	0.8	0.5	5.8	2.4	13.7
3104	0.8	0.3	3.9	1.0	70.4	30.1	0.8	0.3	4.2	1.0	10.2
3105	1.0	0.2	1.4	0.7	41.3	26.4	0.7	0.2	0.9	0.5	11.6
3109	1.2	0.3	4.5	0.4	65.4	43.6	1.4	0.3	5.3	0.5	12.0
n	5	5	5	5	5	5	5	5	5	5	5
Mean	0.9	0.3	3.4	1.0	69.2	34.2	0.9	0.3	3.9	1.2	11.7
S.D.	0.2	0.1	1.4	0.5	17.8	6.5	0.3	0.1	1.9	0.8	1.3

Animal No.	APTT s	FIB mg/dL
3101	11.3	246
3102	16.6	314
3104	12.4	280
3105	13.0	309
3109	13.8	300
n	5	5
Mean	13.4	290
S.D.	2.0	28

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 6 - 8 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Hematology Stage : Lactation day 5

Sex : Female Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	RBC $10^4/\mu L$	HGB g/dL	HCT %	MCV fL	MCH pg	MCHC g/dL	RETIC %	PLT $10^4/\mu L$	WBC $10^2/\mu L$	LYMP %	NEUT %
4102	679	13.6	39.4	58.1	20.0	34.5	6.0	98.6	91.0	70.1	24.2
4103	667	13.9	41.8	62.6	20.8	33.2	10.1	159.2	140.4	61.4	32.3
4104	714	14.0	40.9	57.3	19.6	34.3	4.0	102.3	127.4	61.0	35.0
4105	676	12.9	38.0	56.2	19.1	33.9	6.0	123.7	111.8	65.7	31.1
4111	667	12.6	37.4	56.1	18.9	33.7	7.4	132.0	138.9	59.1	37.4
n	5	5	5	5	5	5	5	5	5	5	5
Mean	681	13.4	39.5	58.1	19.7	33.9	6.7	123.2	121.9	63.5	32.0
S.D.	19	0.6	1.9	2.7	0.8	0.5	2.3	24.6	20.7	4.4	5.0

Animal No.	EOS %	BASO %	MONO %	LUC %	#LYMP $10^2/\mu L$	#NEUT $10^2/\mu L$	#EOS $10^2/\mu L$	#BASO $10^2/\mu L$	#MONO $10^2/\mu L$	#LUC $10^2/\mu L$	PT s
4102	0.7	0.2	3.7	1.1	63.8	22.0	0.7	0.2	3.3	1.0	12.6
4103	0.6	0.2	4.3	1.3	86.2	45.3	0.8	0.3	6.0	1.8	11.3
4104	0.7	0.1	2.5	0.6	77.8	44.6	1.0	0.2	3.2	0.8	13.8
4105	0.3	0.2	2.4	0.3	73.4	34.7	0.4	0.3	2.7	0.3	13.5
4111	0.4	0.2	2.5	0.4	82.1	51.9	0.6	0.3	3.4	0.6	13.5
n	5	5	5	5	5	5	5	5	5	5	5
Mean	0.5	0.2	3.1	0.7	76.7	39.7	0.7	0.3	3.7	0.9	12.9
S.D.	0.2	0.0	0.9	0.4	8.6	11.6	0.2	0.1	1.3	0.6	1.0

Animal No.	APTT s	FIB mg/dL
4102	15.7	297
4103	11.6	399
4104	12.7	403
4105	15.5	335
4111	13.2	278
n	5	5
Mean	13.7	342
S.D.	1.8	57

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Hematology

Stage : End of administration

Sex : Female

Dose : BTetCA 0 mg/kg

Species : Rat

Animal No.	RBC $10^4/\mu L$	HGB g/dL	HCT %	MCV fL	MCH pg	MCHC g/dL	RETIC %	PLT $10^4/\mu L$	WBC $10^2/\mu L$	LYMP %	NEUT %
5101	822	14.8	43.8	53.3	18.0	33.8	1.6	101.5	53.1	80.0	14.7
5102	775	14.2	40.9	52.8	18.3	34.6	2.6	90.3	47.9	81.8	12.3
5103	729	14.1	40.9	56.1	19.3	34.3	1.8	116.0	48.7	81.1	14.1
5104	786	14.4	41.6	52.9	18.4	34.7	2.2	103.4	35.6	84.6	10.7
5105	741	13.9	40.4	54.5	18.8	34.5	1.9	106.9	30.1	69.4	27.4
n	5	5	5	5	5	5	5	5	5	5	5
Mean	771	14.3	41.5	53.9	18.6	34.4	2.0	103.6	43.1	79.4	15.8
S.D.	37	0.3	1.3	1.4	0.5	0.4	0.4	9.3	9.7	5.8	6.7

Animal No.	EOS %	BASO %	MONO %	LUC %	#LYMP $10^2/\mu L$	#NEUT $10^2/\mu L$	#EOS $10^2/\mu L$	#BASO $10^2/\mu L$	#MONO $10^2/\mu L$	#LUC $10^2/\mu L$	PT s
5101	1.3	0.2	3.1	0.6	42.5	7.8	0.7	0.1	1.6	0.3	12.2
5102	1.3	0.2	3.6	0.8	39.2	5.9	0.6	0.1	1.7	0.4	12.4
5103	1.3	0.2	2.8	0.5	39.5	6.9	0.6	0.1	1.4	0.3	12.3
5104	1.5	0.2	2.4	0.6	30.1	3.8	0.5	0.1	0.9	0.2	13.2
5105	2.0	0.0	1.0	0.1	20.9	8.2	0.6	0.0	0.3	0.0	13.3
n	5	5	5	5	5	5	5	5	5	5	5
Mean	1.5	0.2	2.6	0.5	34.4	6.5	0.6	0.1	1.2	0.2	12.7
S.D.	0.3	0.1	1.0	0.3	8.9	1.8	0.1	0.0	0.6	0.2	0.5

Animal No.	APTT s	FIB mg/dL
5101	14.8	218
5102	14.4	234
5103	12.7	217
5104	16.4	214
5105	14.5	173
n	5	5
Mean	14.6	211
S.D.	1.3	23

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Hematology Stage : End of administration
Sex : Female Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	RBC $10^4/\mu L$	HGB g/dL	HCT %	MCV fL	MCH pg	MCHC g/dL	RETIC %	PLT $10^4/\mu L$	WBC $10^2/\mu L$	LYMP %	NEUT %
6101	753	14.7	42.9	56.9	19.5	34.3	2.0	92.4	48.2	81.0	14.2
6102	769	14.5	41.7	54.2	18.8	34.7	1.3	95.7	37.8	86.0	7.7
6103	794	14.5	42.3	53.2	18.2	34.2	2.0	117.7	42.9	80.5	16.1
6104	816	14.9	42.8	52.5	18.2	34.7	1.9	101.3	47.0	80.8	14.6
6105	760	14.2	40.8	53.7	18.6	34.7	2.3	119.5	70.0	67.2	25.1
n	5	5	5	5	5	5	5	5	5	5	5
Mean	778	14.6	42.1	54.1	18.7	34.5	1.9	105.3	49.2	79.1	15.5
S.D.	26	0.3	0.9	1.7	0.5	0.2	0.4	12.5	12.3	7.0	6.2

Animal No.	EOS %	BASO %	MONO %	LUC %	#LYMP $10^2/\mu L$	#NEUT $10^2/\mu L$	#EOS $10^2/\mu L$	#BASO $10^2/\mu L$	#MONO $10^2/\mu L$	#LUC $10^2/\mu L$	PT s
6101	1.2	0.2	2.9	0.5	39.0	6.8	0.6	0.1	1.4	0.2	12.3
6102	2.3	0.2	2.7	1.0	32.5	2.9	0.9	0.1	1.0	0.4	11.9
6103	1.0	0.2	1.8	0.4	34.6	6.9	0.4	0.1	0.8	0.2	12.4
6104	1.8	0.1	1.9	0.8	38.0	6.9	0.8	0.1	0.9	0.4	12.6
6105	3.3	0.2	3.8	0.4	47.0	17.6	2.3	0.1	2.7	0.3	13.4
n	5	5	5	5	5	5	5	5	5	5	5
Mean	1.9	0.2	2.6	0.6	38.2	8.2	1.0	0.1	1.4	0.3	12.5
S.D.	0.9	0.0	0.8	0.3	5.6	5.5	0.8	0.0	0.8	0.1	0.6

Animal No.	APTT s	FIB mg/dL
6101	16.0	168
6102	12.6	186
6103	15.3	227
6104	13.3	226
6105	14.7	209
n	5	5
Mean	14.4	203
S.D.	1.4	26

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 6 - 11 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Hematology Stage : End of recovery

Sex : Male Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	RBC $10^4/\mu L$	HGB g/dL	HCT %	MCV fL	MCH pg	MCHC g/dL	RETIC %	PLT $10^4/\mu L$	WBC $10^2/\mu L$	LYMP %	NEUT %
1008	877	15.3	44.2	50.5	17.5	34.6	2.2	113.8	117.4	71.8	23.0
1009	870	16.3	45.9	52.7	18.7	35.5	1.1	88.7	67.6	85.2	9.9
1010	819	15.2	44.9	54.8	18.6	33.9	1.3	91.9	88.6	82.3	12.7
1011	758	13.7	41.1	54.3	18.1	33.3	1.7	22.3	53.5	76.2	20.2
1012	888	15.8	45.4	51.1	17.8	34.8	1.0	120.8	81.6	77.7	17.8
n	5	5	5	5	5	5	5	5	5	5	5
Mean	842	15.3	44.3	52.7	18.1	34.4	1.5	87.5	81.7	78.6	16.7
S.D.	54	1.0	1.9	1.9	0.5	0.8	0.5	39.0	24.1	5.2	5.4

Animal No.	EOS %	BASO %	MONO %	LUC %	#LYMP $10^2/\mu L$	#NEUT $10^2/\mu L$	#EOS $10^2/\mu L$	#BASO $10^2/\mu L$	#MONO $10^2/\mu L$	#LUC $10^2/\mu L$	PT s
1008	2.0	0.3	2.3	0.6	84.4	27.0	2.3	0.4	2.7	0.7	12.1
1009	1.4	0.3	2.7	0.5	57.6	6.7	1.0	0.2	1.8	0.3	12.4
1010	0.8	0.3	2.4	1.5	72.9	11.3	0.7	0.3	2.1	1.3	13.8
1011	0.9	0.1	2.2	0.5	40.7	10.8	0.5	0.1	1.2	0.2	12.1
1012	1.8	0.2	1.7	0.8	63.4	14.5	1.5	0.1	1.4	0.7	13.0
n	5	5	5	5	5	5	5	5	5	5	5
Mean	1.4	0.2	2.3	0.8	63.8	14.1	1.2	0.2	1.8	0.6	12.7
S.D.	0.5	0.1	0.4	0.4	16.4	7.7	0.7	0.1	0.6	0.4	0.7

Animal No.	APTT s	FIB mg/dL
1008	16.6	278
1009	18.2	318
1010	23.8	254
1011	15.7	290
1012	20.7	302
n	5	5
Mean	19.0	288
S.D.	3.3	24

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Hematology Stage : End of recovery
Sex : Male Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	RBC $10^4/\mu L$	HGB g/dL	HCT %	MCV fL	MCH pg	MCHC g/dL	RETIC %	PLT $10^4/\mu L$	WBC $10^2/\mu L$	LYMP %	NEUT %
4008	871	15.8	45.8	52.6	18.1	34.5	1.5	99.5	57.4	65.5	27.8
4009	895	16.1	46.8	52.3	18.0	34.4	1.1	97.1	64.8	79.3	14.1
4010	908	16.2	48.1	53.0	17.9	33.7	1.3	85.6	46.3	62.6	32.6
4011	902	15.8	45.3	50.3	17.5	34.7	1.5	117.2	70.1	74.3	21.7
4012	867	16.0	46.3	53.4	18.5	34.6	1.7	92.6	67.6	65.5	28.9
n	5	5	5	5	5	5	5	5	5	5	5
Mean	889	16.0	46.5	52.3	18.0	34.4	1.4	98.4	61.2	69.4	25.0
S.D.	19	0.2	1.1	1.2	0.4	0.4	0.2	11.8	9.6	7.0	7.3

Animal No.	EOS %	BASO %	MONO %	LUC %	#LYMP $10^2/\mu L$	#NEUT $10^2/\mu L$	#EOS $10^2/\mu L$	#BASO $10^2/\mu L$	#MONO $10^2/\mu L$	#LUC $10^2/\mu L$	PT s
4008	2.5	0.1	3.6	0.4	37.6	16.0	1.5	0.1	2.0	0.2	12.7
4009	2.2	0.2	3.2	1.0	51.3	9.1	1.4	0.1	2.1	0.6	12.6
4010	1.9	0.2	2.3	0.3	29.0	15.1	0.9	0.1	1.1	0.2	11.7
4011	2.1	0.3	1.2	0.3	52.1	15.2	1.5	0.2	0.9	0.2	13.4
4012	1.4	0.3	3.4	0.5	44.2	19.6	0.9	0.2	2.3	0.3	13.1
n	5	5	5	5	5	5	5	5	5	5	5
Mean	2.0	0.2	2.7	0.5	42.8	15.0	1.2	0.1	1.7	0.3	12.7
S.D.	0.4	0.1	1.0	0.3	9.7	3.8	0.3	0.1	0.6	0.2	0.6

Animal No.	APTT s	FIB mg/dL
4008	18.7	282
4009	15.1	236
4010	16.5	256
4011	15.3	257
4012	17.1	298
n	5	5
Mean	16.5	266
S.D.	1.5	24

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Hematology

Stage : End of recovery

Sex : Female

Dose : BTetCA 0 mg/kg

Species : Rat

Animal No.	RBC $10^4/\mu L$	HGB g/dL	HCT %	MCV fL	MCH pg	MCHC g/dL	RETIC %	PLT $10^4/\mu L$	WBC $10^2/\mu L$	LYMP %	NEUT %
5106	768	14.8	42.1	54.8	19.3	35.2	1.3	112.6	40.0	80.1	15.0
5107	806	15.0	43.3	53.7	18.6	34.6	1.4	161.0	61.5	83.6	10.2
5108	780	14.7	41.5	53.2	18.9	35.5	2.3	108.8	32.1	77.7	17.2
5109	826	15.3	43.6	52.8	18.5	35.1	1.7	112.3	34.1	71.1	23.7
5110	799	15.8	45.0	56.4	19.8	35.1	2.4	100.0	39.2	77.5	14.2
n	5	5	5	5	5	5	5	5	5	5	5
Mean	796	15.1	43.1	54.2	19.0	35.1	1.8	118.9	41.4	78.0	16.1
S.D.	23	0.4	1.4	1.4	0.5	0.3	0.5	24.1	11.7	4.6	5.0

Animal No.	EOS %	BASO %	MONO %	LUC %	#LYMP $10^2/\mu L$	#NEUT $10^2/\mu L$	#EOS $10^2/\mu L$	#BASO $10^2/\mu L$	#MONO $10^2/\mu L$	#LUC $10^2/\mu L$	PT s
5106	1.1	0.1	3.1	0.6	32.0	6.0	0.5	0.1	1.2	0.2	14.0
5107	2.3	0.3	2.4	1.1	51.4	6.3	1.4	0.2	1.4	0.7	12.4
5108	1.2	0.1	3.2	0.6	24.9	5.5	0.4	0.0	1.0	0.2	11.8
5109	1.3	0.4	2.9	0.7	24.3	8.1	0.4	0.1	1.0	0.2	11.3
5110	2.6	0.1	4.9	0.7	30.4	5.6	1.0	0.0	1.9	0.3	11.9
n	5	5	5	5	5	5	5	5	5	5	5
Mean	1.7	0.2	3.3	0.7	32.6	6.3	0.7	0.1	1.3	0.3	12.3
S.D.	0.7	0.1	0.9	0.2	11.0	1.1	0.4	0.1	0.4	0.2	1.0

Animal No.	APTT s	FIB mg/dL
5106	16.3	189
5107	14.4	170
5108	15.3	194
5109	13.8	190
5110	12.7	185
n	5	5
Mean	14.5	186
S.D.	1.4	9

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Hematology Stage : End of recovery
Sex : Female Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	RBC $10^4/\mu L$	HGB g/dL	HCT %	MCV fL	MCH pg	MCHC g/dL	RETIC %	PLT $10^4/\mu L$	WBC $10^2/\mu L$	LYMP %	NEUT %
6106	857	16.0	46.3	54.0	18.7	34.5	2.2	114.6	65.1	84.1	10.5
6107	802	15.4	43.6	54.3	19.2	35.3	1.8	114.2	54.9	80.6	12.0
6108	774	15.1	43.0	55.5	19.5	35.1	1.7	121.5	40.9	83.3	13.2
6109	758	14.9	41.0	54.1	19.6	36.3	1.6	99.6	68.2	84.8	8.6
6110	837	15.8	44.8	53.5	18.9	35.3	1.4	119.0	50.0	80.9	14.1
n	5	5	5	5	5	5	5	5	5	5	5
Mean	806	15.4	43.7	54.3	19.2	35.3	1.7	113.8	55.8	82.7	11.7
S.D.	42	0.5	2.0	0.7	0.4	0.6	0.3	8.5	11.1	1.9	2.2

Animal No.	EOS %	BASO %	MONO %	LUC %	#LYMP $10^2/\mu L$	#NEUT $10^2/\mu L$	#EOS $10^2/\mu L$	#BASO $10^2/\mu L$	#MONO $10^2/\mu L$	#LUC $10^2/\mu L$	PT s
6106	1.3	0.3	3.0	0.8	54.8	6.8	0.9	0.2	1.9	0.6	12.0
6107	1.8	0.3	3.8	1.5	44.3	6.6	1.0	0.2	2.1	0.8	11.8
6108	1.3	0.1	1.8	0.3	34.1	5.4	0.5	0.0	0.7	0.1	11.5
6109	1.2	0.2	4.4	0.8	57.8	5.9	0.8	0.2	3.0	0.6	11.4
6110	2.1	0.2	2.2	0.4	40.4	7.0	1.0	0.1	1.1	0.2	11.7
n	5	5	5	5	5	5	5	5	5	5	5
Mean	1.5	0.2	3.0	0.8	46.3	6.3	0.8	0.1	1.8	0.5	11.7
S.D.	0.4	0.1	1.1	0.5	9.9	0.7	0.2	0.1	0.9	0.3	0.2

Animal No.	APTT s	FIB mg/dL
6106	11.5	188
6107	12.8	198
6108	15.4	209
6109	11.2	175
6110	20.5	212
n	5	5
Mean	14.3	196
S.D.	3.9	15

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 7 - 1 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Blood chemistry Stage : End of administration

Sex : Male Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	AST IU/L	ALT IU/L	LDH IU/L	γ-GTP IU/L	ALP IU/L	T-BA μmol/L	T-CHO mg/dL	TG mg/dL	PL mg/dL	T-BIL mg/dL	GLU mg/dL
1001	62	53	48	1	427	16.7	50	42	88	0.1	156
1002	93	54	116	1	660	41.8	54	66	96	0.1	142
1003	64	35	64	1	306	15.0	59	78	97	0.1	126
1004	56	44	42	1	406	13.0	55	42	93	0.1	131
1005	72	41	74	1	433	46.2	55	73	93	0.1	125
n	5	5	5	5	5	5	5	5	5	5	5
Mean	69	45	69	1	446	26.5	55	60	93	0.1	136
S.D.	14	8	29	0	130	16.1	3	17	4	0.0	13

Animal No.	BUN mg/dL	CRNN mg/dL	Na mmol/L	K mmol/L	Cl mmol/L	Ca mg/dL	P mg/dL	TP g/dL	ALB g/dL	A/G
1001	16	0.32	142	4.4	105	9.8	6.2	5.7	3.1	1.2
1002	11	0.25	144	4.9	106	10.4	5.2	6.1	3.0	1.0
1003	11	0.22	143	4.7	105	10.0	6.1	5.7	3.0	1.1
1004	13	0.25	145	4.2	109	10.0	6.1	5.8	3.2	1.2
1005	13	0.25	144	4.4	107	10.3	6.2	5.7	3.0	1.1
n	5	5	5	5	5	5	5	5	5	5
Mean	13	0.26	144	4.5	106	10.1	6.0	5.8	3.1	1.1
S.D.	2	0.04	1	0.3	2	0.2	0.4	0.2	0.1	0.1

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 7 - 2 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Blood chemistry Stage : End of administration

Sex : Male Dose : BTetCA 100 mg/kg Species : Rat

Animal No.	AST IU/L	ALT IU/L	LDH IU/L	γ-GTP IU/L	ALP IU/L	T-BA μmol/L	T-CHO mg/dL	TG mg/dL	PL mg/dL	T-BIL mg/dL	GLU mg/dL
2001	56	40	65	1	407	31.4	68	91	112	0.1	148
2002	54	39	50	0	597	14.3	66	38	94	0.1	136
2003	60	40	54	1	499	12.2	60	107	97	0.1	137
2004	61	39	46	1	338	7.9	42	24	69	0.1	117
2005	63	39	56	1	642	11.4	82	61	116	0.1	135
n	5	5	5	5	5	5	5	5	5	5	5
Mean	59	39	54	1	497	15.4	64	64	98	0.1	135
S.D.	4	1	7	0	127	9.2	15	35	19	0.0	11

Animal No.	BUN mg/dL	CRNN mg/dL	Na mmol/L	K mmol/L	Cl mmol/L	Ca mg/dL	P mg/dL	TP g/dL	ALB g/dL	A/G
2001	13	0.30	143	4.4	105	10.2	5.8	6.0	3.0	1.0
2002	10	0.30	144	4.7	108	10.0	5.4	5.6	3.1	1.2
2003	12	0.27	143	4.7	105	10.2	5.8	5.5	3.0	1.2
2004	14	0.25	145	4.6	109	9.9	6.2	5.6	3.0	1.2
2005	13	0.23	143	4.5	104	10.4	6.1	5.9	3.0	1.0
n	5	5	5	5	5	5	5	5	5	5
Mean	12	0.27	144	4.6	106	10.1	5.9	5.7	3.0	1.1
S.D.	2	0.03	1	0.1	2	0.2	0.3	0.2	0.0	0.1

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 7 - 3 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Blood chemistry Stage : End of administration

Sex : Male Dose : BTetCA 300 mg/kg Species : Rat

Animal No.	AST IU/L	ALT IU/L	LDH IU/L	γ-GTP IU/L	ALP IU/L	T-BA μmol/L	T-CHO mg/dL	TG mg/dL	PL mg/dL	T-BIL mg/dL	GLU mg/dL
3001	69	50	44	1	461	12.6	70	60	107	0.1	128
3002	122	74	141	1	1125	40.5	76	57	120	0.1	133
3003	59	39	44	1	376	27.9	70	38	106	0.1	134
3004	54	44	39	1	475	9.8	51	71	97	0.1	134
3005	78	49	51	1	701	7.1	61	40	100	0.1	129
n	5	5	5	5	5	5	5	5	5	5	5
Mean	76	51	64	1	628	19.6	66	53	106	0.1	132
S.D.	27	13	43	0	303	14.2	10	14	9	0.0	3

Animal No.	BUN mg/dL	CRNN mg/dL	Na mmol/L	K mmol/L	Cl mmol/L	Ca mg/dL	P mg/dL	TP g/dL	ALB g/dL	A/G
3001	12	0.32	145	4.4	107	10.0	5.8	5.7	3.0	1.1
3002	14	0.26	144	4.7	107	10.0	5.4	5.7	3.0	1.1
3003	16	0.28	143	4.5	107	9.9	5.5	5.7	3.0	1.1
3004	14	0.27	143	4.5	106	9.9	5.8	5.8	3.2	1.2
3005	13	0.28	143	4.3	106	10.0	5.2	5.8	3.0	1.1
n	5	5	5	5	5	5	5	5	5	5
Mean	14	0.28	144	4.5	107	10.0	5.5	5.7	3.0	1.1
S.D.	1	0.02	1	0.1	1	0.1	0.3	0.1	0.1	0.0

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 7 - 4 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Blood chemistry Stage : End of administration

Sex : Male Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	AST IU/L	ALT IU/L	LDH IU/L	γ-GTP IU/L	ALP IU/L	T-BA μmol/L	T-CHO mg/dL	TG mg/dL	PL mg/dL	T-BIL mg/dL	GLU mg/dL
4001	62	42	39	1	473	14.2	64	54	103	0.1	131
4002	161	90	210	1	574	43.8	71	95	122	0.1	132
4003	62	34	41	0	467	16.4	48	34	85	0.1	126
4004	56	35	50	1	389	8.5	77	128	145	0.1	159
4005	54	38	33	1	523	13.4	70	35	105	0.1	136
n	5	5	5	5	5	5	5	5	5	5	5
Mean	79	48	75	1	485	19.3	66	69	112	0.1	137
S.D.	46	24	76	0	69	14.0	11	41	23	0.0	13

Animal No.	BUN mg/dL	CRNN mg/dL	Na mmol/L	K mmol/L	Cl mmol/L	Ca mg/dL	P mg/dL	TP g/dL	ALB g/dL	A/G
4001	9	0.28	142	4.1	106	9.7	5.2	5.4	3.0	1.3
4002	10	0.30	140	4.3	105	10.1	5.2	5.9	3.2	1.2
4003	17	0.31	143	4.1	110	9.5	5.1	5.5	3.1	1.3
4004	12	0.25	143	4.0	111	10.0	4.9	6.2	3.4	1.2
4005	14	0.28	143	4.5	107	9.6	5.3	5.6	2.9	1.1
n	5	5	5	5	5	5	5	5	5	5
Mean	12	0.28	142	4.2	108	9.8	5.1	5.7	3.1	1.2
S.D.	3	0.02	1	0.2	3	0.3	0.2	0.3	0.2	0.1

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 7 - 5 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Blood chemistry Stage : Lactation day 5

Sex : Female Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	AST IU/L	ALT IU/L	LDH IU/L	γ-GTP IU/L	ALP IU/L	T-BA μmol/L	T-CHO mg/dL	TG mg/dL	PL mg/dL	T-BIL mg/dL	GLU mg/dL
1104	109	50	66	1	208	52.7	72	57	142	0.1	118
1105	68	47	52	1	295	46.2	68	112	130	0.1	129
1107	72	35	38	1	503	9.3	50	40	86	0.1	124
1109	68	40	39	1	630	32.5	59	43	111	0.1	129
1111	73	57	45	0	390	17.3	58	71	110	0.1	141
n	5	5	5	5	5	5	5	5	5	5	5
Mean	78	46	48	1	405	31.6	61	65	116	0.1	128
S.D.	17	9	12	0	167	18.4	9	29	21	0.0	8

Animal No.	BUN mg/dL	CRNN mg/dL	Na mmol/L	K mmol/L	Cl mmol/L	Ca mg/dL	P mg/dL	TP g/dL	ALB g/dL	A/G
1104	14	0.32	141	4.3	102	10.6	8.1	6.2	3.6	1.4
1105	19	0.28	145	4.0	105	10.9	8.2	5.3	2.9	1.2
1107	14	0.28	141	4.5	104	10.9	8.5	5.4	3.1	1.3
1109	17	0.25	144	5.0	102	12.2	11.4	6.1	3.3	1.2
1111	18	0.33	140	4.9	102	11.0	8.7	5.6	3.1	1.2
n	5	5	5	5	5	5	5	5	5	5
Mean	16	0.29	142	4.5	103	11.1	9.0	5.7	3.2	1.3
S.D.	2	0.03	2	0.4	1	0.6	1.4	0.4	0.3	0.1

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 7 - 6 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Blood chemistry Stage : Lactation day 5

Sex : Female Dose : BTetCA 100 mg/kg Species : Rat

Animal No.	AST IU/L	ALT IU/L	LDH IU/L	γ-GTP IU/L	ALP IU/L	T-BA μmol/L	T-CHO mg/dL	TG mg/dL	PL mg/dL	T-BIL mg/dL	GLU mg/dL
2104	63	46	31	1	221	16.9	46	50	97	0.0	120
2105	58	47	36	1	292	26.5	69	103	141	0.1	118
2106	121	59	70	1	288	13.1	49	39	94	0.1	100
2109	70	57	69	1	135	16.4	58	226	150	0.1	129
2110	67	42	46	1	144	30.8	69	67	139	0.1	110
n	5	5	5	5	5	5	5	5	5	5	5
Mean	76	50	50	1	216	20.7	58	97	124	0.1	115
S.D.	26	7	18	0	75	7.5	11	76	27	0.0	11

Animal No.	BUN mg/dL	CRNN mg/dL	Na mmol/L	K mmol/L	Cl mmol/L	Ca mg/dL	P mg/dL	TP g/dL	ALB g/dL	A/G
2104	18	0.31	144	3.6	104	10.7	7.9	5.9	3.3	1.3
2105	14	0.29	142	4.2	109	10.9	6.4	6.3	3.7	1.4
2106	16	0.31	141	4.2	107	11.0	7.6	5.8	3.3	1.3
2109	20	0.30	141	4.4	103	11.1	7.7	5.8	3.4	1.4
2110	12	0.26	142	4.4	104	11.1	8.4	6.3	3.6	1.3
n	5	5	5	5	5	5	5	5	5	5
Mean	16	0.29	142	4.2	105	11.0	7.6	6.0	3.5	1.3
S.D.	3	0.02	1	0.3	3	0.2	0.7	0.3	0.2	0.1

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 7 - 7 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Blood chemistry Stage : Lactation day 5

Sex : Female Dose : BTetCA 300 mg/kg Species : Rat

Animal No.	AST IU/L	ALT IU/L	LDH IU/L	γ-GTP IU/L	ALP IU/L	T-BA μmol/L	T-CHO mg/dL	TG mg/dL	PL mg/dL	T-BIL mg/dL	GLU mg/dL
3101	76	49	67	1	300	25.4	80	89	149	0.1	114
3102	72	66	36	0	202	10.0	60	118	115	0.0	138
3104	63	44	53	0	243	20.2	61	121	125	0.1	126
3105	80	62	43	1	415	21.7	62	48	117	0.0	125
3109	80	56	58	1	328	21.2	67	84	128	0.1	108
n	5	5	5	5	5	5	5	5	5	5	5
Mean	74	55	51	1	298	19.7	66	92	127	0.1	122
S.D.	7	9	12	1	82	5.8	8	30	14	0.1	12

Animal No.	BUN mg/dL	CRNN mg/dL	Na mmol/L	K mmol/L	Cl mmol/L	Ca mg/dL	P mg/dL	TP g/dL	ALB g/dL	A/G
3101	20	0.30	141	4.1	108	10.9	7.7	6.1	3.5	1.3
3102	15	0.29	141	4.3	107	11.1	6.8	6.4	3.3	1.1
3104	23	0.34	143	4.8	106	10.8	9.1	5.8	3.3	1.3
3105	17	0.22	143	3.7	108	10.3	6.2	5.7	3.1	1.2
3109	18	0.33	142	4.2	103	11.0	8.0	5.9	3.2	1.2
n	5	5	5	5	5	5	5	5	5	5
Mean	19	0.30	142	4.2	106	10.8	7.6	6.0	3.3	1.2
S.D.	3	0.05	1	0.4	2	0.3	1.1	0.3	0.1	0.1

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 7 - 8 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Blood chemistry Stage : Lactation day 5

Sex : Female Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	AST IU/L	ALT IU/L	LDH IU/L	γ-GTP IU/L	ALP IU/L	T-BA μmol/L	T-CHO mg/dL	TG mg/dL	PL mg/dL	T-BIL mg/dL	GLU mg/dL
4102	84	109	39	1	395	32.9	75	69	144	0.1	105
4103	76	70	40	1	432	21.5	76	59	136	0.1	99
4104	61	47	34	1	305	11.2	72	69	131	0.1	142
4105	82	79	53	2	259	41.5	56	94	113	0.1	136
4111	80	61	41	1	253	29.6	71	118	131	0.1	126
n	5	5	5	5	5	5	5	5	5	5	5
Mean	77	73	41	1	329	27.3	70	82	131	0.1	122
S.D.	9	23	7	0	81	11.5	8	24	11	0.0	19

Animal No.	BUN mg/dL	CRNN mg/dL	Na mmol/L	K mmol/L	Cl mmol/L	Ca mg/dL	P mg/dL	TP g/dL	ALB g/dL	A/G
4102	28	0.38	138	4.7	108	10.4	6.7	5.5	2.8	1.0
4103	13	0.26	139	4.8	103	10.7	6.8	5.7	3.0	1.1
4104	17	0.29	141	4.1	108	11.0	7.2	5.9	3.2	1.2
4105	19	0.33	141	4.3	107	11.0	6.8	5.9	3.2	1.2
4111	13	0.30	141	4.0	106	10.3	5.9	5.4	3.1	1.3
n	5	5	5	5	5	5	5	5	5	5
Mean	18	0.31	140	4.4	106	10.7	6.7	5.7	3.1	1.2
S.D.	6	0.05	1	0.4	2	0.3	0.5	0.2	0.2	0.1

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 7 - 9 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Blood chemistry Stage : End of administration

Sex : Female Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	AST IU/L	ALT IU/L	LDH IU/L	γ-GTP IU/L	ALP IU/L	T-BA μmol/L	T-CHO mg/dL	TG mg/dL	PL mg/dL	T-BIL mg/dL	GLU mg/dL
5101	58	34	49	0	225	30.4	67	22	129	0.1	115
5102	47	37	38	1	348	62.8	55	38	118	0.1	131
5103	66	35	44	1	149	11.8	52	14	103	0.1	116
5104	54	30	40	0	254	22.0	74	68	152	0.1	144
5105	58	28	39	1	273	19.5	93	22	161	0.1	157
n	5	5	5	5	5	5	5	5	5	5	5
Mean	57	33	42	1	250	29.3	68	33	133	0.1	133
S.D.	7	4	5	1	72	19.9	16	22	24	0.0	18

Animal No.	BUN mg/dL	CRNN mg/dL	Na mmol/L	K mmol/L	Cl mmol/L	Ca mg/dL	P mg/dL	TP g/dL	ALB g/dL	A/G
5101	19	0.40	142	4.1	108	9.9	4.2	6.1	3.5	1.3
5102	19	0.33	138	3.9	104	10.7	4.8	6.5	3.7	1.3
5103	19	0.34	141	4.0	108	9.4	4.0	5.5	3.1	1.3
5104	12	0.29	142	4.2	108	9.7	3.2	5.9	3.4	1.4
5105	16	0.28	142	3.8	108	10.2	3.9	6.3	3.6	1.3
n	5	5	5	5	5	5	5	5	5	5
Mean	17	0.33	141	4.0	107	10.0	4.0	6.1	3.5	1.3
S.D.	3	0.05	2	0.2	2	0.5	0.6	0.4	0.2	0.0

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 7 - 10 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Blood chemistry Stage : End of administration

Sex : Female Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	AST IU/L	ALT IU/L	LDH IU/L	γ-GTP IU/L	ALP IU/L	T-BA μmol/L	T-CHO mg/dL	TG mg/dL	PL mg/dL	T-BIL mg/dL	GLU mg/dL
6101	67	34	56	1	198	24.0	69	32	140	0.1	151
6102	44	29	37	0	207	24.1	57	54	124	0.1	138
6103	51	27	39	1	227	15.6	49	21	107	0.1	138
6104	58	35	35	0	236	8.6	54	16	99	0.1	153
6105	54	36	40	0	127	12.7	54	28	102	0.1	116
n	5	5	5	5	5	5	5	5	5	5	5
Mean	55	32	41	0	199	17.0	57	30	114	0.1	139
S.D.	9	4	8	1	43	6.9	8	15	17	0.0	15

Animal No.	BUN mg/dL	CRNN mg/dL	Na mmol/L	K mmol/L	Cl mmol/L	Ca mg/dL	P mg/dL	TP g/dL	ALB g/dL	A/G
6101	13	0.33	142	3.7	107	10.4	3.8	6.3	3.7	1.4
6102	12	0.33	142	3.8	105	10.1	4.3	5.9	3.5	1.5
6103	14	0.31	142	3.9	109	9.9	3.8	5.8	3.3	1.3
6104	16	0.33	139	4.0	108	9.4	4.0	5.6	3.3	1.4
6105	10	0.27	139	4.1	105	9.7	4.7	5.4	2.9	1.2
n	5	5	5	5	5	5	5	5	5	5
Mean	13	0.31	141	3.9	107	9.9	4.1	5.8	3.3	1.4
S.D.	2	0.03	2	0.2	2	0.4	0.4	0.3	0.3	0.1

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 7 - 11 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Blood chemistry Stage : End of recovery

Sex : Male Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	AST IU/L	ALT IU/L	LDH IU/L	γ-GTP IU/L	ALP IU/L	T-BA μmol/L	T-CHO mg/dL	TG mg/dL	PL mg/dL	T-BIL mg/dL	GLU mg/dL
1008	55	35	36	0	253	23.0	59	25	89	0.1	147
1009	85	37	48	1	346	11.9	62	33	93	0.1	156
1010	59	37	35	1	344	9.3	56	44	93	0.1	147
1011	65	40	28	1	306	5.5	67	31	88	0.1	135
1012	59	37	41	1	294	13.2	55	61	90	0.1	138
n	5	5	5	5	5	5	5	5	5	5	5
Mean	65	37	38	1	309	12.6	60	39	91	0.1	145
S.D.	12	2	7	0	39	6.5	5	14	2	0.0	8

Animal No.	BUN mg/dL	CRNN mg/dL	Na mmol/L	K mmol/L	Cl mmol/L	Ca mg/dL	P mg/dL	TP g/dL	ALB g/dL	A/G
1008	18	0.26	143	4.5	107	10.3	5.6	6.0	3.0	1.0
1009	14	0.19	143	4.0	107	9.8	5.4	5.7	2.9	1.0
1010	16	0.24	144	3.9	107	9.8	5.0	6.0	3.2	1.1
1011	13	0.28	145	3.8	108	10.4	4.8	6.2	3.3	1.1
1012	18	0.24	144	4.6	108	10.0	5.6	5.9	3.1	1.1
n	5	5	5	5	5	5	5	5	5	5
Mean	16	0.24	144	4.2	107	10.1	5.3	6.0	3.1	1.1
S.D.	2	0.03	1	0.4	1	0.3	0.4	0.2	0.2	0.1

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 7 - 12 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Blood chemistry Stage : End of recovery

Sex : Male Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	AST IU/L	ALT IU/L	LDH IU/L	γ-GTP IU/L	ALP IU/L	T-BA μmol/L	T-CHO mg/dL	TG mg/dL	PL mg/dL	T-BIL mg/dL	GLU mg/dL
4008	67	46	29	0	354	10.9	57	28	88	0.1	135
4009	68	46	36	0	291	28.3	44	23	76	0.1	109
4010	58	29	26	1	360	7.5	78	38	108	0.1	123
4011	49	29	30	1	281	4.3	38	18	59	0.1	121
4012	51	37	36	1	288	3.9	76	123	119	0.1	150
n	5	5	5	5	5	5	5	5	5	5	5
Mean	59	37	31	1	315	11.0	59	46	90	0.1	128
S.D.	9	9	4	1	39	10.1	18	44	24	0.0	16

Animal No.	BUN mg/dL	CRNN mg/dL	Na mmol/L	K mmol/L	Cl mmol/L	Ca mg/dL	P mg/dL	TP g/dL	ALB g/dL	A/G
4008	19	0.27	142	4.2	106	9.9	5.6	6.0	3.0	1.0
4009	22	0.27	144	3.8	108	9.4	4.3	5.6	3.0	1.2
4010	18	0.31	146	4.3	108	9.9	5.5	6.2	3.1	1.0
4011	13	0.21	143	4.0	107	9.5	4.8	5.5	2.9	1.1
4012	17	0.22	142	3.7	106	10.2	5.2	6.4	3.3	1.1
n	5	5	5	5	5	5	5	5	5	5
Mean	18	0.26	143	4.0	107	9.8	5.1	5.9	3.1	1.1
S.D.	3	0.04	2	0.3	1	0.3	0.5	0.4	0.2	0.1

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Blood chemistry

Stage : End of recovery

Sex : Female

Dose : BTetCA 0 mg/kg

Species : Rat

Animal No.	AST IU/L	ALT IU/L	LDH IU/L	γ-GTP IU/L	ALP IU/L	T-BA μmol/L	T-CHO mg/dL	TG mg/dL	PL mg/dL	T-BIL mg/dL	GLU mg/dL
5106	53	30	60	0	122	18.5	54	28	106	0.1	139
5107	57	33	38	0	158	12.1	74	22	142	0.1	129
5108	60	26	32	0	225	9.5	81	17	140	0.1	139
5109	72	32	44	0	157	21.3	102	25	182	0.1	131
5110	69	27	34	1	213	22.8	77	21	150	0.1	98
n	5	5	5	5	5	5	5	5	5	5	5
Mean	62	30	42	0	175	16.8	78	23	144	0.1	127
S.D.	8	3	11	0	43	5.8	17	4	27	0.0	17

Animal No.	BUN mg/dL	CRNN mg/dL	Na mmol/L	K mmol/L	Cl mmol/L	Ca mg/dL	P mg/dL	TP g/dL	ALB g/dL	A/G
5106	21	0.39	141	4.7	106	10.2	4.7	5.9	3.2	1.2
5107	14	0.31	142	4.0	107	10.4	3.1	6.8	3.8	1.3
5108	14	0.28	142	4.4	109	9.7	3.6	6.2	3.4	1.2
5109	14	0.28	143	3.8	109	10.3	3.5	6.9	3.9	1.3
5110	20	0.31	143	4.0	107	10.2	4.8	6.1	3.5	1.3
n	5	5	5	5	5	5	5	5	5	5
Mean	17	0.31	142	4.2	108	10.2	3.9	6.4	3.6	1.3
S.D.	4	0.05	1	0.4	1	0.3	0.8	0.4	0.3	0.1

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Blood chemistry

Stage : End of recovery

Sex : Female

Dose : BTetCA 1000 mg/kg

Species : Rat

Animal No.	AST IU/L	ALT IU/L	LDH IU/L	γ-GTP IU/L	ALP IU/L	T-BA μmol/L	T-CHO mg/dL	TG mg/dL	PL mg/dL	T-BIL mg/dL	GLU mg/dL
6106	67	46	54	0	117	23.1	52	31	106	0.1	146
6107	64	43	55	1	281	16.6	78	38	143	0.1	136
6108	55	33	51	1	119	21.5	68	41	148	0.1	154
6109	56	34	30	0	216	18.0	71	18	133	0.1	138
6110	62	22	38	1	297	3.6	106	25	180	0.1	151
n	5	5	5	5	5	5	5	5	5	5	5
Mean	61	36	46	1	206	16.6	75	31	142	0.1	145
S.D.	5	9	11	1	86	7.7	20	9	27	0.0	8

Animal No.	BUN mg/dL	CRNN mg/dL	Na mmol/L	K mmol/L	Cl mmol/L	Ca mg/dL	P mg/dL	TP g/dL	ALB g/dL	A/G
6106	17	0.31	143	3.9	106	9.6	3.7	5.6	3.3	1.4
6107	17	0.29	141	3.9	107	10.3	3.9	6.4	3.6	1.3
6108	15	0.29	143	3.8	109	10.7	2.9	7.0	4.2	1.5
6109	16	0.28	141	3.7	107	10.3	3.4	7.0	4.0	1.3
6110	15	0.33	141	4.6	107	9.7	4.2	6.3	3.4	1.2
n	5	5	5	5	5	5	5	5	5	5
Mean	16	0.30	142	4.0	107	10.1	3.6	6.5	3.7	1.3
S.D.	1	0.02	1	0.4	1	0.5	0.5	0.6	0.4	0.1

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 8 - 1 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Organ weight Stage : End of administration

Sex : Male Dose : BTetCA 0 mg/kg Species : Rat

	Body weight	Brain		Pituitary		Thyroid-R		Thyroid-L	
		AB	RE	AB	RE	AB	RE	AB	RE
Animal No.	g	g	g/100g	mg	mg/100g	mg	mg/100g	mg	mg/100g
1001	568	2.19	0.39	16.5	2.9	11.0	1.9	6.9	1.2
1002	555	2.19	0.39	15.1	2.7	11.0	2.0	9.8	1.8
1003	499	2.11	0.42	12.7	2.5	12.0	2.4	12.2	2.4
1004	479	2.20	0.46	13.3	2.8	9.8	2.0	12.4	2.6
1005	534	2.02	0.38	14.5	2.7	13.3	2.5	10.6	2.0
1006	509	2.12	0.42	13.3	2.6	15.3	3.0	12.7	2.5
1007	541	2.24	0.41	12.9	2.4	16.6	3.1	12.9	2.4
n	7	7	7	7	7	7	7	7	7
Mean	526	2.15	0.41	14.0	2.7	12.7	2.4	11.1	2.1
S.D.	32	0.07	0.03	1.4	0.2	2.5	0.5	2.2	0.5

	Thyroid-RL		Thymus		Heart		Liver		Spleen	
	AB	RE	AB	RE	AB	RE	AB	RE	AB	RE
Animal No.	mg	mg/100g	mg	mg/100g	g	g/100g	g	g/100g	g	g/100g
1001	17.9	3.2	339	60	1.54	0.27	14.72	2.59	0.76	0.13
1002	20.8	3.7	426	77	1.36	0.25	16.47	2.97	1.02	0.18
1003	24.2	4.8	324	65	1.44	0.29	13.68	2.74	0.63	0.13
1004	22.2	4.6	113	24	1.25	0.26	12.31	2.57	0.50	0.10
1005	23.9	4.5	257	48	1.45	0.27	13.21	2.47	0.67	0.13
1006	28.0	5.5	427	84	1.59	0.31	12.95	2.54	0.64	0.13
1007	29.5	5.5	610	113	1.46	0.27	13.33	2.46	0.65	0.12
n	7	7	7	7	7	7	7	7	7	7
Mean	23.8	4.5	357	67	1.44	0.27	13.81	2.62	0.70	0.13
S.D.	4.0	0.9	155	28	0.11	0.02	1.38	0.18	0.16	0.02

	Kidney-R		Kidney-L		Kidney-RL		Adrenal-R		Adrenal-L	
	AB	RE	AB	RE	AB	RE	AB	RE	AB	RE
Animal No.	g	g/100g	g	g/100g	g	g/100g	mg	mg/100g	mg	mg/100g
1001	1.67	0.29	1.67	0.29	3.34	0.59	31	5	32	6
1002	1.72	0.31	1.91	0.34	3.63	0.65	35	6	39	7
1003	1.65	0.33	1.60	0.32	3.25	0.65	25	5	32	6
1004	1.53	0.32	1.69	0.35	3.22	0.67	30	6	36	8
1005	1.71	0.32	1.73	0.32	3.44	0.64	30	6	39	7
1006	1.63	0.32	1.69	0.33	3.32	0.65	28	6	30	6
1007	1.66	0.31	1.61	0.30	3.27	0.60	37	7	38	7
n	7	7	7	7	7	7	7	7	7	7
Mean	1.65	0.31	1.70	0.32	3.35	0.64	31	6	35	7
S.D.	0.06	0.01	0.10	0.02	0.14	0.03	4	1	4	1

AB : Absolute weight, RE : Relative weight by body weight

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 8 - 2 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Organ weight Stage : End of administration

Sex : Male Dose : BTetCA 0 mg/kg Species : Rat

	Adrenal-RL		Testis-R		Testis-L		Testis-RL		Epididymis-R	
	AB	RE	AB	RE	AB	RE	AB	RE	AB	RE
Animal No.	mg	mg/100g	g	g/100g	g	g/100g	g	g/100g	mg	mg/100g
1001	63	11	1.69	0.30	1.73	0.30	3.42	0.60	631	111
1002	74	13	1.63	0.29	1.62	0.29	3.25	0.59	726	131
1003	57	11	1.70	0.34	1.71	0.34	3.41	0.68	693	139
1004	66	14	1.41	0.29	1.55	0.32	2.96	0.62	581	121
1005	69	13	1.63	0.31	1.63	0.31	3.26	0.61	691	129
1006	58	11	1.86	0.37	1.95	0.38	3.81	0.75	632	124
1007	75	14	1.56	0.29	1.60	0.30	3.16	0.58	728	135
n	7	7	7	7	7	7	7	7	7	7
Mean	66	12	1.64	0.31	1.68	0.32	3.32	0.63	669	127
S.D.	7	1	0.14	0.03	0.13	0.03	0.27	0.06	55	9

	Epididymis-L		Epididymis-RL		Prostate		Seminalvesicle	
	AB	RE	AB	RE	AB	RE	AB	RE
Animal No.	mg	mg/100g	mg	mg/100g	g	g/100g	g	g/100g
1001	647	114	1278	225	1.25	0.22	1.78	0.31
1002	633	114	1359	245	1.73	0.31	1.98	0.36
1003	620	124	1313	263	1.11	0.22	1.57	0.31
1004	581	121	1162	243	1.18	0.25	1.72	0.36
1005	710	133	1401	262	1.26	0.24	1.90	0.36
1006	678	133	1310	257	1.32	0.26	1.86	0.37
1007	719	133	1447	267	1.08	0.20	2.26	0.42
n	7	7	7	7	7	7	7	7
Mean	655	125	1324	252	1.28	0.24	1.87	0.36
S.D.	50	9	92	15	0.22	0.04	0.22	0.04

AB : Absolute weight, RE : Relative weight by body weight

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 8 - 3 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Organ weight Stage : End of administration

Sex : Male Dose : BTetCA 100 mg/kg Species : Rat

	Body weight	Brain		Pituitary		Thyroid-R		Thyroid-L	
		AB	RE	AB	RE	AB	RE	AB	RE
Animal No.	g	g	g/100g	mg	mg/100g	mg	mg/100g	mg	mg/100g
2001	607	2.14	0.35	14.9	2.5	12.2	2.0	11.8	1.9
2002	500	2.11	0.42	11.8	2.4	12.0	2.4	11.5	2.3
2003	542	2.11	0.39	13.2	2.4	10.2	1.9	11.2	2.1
2004	470	2.09	0.44	15.2	3.2	7.4	1.6	7.4	1.6
2005	514	2.15	0.42	14.9	2.9	13.0	2.5	11.0	2.1
2006	510	2.14	0.42	12.5	2.5	10.5	2.1	14.8	2.9
2007	505	2.20	0.44	13.4	2.7	7.7	1.5	8.4	1.7
2008	546	2.23	0.41	11.9	2.2	11.7	2.1	8.9	1.6
2009	515	2.24	0.43	11.9	2.3	9.5	1.8	8.5	1.7
2010	536	2.16	0.40	14.5	2.7	9.2	1.7	10.0	1.9
2011	535	2.10	0.39	12.5	2.3	10.1	1.9	9.6	1.8
2012	511	2.24	0.44	12.0	2.3	10.8	2.1	10.0	2.0
n	12	12	12	12	12	12	12	12	12
Mean	524	2.16	0.41	13.2	2.5	10.4	2.0	10.3	2.0
S.D.	34	0.06	0.03	1.3	0.3	1.7	0.3	2.0	0.4

	Thyroid-RL		Thymus		Heart		Liver		Spleen	
	AB	RE	AB	RE	AB	RE	AB	RE	AB	RE
Animal No.	mg	mg/100g	mg	mg/100g	g	g/100g	g	g/100g	g	g/100g
2001	24.0	4.0	354	58	1.59	0.26	18.10	2.98	0.75	0.12
2002	23.5	4.7	380	76	1.37	0.27	14.19	2.84	0.88	0.18
2003	21.4	3.9	325	60	1.29	0.24	14.13	2.61	0.85	0.16
2004	14.8	3.1	290	62	1.44	0.31	12.83	2.73	0.72	0.15
2005	24.0	4.7	324	63	1.48	0.29	14.47	2.82	0.82	0.16
2006	25.3	5.0	250	49	1.63	0.32	13.54	2.65	0.84	0.16
2007	16.1	3.2	275	54	1.66	0.33	14.82	2.93	0.77	0.15
2008	20.6	3.8	221	40	1.96	0.36	17.09	3.13	0.70	0.13
2009	18.0	3.5	239	46	1.44	0.28	14.05	2.73	0.73	0.14
2010	19.2	3.6	294	55	1.76	0.33	14.44	2.69	0.83	0.15
2011	19.7	3.7	279	52	1.43	0.27	14.57	2.72	0.84	0.16
2012	20.8	4.1	317	62	1.59	0.31	13.39	2.62	0.63	0.12
n	12	12	12	12	12	12	12	12	12	12
Mean	20.6	3.9	296	56	1.55	0.30	14.64	2.79	0.78	0.15
S.D.	3.3	0.6	47	9	0.19	0.03	1.51	0.16	0.08	0.02

AB : Absolute weight, RE : Relative weight by body weight

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 8 - 4 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Organ weight Stage : End of administration

Sex : Male Dose : BTetCA 100 mg/kg Species : Rat

	Kidney-R		Kidney-L		Kidney-RL		Adrenal-R		Adrenal-L	
	AB	RE	AB	RE	AB	RE	AB	RE	AB	RE
Animal No.	g	g/100g	g	g/100g	g	g/100g	mg	mg/100g	mg	mg/100g
2001	1.85	0.30	1.76	0.29	3.61	0.59	24	4	24	4
2002	1.48	0.30	1.66	0.33	3.14	0.63	27	5	27	5
2003	1.54	0.28	1.65	0.30	3.19	0.59	24	4	25	5
2004	1.60	0.34	1.69	0.36	3.29	0.70	39	8	38	8
2005	2.03	0.39	1.96	0.38	3.99	0.78	29	6	29	6
2006	1.60	0.31	1.54	0.30	3.14	0.62	27	5	27	5
2007	1.71	0.34	1.75	0.35	3.46	0.69	24	5	24	5
2008	1.95	0.36	1.96	0.36	3.91	0.72	27	5	28	5
2009	1.63	0.32	1.62	0.31	3.25	0.63	36	7	34	7
2010	2.04	0.38	1.99	0.37	4.03	0.75	29	5	32	6
2011	1.72	0.32	1.68	0.31	3.40	0.64	32	6	32	6
2012	1.68	0.33	1.63	0.32	3.31	0.65	23	5	25	5
n	12	12	12	12	12	12	12	12	12	12
Mean	1.74	0.33	1.74	0.33	3.48	0.67	28	5	29	6
S.D.	0.19	0.03	0.15	0.03	0.33	0.06	5	1	4	1

	Adrenal-RL		Testis-R		Testis-L		Testis-RL		Epididymis-R	
	AB	RE	AB	RE	AB	RE	AB	RE	AB	RE
Animal No.	mg	mg/100g	g	g/100g	g	g/100g	g	g/100g	mg	mg/100g
2001	48	8	1.59	0.26	1.64	0.27	3.23	0.53	725	119
2002	54	11	1.39	0.28	1.37	0.27	2.76	0.55	551	110
2003	49	9	1.55	0.29	1.62	0.30	3.17	0.58	638	118
2004	77	16	1.64	0.35	1.64	0.35	3.28	0.70	749	159
2005	58	11	1.71	0.33	1.80	0.35	3.51	0.68	662	129
2006	54	11	1.52	0.30	1.48	0.29	3.00	0.59	745	146
2007	48	10	1.68	0.33	1.70	0.34	3.38	0.67	627	124
2008	55	10	1.83	0.34	1.86	0.34	3.69	0.68	675	124
2009	70	14	1.66	0.32	1.59	0.31	3.25	0.63	674	131
2010	61	11	1.55	0.29	1.56	0.29	3.11	0.58	681	127
2011	64	12	1.74	0.33	1.76	0.33	3.50	0.65	644	120
2012	48	9	1.41	0.28	1.38	0.27	2.79	0.55	558	109
n	12	12	12	12	12	12	12	12	12	12
Mean	57	11	1.61	0.31	1.62	0.31	3.22	0.62	661	126
S.D.	9	2	0.13	0.03	0.15	0.03	0.28	0.06	63	14

AB : Absolute weight, RE : Relative weight by body weight

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 8 - 5 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Organ weight Stage : End of administration

Sex : Male Dose : BTetCA 100 mg/kg Species : Rat

	Epididymis-L		Epididymis-RL		Prostate		Seminalvesicle	
	AB	RE	AB	RE	AB	RE	AB	RE
Animal No.	mg	mg/100g	mg	mg/100g	g	g/100g	g	g/100g
2001	704	116	1429	235	1.49	0.25	1.71	0.28
2002	523	105	1074	215	0.84	0.17	1.89	0.38
2003	655	121	1293	239	1.11	0.20	1.70	0.31
2004	759	161	1508	321	1.34	0.29	1.75	0.37
2005	679	132	1341	261	1.45	0.28	1.61	0.31
2006	643	126	1388	272	1.28	0.25	1.80	0.35
2007	606	120	1233	244	1.25	0.25	1.80	0.36
2008	680	125	1355	248	1.33	0.24	2.21	0.40
2009	636	123	1310	254	1.46	0.28	2.14	0.42
2010	657	123	1338	250	1.53	0.29	1.74	0.32
2011	612	114	1256	235	1.02	0.19	1.62	0.30
2012	572	112	1130	221	1.58	0.31	1.75	0.34
n	12	12	12	12	12	12	12	12
Mean	644	123	1305	250	1.31	0.25	1.81	0.35
S.D.	62	14	121	28	0.22	0.04	0.19	0.04

AB : Absolute weight, RE : Relative weight by body weight

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 8 - 6 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Organ weight Stage : End of administration

Sex : Male Dose : BTetCA 300 mg/kg Species : Rat

	Body weight	Brain		Pituitary		Thyroid-R		Thyroid-L	
		AB	RE	AB	RE	AB	RE	AB	RE
Animal No.	g	g	g/100g	mg	mg/100g	mg	mg/100g	mg	mg/100g
3001	525	2.02	0.38	15.1	2.9	9.1	1.7	9.2	1.8
3002	505	1.99	0.39	12.1	2.4	9.2	1.8	6.9	1.4
3003	524	2.24	0.43	14.3	2.7	13.8	2.6	9.4	1.8
3004	464	2.01	0.43	9.9	2.1	12.1	2.6	5.8	1.3
3005	540	2.15	0.40	11.3	2.1	8.9	1.6	13.6	2.5
3006	526	2.14	0.41	12.4	2.4	9.2	1.7	10.0	1.9
3007	540	2.34	0.43	15.8	2.9	11.2	2.1	8.9	1.6
3008	503	2.07	0.41	12.9	2.6	13.3	2.6	5.8	1.2
3009	538	2.23	0.41	12.6	2.3	5.9	1.1	7.6	1.4
3010	538	2.06	0.38	15.7	2.9	12.0	2.2	13.1	2.4
3011	517	2.10	0.41	13.9	2.7	14.7	2.8	8.0	1.5
3012	492	2.22	0.45	13.0	2.6	10.7	2.2	12.8	2.6
n	12	12	12	12	12	12	12	12	12
Mean	518	2.13	0.41	13.3	2.6	10.8	2.1	9.3	1.8
S.D.	23	0.11	0.02	1.8	0.3	2.5	0.5	2.7	0.5

	Thyroid-RL		Thymus		Heart		Liver		Spleen	
	AB	RE	AB	RE	AB	RE	AB	RE	AB	RE
Animal No.	mg	mg/100g	mg	mg/100g	g	g/100g	g	g/100g	g	g/100g
3001	18.3	3.5	168	32	1.46	0.28	12.90	2.46	0.67	0.13
3002	16.1	3.2	442	88	1.52	0.30	13.29	2.63	0.76	0.15
3003	23.2	4.4	415	79	1.64	0.31	16.27	3.10	0.88	0.17
3004	17.9	3.9	314	68	1.42	0.31	13.41	2.89	0.61	0.13
3005	22.5	4.2	398	74	1.62	0.30	14.86	2.75	0.84	0.16
3006	19.2	3.7	312	59	1.48	0.28	16.27	3.09	0.62	0.12
3007	20.1	3.7	359	66	1.67	0.31	16.08	2.98	0.98	0.18
3008	19.1	3.8	288	57	1.33	0.26	13.79	2.74	0.67	0.13
3009	13.5	2.5	338	63	1.53	0.28	16.66	3.10	0.72	0.13
3010	25.1	4.7	494	92	1.66	0.31	15.54	2.89	0.92	0.17
3011	22.7	4.4	307	59	1.57	0.30	12.73	2.46	0.72	0.14
3012	23.5	4.8	332	67	1.53	0.31	12.13	2.47	0.63	0.13
n	12	12	12	12	12	12	12	12	12	12
Mean	20.1	3.9	347	67	1.54	0.30	14.49	2.80	0.75	0.15
S.D.	3.4	0.7	84	16	0.10	0.02	1.63	0.25	0.13	0.02

AB : Absolute weight, RE : Relative weight by body weight

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 8 - 7 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Organ weight Stage : End of administration

Sex : Male Dose : BTetCA 300 mg/kg Species : Rat

	Kidney-R		Kidney-L		Kidney-RL		Adrenal-R		Adrenal-L	
	AB	RE	AB	RE	AB	RE	AB	RE	AB	RE
Animal No.	g	g/100g	g	g/100g	g	g/100g	mg	mg/100g	mg	mg/100g
3001	1.57	0.30	1.68	0.32	3.25	0.62	30	6	29	6
3002	1.70	0.34	1.79	0.35	3.49	0.69	23	5	26	5
3003	1.90	0.36	1.94	0.37	3.84	0.73	32	6	36	7
3004	1.48	0.32	1.64	0.35	3.12	0.67	36	8	35	8
3005	1.70	0.31	1.75	0.32	3.45	0.64	32	6	35	6
3006	1.85	0.35	1.72	0.33	3.57	0.68	26	5	28	5
3007	1.83	0.34	1.78	0.33	3.61	0.67	39	7	42	8
3008	1.69	0.34	1.66	0.33	3.35	0.67	26	5	26	5
3009	1.81	0.34	1.83	0.34	3.64	0.68	29	5	28	5
3010	1.97	0.37	1.97	0.37	3.94	0.73	34	6	34	6
3011	1.68	0.32	1.72	0.33	3.40	0.66	31	6	32	6
3012	1.50	0.30	1.63	0.33	3.13	0.64	27	5	31	6
n	12	12	12	12	12	12	12	12	12	12
Mean	1.72	0.33	1.76	0.34	3.48	0.67	30	6	32	6
S.D.	0.15	0.02	0.11	0.02	0.26	0.03	5	1	5	1

	Adrenal-RL		Testis-R		Testis-L		Testis-RL		Epididymis-R	
	AB	RE	AB	RE	AB	RE	AB	RE	AB	RE
Animal No.	mg	mg/100g	g	g/100g	g	g/100g	g	g/100g	mg	mg/100g
3001	59	11	1.58	0.30	1.50	0.29	3.08	0.59	613	117
3002	49	10	1.67	0.33	1.71	0.34	3.38	0.67	647	128
3003	68	13	1.86	0.35	1.80	0.34	3.66	0.70	672	128
3004	71	15	1.71	0.37	1.69	0.36	3.40	0.73	630	136
3005	67	12	1.74	0.32	1.75	0.32	3.49	0.65	663	123
3006	54	10	1.67	0.32	1.64	0.31	3.31	0.63	641	122
3007	81	15	2.05	0.38	2.02	0.37	4.07	0.75	821	152
3008	52	10	1.63	0.32	1.61	0.32	3.24	0.64	561	112
3009	57	11	1.98	0.37	1.95	0.36	3.93	0.73	728	135
3010	68	13	1.91	0.36	1.88	0.35	3.79	0.70	732	136
3011	63	12	1.52	0.29	1.59	0.31	3.11	0.60	669	129
3012	58	12	1.60	0.33	1.63	0.33	3.23	0.66	699	142
n	12	12	12	12	12	12	12	12	12	12
Mean	62	12	1.74	0.34	1.73	0.33	3.47	0.67	673	130
S.D.	9	2	0.17	0.03	0.16	0.02	0.32	0.05	67	11

AB : Absolute weight, RE : Relative weight by body weight

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 8 - 8 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Organ weight Stage : End of administration

Sex : Male Dose : BTetCA 300 mg/kg Species : Rat

	Epididymis-L		Epididymis-RL		Prostate		Seminalvesicle	
	AB	RE	AB	RE	AB	RE	AB	RE
Animal No.	mg	mg/100g	mg	mg/100g	g	g/100g	g	g/100g
3001	602	115	1215	231	1.19	0.23	1.96	0.37
3002	654	130	1301	258	1.56	0.31	2.01	0.40
3003	667	127	1339	256	1.11	0.21	1.68	0.32
3004	592	128	1222	263	0.98	0.21	1.76	0.38
3005	665	123	1328	246	1.39	0.26	1.10	0.20
3006	684	130	1325	252	1.26	0.24	1.82	0.35
3007	814	151	1635	303	1.47	0.27	1.77	0.33
3008	583	116	1144	227	1.24	0.25	1.83	0.36
3009	760	141	1488	277	0.97	0.18	1.80	0.33
3010	747	139	1479	275	0.92	0.17	1.68	0.31
3011	728	141	1397	270	1.34	0.26	2.19	0.42
3012	695	141	1394	283	1.48	0.30	2.11	0.43
n	12	12	12	12	12	12	12	12
Mean	683	132	1356	262	1.24	0.24	1.81	0.35
S.D.	71	11	135	22	0.21	0.04	0.28	0.06

AB : Absolute weight, RE : Relative weight by body weight

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Organ weight

Stage : End of administration

Sex : Male

Dose : BTetCA 1000 mg/kg

Species : Rat

Animal No.	Body weight g	Brain AB g	Brain RE g/100g	Pituitary AB mg	Pituitary RE mg/100g	Thyroid-R AB mg	Thyroid-R RE mg/100g	Thyroid-L AB mg	Thyroid-L RE mg/100g
4001	454	2.12	0.47	11.3	2.5	10.3	2.3	8.6	1.9
4002	542	2.11	0.39	14.0	2.6	15.2	2.8	12.9	2.4
4003	470	2.10	0.45	12.4	2.6	12.6	2.7	7.7	1.6
4004	495	1.96	0.40	13.2	2.7	11.7	2.4	5.4	1.1
4005	462	1.94	0.42	12.8	2.8	10.8	2.3	9.3	2.0
4006	515	2.27	0.44	14.2	2.8	14.3	2.8	14.2	2.8
4007	495	2.11	0.43	13.8	2.8	10.2	2.1	11.3	2.3
n	7	7	7	7	7	7	7	7	7
Mean	490	2.09	0.43	13.1	2.7	12.2	2.5	9.9	2.0
S.D.	31	0.11	0.03	1.0	0.1	2.0	0.3	3.1	0.6

Animal No.	Thyroid-RL AB mg	Thyroid-RL RE mg/100g	Thymus AB mg	Thymus RE mg/100g	Heart AB g	Heart RE g/100g	Liver AB g	Liver RE g/100g	Spleen AB g	Spleen RE g/100g
4001	18.9	4.2	274	60	1.26	0.28	12.55	2.76	0.65	0.14
4002	28.1	5.2	186	34	1.38	0.25	15.40	2.84	0.74	0.14
4003	20.3	4.3	203	43	1.39	0.30	11.64	2.48	0.62	0.13
4004	17.1	3.5	268	54	1.41	0.28	14.30	2.89	0.63	0.13
4005	20.1	4.4	320	69	1.22	0.26	12.65	2.74	0.65	0.14
4006	28.5	5.5	324	63	1.43	0.28	13.28	2.58	0.72	0.14
4007	21.5	4.3	350	71	1.21	0.24	14.41	2.91	0.70	0.14
n	7	7	7	7	7	7	7	7	7	7
Mean	22.1	4.5	275	56	1.33	0.27	13.46	2.74	0.67	0.14
S.D.	4.5	0.7	62	14	0.09	0.02	1.30	0.16	0.05	0.00

Animal No.	Kidney-R AB g	Kidney-R RE g/100g	Kidney-L AB g	Kidney-L RE g/100g	Kidney-RL AB g	Kidney-RL RE g/100g	Adrenal-R AB mg	Adrenal-R RE mg/100g	Adrenal-L AB mg	Adrenal-L RE mg/100g
4001	1.71	0.38	1.61	0.35	3.32	0.73	29	6	30	7
4002	1.59	0.29	1.88	0.35	3.47	0.64	30	6	29	5
4003	1.87	0.40	1.71	0.36	3.58	0.76	29	6	34	7
4004	1.70	0.34	1.72	0.35	3.42	0.69	30	6	33	7
4005	1.60	0.35	1.55	0.34	3.15	0.68	26	6	30	6
4006	1.63	0.32	1.60	0.31	3.23	0.63	35	7	35	7
4007	1.76	0.36	1.81	0.37	3.57	0.72	34	7	38	8
n	7	7	7	7	7	7	7	7	7	7
Mean	1.69	0.35	1.70	0.35	3.39	0.69	30	6	33	7
S.D.	0.10	0.04	0.12	0.02	0.17	0.05	3	0	3	1

AB : Absolute weight, RE : Relative weight by body weight

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 8 - 10 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Organ weight Stage : End of administration

Sex : Male Dose : BTetCA 1000 mg/kg Species : Rat

	Adrenal-RL		Testis-R		Testis-L		Testis-RL		Epididymis-R	
	AB	RE	AB	RE	AB	RE	AB	RE	AB	RE
Animal No.	mg	mg/100g	g	g/100g	g	g/100g	g	g/100g	mg	mg/100g
4001	59	13	1.60	0.35	1.63	0.36	3.23	0.71	634	140
4002	59	11	1.53	0.28	1.50	0.28	3.03	0.56	615	113
4003	63	13	1.76	0.37	1.76	0.37	3.52	0.75	649	138
4004	63	13	1.65	0.33	1.62	0.33	3.27	0.66	587	119
4005	56	12	1.57	0.34	1.61	0.35	3.18	0.69	634	137
4006	70	14	1.68	0.33	1.64	0.32	3.32	0.64	765	149
4007	72	15	1.77	0.36	1.78	0.36	3.55	0.72	689	139
n	7	7	7	7	7	7	7	7	7	7
Mean	63	13	1.65	0.34	1.65	0.34	3.30	0.68	653	134
S.D.	6	1	0.09	0.03	0.10	0.03	0.18	0.06	58	13

	Epididymis-L		Epididymis-RL		Prostate		Seminalvesicle	
	AB	RE	AB	RE	AB	RE	AB	RE
Animal No.	mg	mg/100g	mg	mg/100g	g	g/100g	g	g/100g
4001	597	131	1231	271	1.07	0.24	1.82	0.40
4002	633	117	1248	230	1.59	0.29	1.55	0.29
4003	652	139	1301	277	0.84	0.18	1.68	0.36
4004	589	119	1176	238	1.18	0.24	1.86	0.38
4005	618	134	1252	271	1.10	0.24	1.96	0.42
4006	713	138	1478	287	1.25	0.24	1.99	0.39
4007	702	142	1391	281	0.85	0.17	1.74	0.35
n	7	7	7	7	7	7	7	7
Mean	643	131	1297	265	1.13	0.23	1.80	0.37
S.D.	49	10	104	22	0.26	0.04	0.16	0.04

AB : Absolute weight, RE : Relative weight by body weight

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 8 - 11 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Organ weight Stage : Lactation day 5

Sex : Female Dose : BTetCA 0 mg/kg Species : Rat

	Body weight	Brain		Pituitary		Thyroid-R		Thyroid-L	
		AB	RE	AB	RE	AB	RE	AB	RE
Animal No.	g	g	g/100g	mg	mg/100g	mg	mg/100g	mg	mg/100g
1101	284	1.89	0.67	13.0	4.6	5.9	2.1	6.7	2.4
1102	273	1.97	0.72	12.9	4.7	11.0	4.0	8.3	3.0
1103	306	1.97	0.64	14.5	4.7	8.3	2.7	9.4	3.1
1104	279	1.86	0.67	17.5	6.3	7.7	2.8	8.8	3.2
1105	313	1.96	0.63	15.8	5.0	7.9	2.5	6.4	2.0
1106	305	1.89	0.62	16.7	5.5	10.4	3.4	8.0	2.6
1107	316	2.00	0.63	15.4	4.9	6.8	2.2	7.5	2.4
1108	266	1.89	0.71	18.6	7.0	12.0	4.5	9.4	3.5
1109	296	1.98	0.67	14.5	4.9	10.3	3.5	7.9	2.7
1110	321	1.89	0.59	15.6	4.9	8.9	2.8	6.6	2.1
1111	315	1.99	0.63	19.3	6.1	10.1	3.2	10.0	3.2
1112	320	1.95	0.61	13.9	4.3	8.7	2.7	7.4	2.3
n	12	12	12	12	12	12	12	12	12
Mean	300	1.94	0.65	15.6	5.2	9.0	3.0	8.0	2.7
S.D.	19	0.05	0.04	2.1	0.8	1.8	0.7	1.2	0.5

	Thyroid-RL		Thymus		Heart		Liver		Spleen	
	AB	RE	AB	RE	AB	RE	AB	RE	AB	RE
Animal No.	mg	mg/100g	mg	mg/100g	g	g/100g	g	g/100g	g	g/100g
1101	12.6	4.4	138	49	0.89	0.31	10.21	3.60	0.58	0.20
1102	19.3	7.1	146	53	0.97	0.36	8.75	3.21	0.54	0.20
1103	17.7	5.8	218	71	1.13	0.37	10.09	3.30	0.58	0.19
1104	16.5	5.9	165	59	0.94	0.34	8.96	3.21	0.45	0.16
1105	14.3	4.6	166	53	1.10	0.35	10.56	3.37	0.74	0.24
1106	18.4	6.0	163	53	0.98	0.32	10.60	3.48	0.70	0.23
1107	14.3	4.5	280	89	1.03	0.33	9.69	3.07	0.73	0.23
1108	21.4	8.0	190	71	1.06	0.40	8.99	3.38	0.55	0.21
1109	18.2	6.1	209	71	0.87	0.29	10.08	3.41	0.54	0.18
1110	15.5	4.8	206	64	0.92	0.29	10.18	3.17	0.54	0.17
1111	20.1	6.4	283	90	0.98	0.31	9.58	3.04	0.56	0.18
1112	16.1	5.0	214	67	1.05	0.33	10.11	3.16	0.53	0.17
n	12	12	12	12	12	12	12	12	12	12
Mean	17.0	5.7	198	66	0.99	0.33	9.82	3.28	0.59	0.20
S.D.	2.6	1.1	47	14	0.08	0.03	0.63	0.17	0.09	0.03

AB : Absolute weight, RE : Relative weight by body weight

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 8 - 12 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Organ weight Stage : Lactation day 5

Sex : Female Dose : BTetCA 0 mg/kg Species : Rat

	Kidney-R		Kidney-L		Kidney-RL		Adrenal-R		Adrenal-L	
	AB	RE	AB	RE	AB	RE	AB	RE	AB	RE
Animal No.	g	g/100g	g	g/100g	g	g/100g	mg	mg/100g	mg	mg/100g
1101	0.94	0.33	0.96	0.34	1.90	0.67	29	10	32	11
1102	0.97	0.36	0.92	0.34	1.89	0.69	30	11	30	11
1103	0.90	0.29	0.88	0.29	1.78	0.58	30	10	32	10
1104	0.87	0.31	0.92	0.33	1.79	0.64	34	12	38	14
1105	1.08	0.35	1.11	0.35	2.19	0.70	35	11	36	12
1106	1.02	0.33	1.04	0.34	2.06	0.68	29	10	33	11
1107	1.12	0.35	1.12	0.35	2.24	0.71	39	12	42	13
1108	0.95	0.36	0.96	0.36	1.91	0.72	32	12	36	14
1109	1.05	0.35	1.01	0.34	2.06	0.70	46	16	52	18
1110	1.06	0.33	1.02	0.32	2.08	0.65	35	11	36	11
1111	1.10	0.35	1.03	0.33	2.13	0.68	39	12	44	14
1112	1.09	0.34	1.08	0.34	2.17	0.68	35	11	44	14
n	12	12	12	12	12	12	12	12	12	12
Mean	1.01	0.34	1.00	0.34	2.02	0.68	34	12	38	13
S.D.	0.08	0.02	0.08	0.02	0.16	0.04	5	2	6	2

	Adrenal-RL		Ovary-R		Ovary-L		Ovary-RL		Uterus	
	AB	RE	AB	RE	AB	RE	AB	RE	AB	RE
Animal No.	mg	mg/100g	mg	mg/100g	mg	mg/100g	mg	mg/100g	mg	mg/100g
1101	61	21	51.8	18.2	44.5	15.7	96.3	33.9	842	296
1102	60	22	50.5	18.5	32.3	11.8	82.8	30.3	493	181
1103	62	20	46.6	15.2	51.1	16.7	97.7	31.9	770	252
1104	72	26	55.9	20.0	34.4	12.3	90.3	32.4	559	200
1105	71	23	55.5	17.7	49.2	15.7	104.7	33.5	833	266
1106	62	20	35.1	11.5	60.3	19.8	95.4	31.3	688	226
1107	81	26	62.6	19.8	51.0	16.1	113.6	35.9	827	262
1108	68	26	56.8	21.4	39.4	14.8	96.2	36.2	887	333
1109	98	33	64.0	21.6	48.8	16.5	112.8	38.1	669	226
1110	71	22	59.6	18.6	56.6	17.6	116.2	36.2	649	202
1111	83	26	41.5	13.2	45.6	14.5	87.1	27.7	741	235
1112	79	25	55.5	17.3	46.4	14.5	101.9	31.8	657	205
n	12	12	12	12	12	12	12	12	12	12
Mean	72	24	53.0	17.8	46.6	15.5	99.6	33.3	718	240
S.D.	11	4	8.5	3.1	8.3	2.2	10.6	3.0	121	44

AB : Absolute weight, RE : Relative weight by body weight

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Organ weight

Stage : Lactation day 5

Sex : Female

Dose : BTetCA 100 mg/kg

Species : Rat

	Body weight	Brain		Pituitary		Thyroid-R		Thyroid-L	
		AB	RE	AB	RE	AB	RE	AB	RE
Animal No.	g	g	g/100g	mg	mg/100g	mg	mg/100g	mg	mg/100g
2101	325	1.92	0.59	18.4	5.7	10.3	3.2	9.9	3.0
2102	282	1.97	0.70	14.5	5.1	8.9	3.2	6.9	2.4
2103	266	1.80	0.68	14.4	5.4	6.3	2.4	7.2	2.7
2104	285	1.90	0.67	16.3	5.7	6.9	2.4	6.8	2.4
2105	325	1.99	0.61	19.0	5.8	9.5	2.9	6.7	2.1
2106	344	2.01	0.58	17.0	4.9	10.4	3.0	11.7	3.4
2107	286	1.97	0.69	17.3	6.0	8.7	3.0	8.7	3.0
2108	291	1.86	0.64	18.7	6.4	9.8	3.4	6.6	2.3
2109	312	2.07	0.66	17.9	5.7	12.3	3.9	10.9	3.5
2110	286	1.93	0.67	16.2	5.7	8.9	3.1	8.4	2.9
2111	268	1.83	0.68	14.0	5.2	7.3	2.7	6.5	2.4
2112	304	1.94	0.64	16.5	5.4	9.8	3.2	7.7	2.5
n	12	12	12	12	12	12	12	12	12
Mean	298	1.93	0.65	16.7	5.6	9.1	3.0	8.2	2.7
S.D.	24	0.08	0.04	1.7	0.4	1.7	0.4	1.8	0.4

	Thyroid-RL		Thymus		Heart		Liver		Spleen	
	AB	RE	AB	RE	AB	RE	AB	RE	AB	RE
Animal No.	mg	mg/100g	mg	mg/100g	g	g/100g	g	g/100g	g	g/100g
2101	20.2	6.2	229	70	1.01	0.31	11.36	3.50	0.60	0.18
2102	15.8	5.6	167	59	0.95	0.34	8.98	3.18	0.60	0.21
2103	13.5	5.1	161	61	0.93	0.35	8.96	3.37	0.51	0.19
2104	13.7	4.8	211	74	1.02	0.36	9.80	3.44	0.58	0.20
2105	16.2	5.0	213	66	1.02	0.31	10.27	3.16	0.64	0.20
2106	22.1	6.4	325	94	1.11	0.32	10.63	3.09	0.60	0.17
2107	17.4	6.1	211	74	0.94	0.33	9.65	3.37	0.65	0.23
2108	16.4	5.6	132	45	0.97	0.33	10.31	3.54	0.62	0.21
2109	23.2	7.4	202	65	1.13	0.36	10.35	3.32	0.62	0.20
2110	17.3	6.0	199	70	1.04	0.36	10.15	3.55	0.61	0.21
2111	13.8	5.1	115	43	0.81	0.30	7.59	2.83	0.44	0.16
2112	17.5	5.8	262	86	1.04	0.34	10.13	3.33	0.69	0.23
n	12	12	12	12	12	12	12	12	12	12
Mean	17.3	5.8	202	67	1.00	0.33	9.85	3.31	0.60	0.20
S.D.	3.2	0.7	57	15	0.09	0.02	0.97	0.21	0.07	0.02

AB : Absolute weight, RE : Relative weight by body weight

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 8 - 14 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Organ weight Stage : Lactation day 5

Sex : Female Dose : BTetCA 100 mg/kg Species : Rat

	Kidney-R		Kidney-L		Kidney-RL		Adrenal-R		Adrenal-L	
	AB	RE	AB	RE	AB	RE	AB	RE	AB	RE
Animal No.	g	g/100g	g	g/100g	g	g/100g	mg	mg/100g	mg	mg/100g
2101	1.10	0.34	1.12	0.34	2.22	0.68	33	10	36	11
2102	1.00	0.35	0.97	0.34	1.97	0.70	30	11	32	11
2103	0.92	0.35	0.91	0.34	1.83	0.69	35	13	34	13
2104	0.95	0.33	0.90	0.32	1.85	0.65	36	13	39	14
2105	1.06	0.33	1.08	0.33	2.14	0.66	29	9	32	10
2106	1.07	0.31	1.06	0.31	2.13	0.62	34	10	35	10
2107	0.95	0.33	0.97	0.34	1.92	0.67	25	9	28	10
2108	1.03	0.35	1.07	0.37	2.10	0.72	33	11	41	14
2109	1.00	0.32	1.01	0.32	2.01	0.64	38	12	40	13
2110	0.98	0.34	0.98	0.34	1.96	0.69	35	12	37	13
2111	0.99	0.37	0.93	0.35	1.92	0.72	29	11	29	11
2112	1.09	0.36	1.15	0.38	2.24	0.74	35	12	41	13
n	12	12	12	12	12	12	12	12	12	12
Mean	1.01	0.34	1.01	0.34	2.02	0.68	33	11	35	12
S.D.	0.06	0.02	0.08	0.02	0.14	0.04	4	1	4	2

	Adrenal-RL		Ovary-R		Ovary-L		Ovary-RL		Uterus	
	AB	RE	AB	RE	AB	RE	AB	RE	AB	RE
Animal No.	mg	mg/100g	mg	mg/100g	mg	mg/100g	mg	mg/100g	mg	mg/100g
2101	69	21	55.0	16.9	56.1	17.3	111.1	34.2	811	250
2102	62	22	53.9	19.1	56.7	20.1	110.6	39.2	756	268
2103	69	26	44.6	16.8	57.4	21.6	102.0	38.3	719	270
2104	75	26	52.1	18.3	50.5	17.7	102.6	36.0	735	258
2105	61	19	44.4	13.7	62.2	19.1	106.6	32.8	747	230
2106	69	20	55.1	16.0	64.9	18.9	120.0	34.9	647	188
2107	53	19	46.6	16.3	42.9	15.0	89.5	31.3	634	222
2108	74	25	59.1	20.3	43.1	14.8	102.2	35.1	752	258
2109	78	25	63.8	20.4	45.6	14.6	109.4	35.1	630	202
2110	72	25	48.8	17.1	49.9	17.4	98.7	34.5	598	209
2111	58	22	50.8	19.0	56.1	20.9	106.9	39.9	685	256
2112	76	25	52.2	17.2	43.3	14.2	95.5	31.4	889	292
n	12	12	12	12	12	12	12	12	12	12
Mean	68	23	52.2	17.6	52.4	17.6	104.6	35.2	717	242
S.D.	8	3	5.8	1.9	7.6	2.6	8.0	2.8	84	31

AB : Absolute weight, RE : Relative weight by body weight

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Organ weight

Stage : Lactation day 5

Sex : Female

Dose : BTetCA 300 mg/kg

Species : Rat

	Body weight	Brain		Pituitary		Thyroid-R		Thyroid-L	
		AB	RE	AB	RE	AB	RE	AB	RE
Animal No.	g	g	g/100g	mg	mg/100g	mg	mg/100g	mg	mg/100g
3101	292	1.97	0.67	17.3	5.9	8.2	2.8	6.7	2.3
3102	328	2.01	0.61	22.6	6.9	6.4	2.0	6.6	2.0
3103	296	1.94	0.66	18.3	6.2	5.4	1.8	9.9	3.3
3104	322	1.95	0.61	15.2	4.7	8.9	2.8	6.8	2.1
3105	314	2.03	0.65	19.7	6.3	8.3	2.6	12.5	4.0
3106	296	1.91	0.65	14.5	4.9	7.8	2.6	5.0	1.7
3107	291	1.99	0.68	17.7	6.1	6.9	2.4	6.9	2.4
3108	294	1.86	0.63	19.9	6.8	9.5	3.2	7.0	2.4
3109	342	2.11	0.62	18.7	5.5	9.1	2.7	8.1	2.4
3110	288	1.90	0.66	12.8	4.4	8.5	3.0	7.0	2.4
3111	283	1.86	0.66	16.8	5.9	8.7	3.1	6.1	2.2
3112	322	2.02	0.63	17.1	5.3	9.3	2.9	9.4	2.9
n	12	12	12	12	12	12	12	12	12
Mean	306	1.96	0.64	17.6	5.7	8.1	2.7	7.7	2.5
S.D.	19	0.07	0.02	2.6	0.8	1.3	0.4	2.0	0.6

	Thyroid-RL		Thymus		Heart		Liver		Spleen	
	AB	RE	AB	RE	AB	RE	AB	RE	AB	RE
Animal No.	mg	mg/100g	mg	mg/100g	g	g/100g	g	g/100g	g	g/100g
3101	14.9	5.1	184	63	1.07	0.37	9.91	3.39	0.55	0.19
3102	13.0	4.0	293	89	1.17	0.36	11.53	3.52	0.74	0.23
3103	15.3	5.2	172	58	1.08	0.36	10.16	3.43	0.71	0.24
3104	15.7	4.9	218	68	0.96	0.30	10.68	3.32	0.67	0.21
3105	20.8	6.6	226	72	1.08	0.34	9.59	3.05	0.65	0.21
3106	12.8	4.3	283	96	0.98	0.33	9.66	3.26	0.58	0.20
3107	13.8	4.7	210	72	1.01	0.35	10.40	3.57	0.79	0.27
3108	16.5	5.6	164	56	1.07	0.36	10.65	3.62	0.52	0.18
3109	17.2	5.0	220	64	1.09	0.32	10.37	3.03	0.80	0.23
3110	15.5	5.4	192	67	0.98	0.34	8.63	3.00	0.53	0.18
3111	14.8	5.2	241	85	0.94	0.33	8.87	3.13	0.56	0.20
3112	18.7	5.8	226	70	0.94	0.29	10.43	3.24	0.60	0.19
n	12	12	12	12	12	12	12	12	12	12
Mean	15.8	5.2	219	72	1.03	0.34	10.07	3.30	0.64	0.21
S.D.	2.3	0.7	40	12	0.07	0.02	0.80	0.21	0.10	0.03

AB : Absolute weight, RE : Relative weight by body weight

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Organ weight

Stage : Lactation day 5

Sex : Female

Dose : BTetCA 300 mg/kg

Species : Rat

	Kidney-R		Kidney-L		Kidney-RL		Adrenal-R		Adrenal-L	
	AB	RE	AB	RE	AB	RE	AB	RE	AB	RE
Animal No.	g	g/100g	g	g/100g	g	g/100g	mg	mg/100g	mg	mg/100g
3101	1.03	0.35	0.97	0.33	2.00	0.68	35	12	34	12
3102	1.04	0.32	1.02	0.31	2.06	0.63	35	11	37	11
3103	0.97	0.33	0.99	0.33	1.96	0.66	36	12	34	11
3104	1.06	0.33	0.97	0.30	2.03	0.63	35	11	35	11
3105	1.17	0.37	1.16	0.37	2.33	0.74	29	9	30	10
3106	0.97	0.33	0.98	0.33	1.95	0.66	29	10	33	11
3107	1.01	0.35	1.04	0.36	2.05	0.70	36	12	35	12
3108	1.10	0.37	1.14	0.39	2.24	0.76	38	13	39	13
3109	1.06	0.31	0.98	0.29	2.04	0.60	34	10	40	12
3110	0.91	0.32	0.92	0.32	1.83	0.64	29	10	35	12
3111	0.89	0.31	0.87	0.31	1.76	0.62	32	11	34	12
3112	0.95	0.30	0.97	0.30	1.92	0.60	35	11	37	11
n	12	12	12	12	12	12	12	12	12	12
Mean	1.01	0.33	1.00	0.33	2.01	0.66	34	11	35	12
S.D.	0.08	0.02	0.08	0.03	0.16	0.05	3	1	3	1

	Adrenal-RL		Ovary-R		Ovary-L		Ovary-RL		Uterus	
	AB	RE	AB	RE	AB	RE	AB	RE	AB	RE
Animal No.	mg	mg/100g	mg	mg/100g	mg	mg/100g	mg	mg/100g	mg	mg/100g
3101	69	24	67.0	22.9	36.6	12.5	103.6	35.5	700	240
3102	72	22	49.2	15.0	55.0	16.8	104.2	31.8	722	220
3103	70	24	46.9	15.8	60.3	20.4	107.2	36.2	722	244
3104	70	22	52.7	16.4	39.3	12.2	92.0	28.6	690	214
3105	59	19	46.6	14.8	52.1	16.6	98.7	31.4	711	226
3106	62	21	41.2	13.9	49.7	16.8	90.9	30.7	824	278
3107	71	24	48.3	16.6	63.1	21.7	111.4	38.3	656	225
3108	77	26	55.6	18.9	59.1	20.1	114.7	39.0	691	235
3109	74	22	57.0	16.7	46.8	13.7	103.8	30.4	673	197
3110	64	22	86.0	29.9	45.8	15.9	131.8	45.8	777	270
3111	66	23	55.0	19.4	57.5	20.3	112.5	39.8	797	282
3112	72	22	56.9	17.7	71.5	22.2	128.4	39.9	610	189
n	12	12	12	12	12	12	12	12	12	12
Mean	69	23	55.2	18.2	53.1	17.4	108.3	35.6	714	235
S.D.	5	2	11.8	4.4	10.1	3.5	12.6	5.1	60	30

AB : Absolute weight, RE : Relative weight by body weight

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Organ weight

Stage : Lactation day 5

Sex : Female

Dose : BTetCA 1000 mg/kg

Species : Rat

	Body weight	Brain		Pituitary		Thyroid-R		Thyroid-L	
		AB	RE	AB	RE	AB	RE	AB	RE
Animal No.	g	g	g/100g	mg	mg/100g	mg	mg/100g	mg	mg/100g
4101	319	2.10	0.66	17.8	5.6	7.2	2.3	6.9	2.2
4102	312	1.87	0.60	17.2	5.5	13.6	4.4	13.0	4.2
4103	305	1.94	0.64	18.3	6.0	7.0	2.3	8.5	2.8
4104	304	1.99	0.65	16.8	5.5	10.3	3.4	8.8	2.9
4105	279	1.87	0.67	12.6	4.5	6.9	2.5	5.6	2.0
4106	289	1.86	0.64	15.6	5.4	10.3	3.6	9.6	3.3
4107	312	1.96	0.63	19.9	6.4	8.4	2.7	9.1	2.9
4108	260	1.82	0.70	18.1	7.0	5.3	2.0	5.9	2.3
4109	308	1.92	0.62	18.3	5.9	9.8	3.2	9.7	3.1
4110	329	2.01	0.61	17.2	5.2	6.1	1.9	5.1	1.6
4111	308	1.99	0.65	13.9	4.5	6.4	2.1	6.9	2.2
4112	311	1.89	0.61	15.7	5.0	8.0	2.6	7.3	2.3
n	12	12	12	12	12	12	12	12	12
Mean	303	1.94	0.64	16.8	5.5	8.3	2.8	8.0	2.7
S.D.	19	0.08	0.03	2.0	0.7	2.3	0.8	2.2	0.7

	Thyroid-RL		Thymus		Heart		Liver		Spleen	
	AB	RE	AB	RE	AB	RE	AB	RE	AB	RE
Animal No.	mg	mg/100g	mg	mg/100g	g	g/100g	g	g/100g	g	g/100g
4101	14.1	4.4	323	101	1.04	0.33	9.39	2.94	0.53	0.17
4102	26.6	8.5	181	58	0.94	0.30	9.27	2.97	0.44	0.14
4103	15.5	5.1	139	46	0.96	0.31	9.72	3.19	0.74	0.24
4104	19.1	6.3	337	111	0.91	0.30	10.16	3.34	0.50	0.16
4105	12.5	4.5	152	54	0.95	0.34	9.70	3.48	0.51	0.18
4106	19.9	6.9	188	65	0.99	0.34	8.91	3.08	0.52	0.18
4107	17.5	5.6	185	59	1.08	0.35	10.16	3.26	0.58	0.19
4108	11.2	4.3	131	50	0.88	0.34	9.13	3.51	0.54	0.21
4109	19.5	6.3	297	96	0.95	0.31	9.56	3.10	0.57	0.19
4110	11.2	3.4	252	77	1.06	0.32	9.54	2.90	0.89	0.27
4111	13.3	4.3	231	75	0.98	0.32	9.40	3.05	0.74	0.24
4112	15.3	4.9	294	95	0.91	0.29	10.37	3.33	0.62	0.20
n	12	12	12	12	12	12	12	12	12	12
Mean	16.3	5.4	226	74	0.97	0.32	9.61	3.18	0.60	0.20
S.D.	4.5	1.4	73	22	0.06	0.02	0.44	0.21	0.13	0.04

AB : Absolute weight, RE : Relative weight by body weight

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Organ weight

Stage : Lactation day 5

Sex : Female

Dose : BTetCA 1000 mg/kg

Species : Rat

	Kidney-R		Kidney-L		Kidney-RL		Adrenal-R		Adrenal-L	
	AB	RE	AB	RE	AB	RE	AB	RE	AB	RE
Animal No.	g	g/100g	g	g/100g	g	g/100g	mg	mg/100g	mg	mg/100g
4101	1.14	0.36	1.14	0.36	2.28	0.71	32	10	32	10
4102	1.05	0.34	0.99	0.32	2.04	0.65	33	11	35	11
4103	1.00	0.33	1.02	0.33	2.02	0.66	32	10	31	10
4104	1.08	0.36	1.06	0.35	2.14	0.70	32	11	38	13
4105	0.88	0.32	0.88	0.32	1.76	0.63	30	11	30	11
4106	1.05	0.36	0.98	0.34	2.03	0.70	36	12	38	13
4107	1.00	0.32	0.95	0.30	1.95	0.63	30	10	33	11
4108	0.94	0.36	0.90	0.35	1.84	0.71	31	12	37	14
4109	1.10	0.36	1.08	0.35	2.18	0.71	42	14	45	15
4110	1.04	0.32	0.99	0.30	2.03	0.62	30	9	35	11
4111	0.96	0.31	0.93	0.30	1.89	0.61	28	9	33	11
4112	0.98	0.32	0.99	0.32	1.97	0.63	32	10	35	11
n	12	12	12	12	12	12	12	12	12	12
Mean	1.02	0.34	0.99	0.33	2.01	0.66	32	11	35	12
S.D.	0.07	0.02	0.07	0.02	0.15	0.04	4	1	4	2

	Adrenal-RL		Ovary-R		Ovary-L		Ovary-RL		Uterus	
	AB	RE	AB	RE	AB	RE	AB	RE	AB	RE
Animal No.	mg	mg/100g	mg	mg/100g	mg	mg/100g	mg	mg/100g	mg	mg/100g
4101	64	20	47.7	15.0	49.6	15.5	97.3	30.5	712	223
4102	68	22	38.3	12.3	46.1	14.8	84.4	27.1	575	184
4103	63	21	50.6	16.6	61.6	20.2	112.2	36.8	592	194
4104	70	23	44.1	14.5	47.8	15.7	91.9	30.2	528	174
4105	60	22	54.1	19.4	50.2	18.0	104.3	37.4	614	220
4106	74	26	32.7	11.3	40.9	14.2	73.6	25.5	755	261
4107	63	20	41.1	13.2	53.4	17.1	94.5	30.3	733	235
4108	68	26	44.5	17.1	60.3	23.2	104.8	40.3	588	226
4109	87	28	50.2	16.3	53.4	17.3	103.6	33.6	634	206
4110	65	20	47.1	14.3	55.1	16.7	102.2	31.1	922	280
4111	61	20	57.6	18.7	37.7	12.2	95.3	30.9	771	250
4112	67	22	42.5	13.7	46.9	15.1	89.4	28.7	861	277
n	12	12	12	12	12	12	12	12	12	12
Mean	68	23	45.9	15.2	50.3	16.7	96.1	31.9	690	228
S.D.	7	3	6.9	2.5	7.1	2.9	10.5	4.4	122	35

AB : Absolute weight, RE : Relative weight by body weight

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Organ weight

Stage : End of administration

Sex : Female

Dose : BTetCA 0 mg/kg

Species : Rat

Animal No.	Body weight g	Brain AB g	Brain RE g/100g	Pituitary AB mg	Pituitary RE mg/100g	Thyroid-R AB mg	Thyroid-R RE mg/100g	Thyroid-L AB mg	Thyroid-L RE mg/100g
5101	247	1.80	0.73	11.9	4.8	8.0	3.2	7.0	2.8
5102	294	1.90	0.65	15.7	5.3	7.5	2.6	8.0	2.7
5103	285	1.95	0.68	14.7	5.2	7.0	2.5	7.1	2.5
5104	247	1.95	0.79	12.3	5.0	10.0	4.0	11.9	4.8
5105	252	1.89	0.75	21.0	8.3	9.5	3.8	10.4	4.1
n	5	5	5	5	5	5	5	5	5
Mean	265	1.90	0.72	15.1	5.7	8.4	3.2	8.9	3.4
S.D.	23	0.06	0.06	3.7	1.5	1.3	0.7	2.2	1.0

Animal No.	Thyroid-RL AB mg	Thyroid-RL RE mg/100g	Thymus AB mg	Thymus RE mg/100g	Heart AB g	Heart RE g/100g	Liver AB g	Liver RE g/100g	Spleen AB g	Spleen RE g/100g
5101	15.0	6.1	208	84	0.81	0.33	6.00	2.43	0.41	0.17
5102	15.5	5.3	334	114	0.86	0.29	8.51	2.89	0.50	0.17
5103	14.1	4.9	334	117	0.79	0.28	6.48	2.27	0.44	0.15
5104	21.9	8.9	228	92	0.77	0.31	6.51	2.64	0.46	0.19
5105	19.9	7.9	234	93	0.98	0.39	7.04	2.79	0.39	0.15
n	5	5	5	5	5	5	5	5	5	5
Mean	17.3	6.6	268	100	0.84	0.32	6.91	2.60	0.44	0.17
S.D.	3.4	1.7	61	15	0.08	0.04	0.97	0.25	0.04	0.02

Animal No.	Kidney-R AB g	Kidney-R RE g/100g	Kidney-L AB g	Kidney-L RE g/100g	Kidney-RL AB g	Kidney-RL RE g/100g	Adrenal-R AB mg	Adrenal-R RE mg/100g	Adrenal-L AB mg	Adrenal-L RE mg/100g
5101	0.76	0.31	0.76	0.31	1.52	0.62	25	10	25	10
5102	0.96	0.33	0.99	0.34	1.95	0.66	34	12	37	13
5103	0.83	0.29	0.79	0.28	1.62	0.57	29	10	34	12
5104	0.81	0.33	0.79	0.32	1.60	0.65	31	13	33	13
5105	0.87	0.35	0.83	0.33	1.70	0.67	32	13	33	13
n	5	5	5	5	5	5	5	5	5	5
Mean	0.85	0.32	0.83	0.32	1.68	0.63	30	12	32	12
S.D.	0.08	0.02	0.09	0.02	0.16	0.04	3	2	4	1

AB : Absolute weight, RE : Relative weight by body weight

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 8 - 20 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Organ weight Stage : End of administration

Sex : Female Dose : BTetCA 0 mg/kg Species : Rat

	Adrenal-RL		Ovary-R		Ovary-L		Ovary-RL		Uterus	
	AB	RE	AB	RE	AB	RE	AB	RE	AB	RE
Animal No.	mg	mg/100g	mg	mg/100g	mg	mg/100g	mg	mg/100g	mg	mg/100g
5101	50	20	32.9	13.3	36.1	14.6	69.0	27.9	404	164
5102	71	24	61.0	20.7	46.4	15.8	107.4	36.5	418	142
5103	63	22	36.7	12.9	40.2	14.1	76.9	27.0	461	162
5104	64	26	41.4	16.8	38.8	15.7	80.2	32.5	670	271
5105	65	26	30.7	12.2	27.8	11.0	58.5	23.2	635	252
n	5	5	5	5	5	5	5	5	5	5
Mean	63	24	40.5	15.2	37.9	14.2	78.4	29.4	518	198
S.D.	8	3	12.1	3.6	6.8	2.0	18.2	5.2	126	59

AB : Absolute weight, RE : Relative weight by body weight

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Organ weight

Stage : End of administration

Sex : Female

Dose : BTetCA 1000 mg/kg

Species : Rat

	Body weight	Brain		Pituitary		Thyroid-R		Thyroid-L	
		AB	RE	AB	RE	AB	RE	AB	RE
Animal No.	g	g	g/100g	mg	mg/100g	mg	mg/100g	mg	mg/100g
6101	237	1.95	0.82	15.5	6.5	7.3	3.1	6.1	2.6
6102	294	1.90	0.65	17.3	5.9	10.8	3.7	10.3	3.5
6103	231	1.86	0.81	13.4	5.8	6.8	2.9	7.9	3.4
6104	256	1.91	0.75	12.9	5.0	9.3	3.6	6.8	2.7
6105	271	1.93	0.71	14.2	5.2	8.3	3.1	7.0	2.6
n	5	5	5	5	5	5	5	5	5
Mean	258	1.91	0.75	14.7	5.7	8.5	3.3	7.6	3.0
S.D.	26	0.03	0.07	1.8	0.6	1.6	0.3	1.6	0.5

	Thyroid-RL		Thymus		Heart		Liver		Spleen	
	AB	RE	AB	RE	AB	RE	AB	RE	AB	RE
Animal No.	mg	mg/100g	mg	mg/100g	g	g/100g	g	g/100g	g	g/100g
6101	13.4	5.7	203	86	0.92	0.39	6.64	2.80	0.38	0.16
6102	21.1	7.2	366	124	0.93	0.32	7.33	2.49	0.45	0.15
6103	14.7	6.4	157	68	0.74	0.32	6.70	2.90	0.48	0.21
6104	16.1	6.3	341	133	0.79	0.31	6.66	2.60	0.47	0.18
6105	15.3	5.6	221	82	0.85	0.31	7.17	2.65	0.50	0.18
n	5	5	5	5	5	5	5	5	5	5
Mean	16.1	6.2	258	99	0.85	0.33	6.90	2.69	0.46	0.18
S.D.	3.0	0.6	91	28	0.08	0.03	0.33	0.16	0.05	0.02

	Kidney-R		Kidney-L		Kidney-RL		Adrenal-R		Adrenal-L	
	AB	RE	AB	RE	AB	RE	AB	RE	AB	RE
Animal No.	g	g/100g	g	g/100g	g	g/100g	mg	mg/100g	mg	mg/100g
6101	0.83	0.35	0.85	0.36	1.68	0.71	35	15	27	11
6102	0.87	0.30	0.88	0.30	1.75	0.60	30	10	31	11
6103	0.85	0.37	0.86	0.37	1.71	0.74	29	13	32	14
6104	0.82	0.32	0.78	0.30	1.60	0.63	39	15	37	14
6105	0.92	0.34	0.91	0.34	1.83	0.68	37	14	40	15
n	5	5	5	5	5	5	5	5	5	5
Mean	0.86	0.34	0.86	0.33	1.71	0.67	34	13	33	13
S.D.	0.04	0.03	0.05	0.03	0.09	0.06	4	2	5	2

AB : Absolute weight, RE : Relative weight by body weight

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 8 - 22 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Organ weight Stage : End of administration

Sex : Female Dose : BTetCA 1000 mg/kg Species : Rat

	Adrenal-RL		Ovary-R		Ovary-L		Ovary-RL		Uterus	
	AB	RE	AB	RE	AB	RE	AB	RE	AB	RE
Animal No.	mg	mg/100g	mg	mg/100g	mg	mg/100g	mg	mg/100g	mg	mg/100g
6101	62	26	19.2	8.1	26.8	11.3	46.0	19.4	505	213
6102	61	21	35.3	12.0	42.1	14.3	77.4	26.3	559	190
6103	61	26	40.8	17.7	35.3	15.3	76.1	32.9	500	216
6104	76	30	37.6	14.7	42.9	16.8	80.5	31.4	416	163
6105	77	28	36.1	13.3	34.6	12.8	70.7	26.1	413	152
n	5	5	5	5	5	5	5	5	5	5
Mean	67	26	33.8	13.2	36.3	14.1	70.1	27.2	479	187
S.D.	8	3	8.4	3.5	6.5	2.1	14.0	5.3	63	29

AB : Absolute weight, RE : Relative weight by body weight

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Organ weight Stage : End of recovery
Sex : Male Dose : BTetCA 0 mg/kg Species : Rat

	Body weight	Brain		Pituitary		Thyroid-R		Thyroid-L	
		AB	RE	AB	RE	AB	RE	AB	RE
Animal No.	g	g	g/100g	mg	mg/100g	mg	mg/100g	mg	mg/100g
1008	528	2.26	0.43	12.1	2.3	9.7	1.8	12.7	2.4
1009	544	2.23	0.41	14.7	2.7	10.3	1.9	9.0	1.7
1010	507	2.11	0.42	12.9	2.5	13.0	2.6	7.8	1.5
1011	530	2.26	0.43	14.7	2.8	11.9	2.2	9.8	1.8
1012	560	2.21	0.39	15.8	2.8	14.6	2.6	11.7	2.1
n	5	5	5	5	5	5	5	5	5
Mean	534	2.21	0.42	14.0	2.6	11.9	2.2	10.2	1.9
S.D.	20	0.06	0.02	1.5	0.2	2.0	0.4	2.0	0.4

	Thyroid-RL		Thymus		Heart		Liver		Spleen	
	AB	RE	AB	RE	AB	RE	AB	RE	AB	RE
Animal No.	mg	mg/100g	mg	mg/100g	g	g/100g	g	g/100g	g	g/100g
1008	22.4	4.2	390	74	1.47	0.28	14.14	2.68	0.96	0.18
1009	19.3	3.5	243	45	1.40	0.26	13.06	2.40	0.70	0.13
1010	20.8	4.1	382	75	1.47	0.29	12.69	2.50	0.66	0.13
1011	21.7	4.1	190	36	1.46	0.28	12.76	2.41	0.67	0.13
1012	26.3	4.7	371	66	1.96	0.35	12.42	2.22	0.70	0.13
n	5	5	5	5	5	5	5	5	5	5
Mean	22.1	4.1	315	59	1.55	0.29	13.01	2.44	0.74	0.14
S.D.	2.6	0.4	92	18	0.23	0.03	0.67	0.17	0.13	0.02

	Kidney-R		Kidney-L		Kidney-RL		Adrenal-R		Adrenal-L	
	AB	RE	AB	RE	AB	RE	AB	RE	AB	RE
Animal No.	g	g/100g	g	g/100g	g	g/100g	mg	mg/100g	mg	mg/100g
1008	1.65	0.31	1.76	0.33	3.41	0.65	34	6	37	7
1009	2.05	0.38	2.15	0.40	4.20	0.77	29	5	33	6
1010	1.72	0.34	1.87	0.37	3.59	0.71	21	4	22	4
1011	1.52	0.29	1.54	0.29	3.06	0.58	24	5	26	5
1012	1.68	0.30	1.84	0.33	3.52	0.63	28	5	31	6
n	5	5	5	5	5	5	5	5	5	5
Mean	1.72	0.32	1.83	0.34	3.56	0.67	27	5	30	6
S.D.	0.20	0.04	0.22	0.04	0.41	0.07	5	1	6	1

AB : Absolute weight, RE : Relative weight by body weight
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Organ weight

Stage : End of recovery

Sex : Male

Dose : BTetCA 0 mg/kg

Species : Rat

	Adrenal-RL		Testis-R		Testis-L		Testis-RL		Epididymis-R	
	AB	RE	AB	RE	AB	RE	AB	RE	AB	RE
Animal No.	mg	mg/100g	g	g/100g	g	g/100g	g	g/100g	mg	mg/100g
1008	71	13	1.73	0.33	1.78	0.34	3.51	0.66	751	142
1009	62	11	1.63	0.30	1.63	0.30	3.26	0.60	695	128
1010	43	8	1.86	0.37	1.90	0.37	3.76	0.74	677	134
1011	50	9	1.58	0.30	1.61	0.30	3.19	0.60	669	126
1012	59	11	1.88	0.34	1.92	0.34	3.80	0.68	670	120
n	5	5	5	5	5	5	5	5	5	5
Mean	57	10	1.74	0.33	1.77	0.33	3.50	0.66	692	130
S.D.	11	2	0.13	0.03	0.15	0.03	0.28	0.06	34	8

	Epididymis-L		Epididymis-RL		Prostate		Seminalvesicle	
	AB	RE	AB	RE	AB	RE	AB	RE
Animal No.	mg	mg/100g	mg	mg/100g	g	g/100g	g	g/100g
1008	688	130	1439	273	1.56	0.30	2.09	0.40
1009	673	124	1368	251	1.09	0.20	2.12	0.39
1010	671	132	1348	266	1.35	0.27	1.83	0.36
1011	648	122	1317	248	1.35	0.25	1.89	0.36
1012	705	126	1375	246	1.41	0.25	1.78	0.32
n	5	5	5	5	5	5	5	5
Mean	677	127	1369	257	1.35	0.25	1.94	0.37
S.D.	21	4	45	12	0.17	0.04	0.15	0.03

AB : Absolute weight, RE : Relative weight by body weight

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Organ weight

Stage : End of recovery

Sex : Male

Dose : BTetCA 1000 mg/kg

Species : Rat

	Body weight	Brain		Pituitary		Thyroid-R		Thyroid-L	
		AB	RE	AB	RE	AB	RE	AB	RE
Animal No.	g	g	g/100g	mg	mg/100g	mg	mg/100g	mg	mg/100g
4008	474	2.12	0.45	15.7	3.3	13.4	2.8	10.6	2.2
4009	462	2.18	0.47	9.4	2.0	15.2	3.3	11.8	2.6
4010	521	2.22	0.43	13.0	2.5	8.9	1.7	9.3	1.8
4011	497	2.14	0.43	11.7	2.4	12.1	2.4	10.3	2.1
4012	579	2.23	0.39	13.1	2.3	15.2	2.6	11.8	2.0
n	5	5	5	5	5	5	5	5	5
Mean	507	2.18	0.43	12.6	2.5	13.0	2.6	10.8	2.1
S.D.	46	0.05	0.03	2.3	0.5	2.6	0.6	1.1	0.3

	Thyroid-RL		Thymus		Heart		Liver		Spleen	
	AB	RE	AB	RE	AB	RE	AB	RE	AB	RE
Animal No.	mg	mg/100g	mg	mg/100g	g	g/100g	g	g/100g	g	g/100g
4008	24.0	5.1	236	50	1.43	0.30	10.64	2.24	0.68	0.14
4009	27.0	5.8	237	51	1.36	0.29	9.58	2.07	0.58	0.13
4010	18.2	3.5	222	43	1.45	0.28	12.24	2.35	0.61	0.12
4011	22.4	4.5	459	92	1.28	0.26	11.24	2.26	0.62	0.12
4012	27.0	4.7	377	65	1.50	0.26	15.12	2.61	0.85	0.15
n	5	5	5	5	5	5	5	5	5	5
Mean	23.7	4.7	306	60	1.40	0.28	11.76	2.31	0.67	0.13
S.D.	3.7	0.8	106	19	0.09	0.02	2.11	0.20	0.11	0.01

	Kidney-R		Kidney-L		Kidney-RL		Adrenal-R		Adrenal-L	
	AB	RE	AB	RE	AB	RE	AB	RE	AB	RE
Animal No.	g	g/100g	g	g/100g	g	g/100g	mg	mg/100g	mg	mg/100g
4008	1.50	0.32	1.64	0.35	3.14	0.66	40	8	43	9
4009	1.40	0.30	1.48	0.32	2.88	0.62	24	5	25	5
4010	1.48	0.28	1.54	0.30	3.02	0.58	25	5	27	5
4011	1.50	0.30	1.79	0.36	3.29	0.66	33	7	36	7
4012	1.68	0.29	1.65	0.28	3.33	0.58	24	4	28	5
n	5	5	5	5	5	5	5	5	5	5
Mean	1.51	0.30	1.62	0.32	3.13	0.62	29	6	32	6
S.D.	0.10	0.01	0.12	0.03	0.19	0.04	7	2	8	2

AB : Absolute weight, RE : Relative weight by body weight

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Organ weight

Stage : End of recovery

Sex : Male

Dose : BTetCA 1000 mg/kg

Species : Rat

	Adrenal-RL		Testis-R		Testis-L		Testis-RL		Epididymis-R	
	AB	RE	AB	RE	AB	RE	AB	RE	AB	RE
Animal No.	mg	mg/100g	g	g/100g	g	g/100g	g	g/100g	mg	mg/100g
4008	83	18	1.61	0.34	1.62	0.34	3.23	0.68	604	127
4009	49	11	1.61	0.35	1.62	0.35	3.23	0.70	607	131
4010	52	10	1.49	0.29	1.51	0.29	3.00	0.58	605	116
4011	69	14	1.77	0.36	1.77	0.36	3.54	0.71	673	135
4012	52	9	1.73	0.30	1.80	0.31	3.53	0.61	682	118
n	5	5	5	5	5	5	5	5	5	5
Mean	61	12	1.64	0.33	1.66	0.33	3.31	0.66	634	125
S.D.	15	4	0.11	0.03	0.12	0.03	0.23	0.06	40	8

	Epididymis-L		Epididymis-RL		Prostate		Seminalvesicle	
	AB	RE	AB	RE	AB	RE	AB	RE
Animal No.	mg	mg/100g	mg	mg/100g	g	g/100g	g	g/100g
4008	642	135	1246	263	1.43	0.30	2.00	0.42
4009	642	139	1249	270	1.28	0.28	1.46	0.32
4010	631	121	1236	237	1.39	0.27	2.04	0.39
4011	655	132	1328	267	1.26	0.25	2.04	0.41
4012	721	125	1403	242	1.07	0.18	1.51	0.26
n	5	5	5	5	5	5	5	5
Mean	658	130	1292	256	1.29	0.26	1.81	0.36
S.D.	36	7	72	15	0.14	0.05	0.30	0.07

AB : Absolute weight, RE : Relative weight by body weight

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Organ weight Stage : End of recovery
Sex : Female Dose : BTetCA 0 mg/kg Species : Rat

	Body weight	Brain		Pituitary		Thyroid-R		Thyroid-L	
		AB	RE	AB	RE	AB	RE	AB	RE
Animal No.	g	g	g/100g	mg	mg/100g	mg	mg/100g	mg	mg/100g
5106	251	1.93	0.77	17.2	6.9	6.6	2.6	5.8	2.3
5107	250	1.93	0.77	15.6	6.2	5.8	2.3	5.9	2.4
5108	250	1.89	0.76	15.7	6.3	9.4	3.8	7.4	3.0
5109	262	2.07	0.79	26.1	10.0	9.0	3.4	8.8	3.4
5110	265	2.00	0.75	18.5	7.0	9.3	3.5	8.0	3.0
n	5	5	5	5	5	5	5	5	5
Mean	256	1.96	0.77	18.6	7.3	8.0	3.1	7.2	2.8
S.D.	7	0.07	0.01	4.3	1.6	1.7	0.6	1.3	0.5

	Thyroid-RL		Thymus		Heart		Liver		Spleen	
	AB	RE	AB	RE	AB	RE	AB	RE	AB	RE
Animal No.	mg	mg/100g	mg	mg/100g	g	g/100g	g	g/100g	g	g/100g
5106	12.4	4.9	184	73	0.77	0.31	6.18	2.46	0.47	0.19
5107	11.7	4.7	139	56	0.79	0.32	5.83	2.33	0.43	0.17
5108	16.8	6.7	218	87	0.79	0.32	6.30	2.52	0.41	0.16
5109	17.8	6.8	227	87	0.99	0.38	7.23	2.76	0.49	0.19
5110	17.3	6.5	221	83	1.10	0.42	6.85	2.58	0.44	0.17
n	5	5	5	5	5	5	5	5	5	5
Mean	15.2	5.9	198	77	0.89	0.35	6.48	2.53	0.45	0.18
S.D.	2.9	1.0	37	13	0.15	0.05	0.56	0.16	0.03	0.01

	Kidney-R		Kidney-L		Kidney-RL		Adrenal-R		Adrenal-L	
	AB	RE	AB	RE	AB	RE	AB	RE	AB	RE
Animal No.	g	g/100g	g	g/100g	g	g/100g	mg	mg/100g	mg	mg/100g
5106	0.79	0.31	0.82	0.33	1.61	0.64	24	10	27	11
5107	0.74	0.30	0.78	0.31	1.52	0.61	20	8	18	7
5108	0.85	0.34	0.84	0.34	1.69	0.68	35	14	34	14
5109	0.88	0.34	0.92	0.35	1.80	0.69	42	16	41	16
5110	0.98	0.37	0.93	0.35	1.91	0.72	34	13	35	13
n	5	5	5	5	5	5	5	5	5	5
Mean	0.85	0.33	0.86	0.34	1.71	0.67	31	12	31	12
S.D.	0.09	0.03	0.06	0.02	0.15	0.04	9	3	9	3

AB : Absolute weight, RE : Relative weight by body weight
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 8 - 28 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Organ weight Stage : End of recovery

Sex : Female Dose : BTetCA 0 mg/kg Species : Rat

	Adrenal-RL		Ovary-R		Ovary-L		Ovary-RL		Uterus	
	AB	RE	AB	RE	AB	RE	AB	RE	AB	RE
Animal No.	mg	mg/100g	mg	mg/100g	mg	mg/100g	mg	mg/100g	mg	mg/100g
5106	51	20	33.1	13.2	28.1	11.2	61.2	24.4	414	165
5107	38	15	24.0	9.6	26.8	10.7	50.8	20.3	758	303
5108	69	28	40.1	16.0	32.6	13.0	72.7	29.1	741	296
5109	83	32	31.8	12.1	46.9	17.9	78.7	30.0	671	256
5110	69	26	50.8	19.2	39.5	14.9	90.3	34.1	577	218
n	5	5	5	5	5	5	5	5	5	5
Mean	62	24	36.0	14.0	34.8	13.5	70.7	27.6	632	248
S.D.	18	7	10.1	3.7	8.4	2.9	15.3	5.3	141	57

AB : Absolute weight, RE : Relative weight by body weight

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Organ weight

Stage : End of recovery

Sex : Female

Dose : BTetCA 1000 mg/kg

Species : Rat

Animal No.	Body weight g	Brain AB g	Brain RE g/100g	Pituitary AB mg	Pituitary RE mg/100g	Thyroid-R AB mg	Thyroid-R RE mg/100g	Thyroid-L AB mg	Thyroid-L RE mg/100g
6106	278	1.97	0.71	14.9	5.4	7.4	2.7	6.0	2.2
6107	278	1.83	0.66	16.2	5.8	7.0	2.5	5.9	2.1
6108	258	1.85	0.72	14.8	5.7	8.8	3.4	6.7	2.6
6109	246	1.89	0.77	18.4	7.5	6.4	2.6	7.8	3.2
6110	268	2.08	0.78	21.7	8.1	12.1	4.5	6.5	2.4
n	5	5	5	5	5	5	5	5	5
Mean	266	1.92	0.73	17.2	6.5	8.3	3.1	6.6	2.5
S.D.	14	0.10	0.05	2.9	1.2	2.3	0.8	0.8	0.4

Animal No.	Thyroid-RL AB mg	Thyroid-RL RE mg/100g	Thymus AB mg	Thymus RE mg/100g	Heart AB g	Heart RE g/100g	Liver AB g	Liver RE g/100g	Spleen AB g	Spleen RE g/100g
6106	13.4	4.8	200	72	0.91	0.33	6.24	2.24	0.42	0.15
6107	12.9	4.6	300	108	0.91	0.33	6.50	2.34	0.37	0.13
6108	15.5	6.0	166	64	0.97	0.38	6.87	2.66	0.39	0.15
6109	14.2	5.8	257	104	0.77	0.31	6.25	2.54	0.41	0.17
6110	18.6	6.9	291	109	0.90	0.34	7.25	2.71	0.39	0.15
n	5	5	5	5	5	5	5	5	5	5
Mean	14.9	5.6	243	91	0.89	0.34	6.62	2.50	0.40	0.15
S.D.	2.3	0.9	58	22	0.07	0.03	0.43	0.20	0.02	0.01

Animal No.	Kidney-R AB g	Kidney-R RE g/100g	Kidney-L AB g	Kidney-L RE g/100g	Kidney-RL AB g	Kidney-RL RE g/100g	Adrenal-R AB mg	Adrenal-R RE mg/100g	Adrenal-L AB mg	Adrenal-L RE mg/100g
6106	0.92	0.33	0.89	0.32	1.81	0.65	35	13	38	14
6107	0.89	0.32	0.92	0.33	1.81	0.65	34	12	36	13
6108	0.89	0.34	0.88	0.34	1.77	0.69	29	11	28	11
6109	0.91	0.37	0.89	0.36	1.80	0.73	26	11	28	11
6110	0.88	0.33	0.97	0.36	1.85	0.69	36	13	42	16
n	5	5	5	5	5	5	5	5	5	5
Mean	0.90	0.34	0.91	0.34	1.81	0.68	32	12	34	13
S.D.	0.02	0.02	0.04	0.02	0.03	0.03	4	1	6	2

AB : Absolute weight, RE : Relative weight by body weight

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Organ weight

Stage : End of recovery

Sex : Female

Dose : BTetCA 1000 mg/kg

Species : Rat

	Adrenal-RL		Ovary-R		Ovary-L		Ovary-RL		Uterus	
	AB	RE	AB	RE	AB	RE	AB	RE	AB	RE
Animal No.	mg	mg/100g	mg	mg/100g	mg	mg/100g	mg	mg/100g	mg	mg/100g
6106	73	26	46.8	16.8	46.0	16.5	92.8	33.4	721	259
6107	70	25	30.5	11.0	30.0	10.8	60.5	21.8	505	182
6108	57	22	40.9	15.9	40.9	15.9	81.8	31.7	469	182
6109	54	22	33.6	13.7	32.0	13.0	65.6	26.7	465	189
6110	78	29	55.5	20.7	57.7	21.5	113.2	42.2	750	280
n	5	5	5	5	5	5	5	5	5	5
Mean	66	25	41.5	15.6	41.3	15.5	82.8	31.2	582	218
S.D.	10	3	10.1	3.6	11.2	4.0	21.3	7.7	141	47

AB : Absolute weight, RE : Relative weight by body weight

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 9-1(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 1001 Male 0 mg/kg Day 43 End of administration

Gross pathology:

All tissues	Not remarkable

Histopathology:

Heart	Cell infiltration,focal: minimal
Prostate	Cell infiltration: minimal ventral: lymphocytic, dorsolateral: inflammatory

Following tissues : Not remarkable

Adrenal, Bone+Bone marrow,femoral, Cerebellum(pons), Cerebrum, Epididymis, Eye
Intestine,duodenum, Intestine,jejunum, Intestine,ileum(Peyer's patch)
Intestine,cecum, Intestine,colon, Intestine,rectum, Kidney
Lymph node,mesenteric, Lymph node,submandibular, Liver, Lung(bronchus)
Mammary gland,inguinal, Optic nerve, Parathyroid, Pancreas, Pituitary
Salivary gland,submandibular, Salivary gland,sublingual, Skin,inguinal
Sciatic nerve, Spleen, Stomach, Skeletal muscle,femoral
Seminal vesicle(coagulating gland), Spinal cord,thoracic, Testis, Thymus, Trachea
Thyroid, Urinary bladder

Appendix 9-2(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 1002 Male 0 mg/kg Day 43 End of administration

Gross pathology:

All tissues	Not remarkable

Histopathology:

Liver	Microgranuloma: minimal
Prostate	Cell infiltration: minimal, lymphocytic ventral

Following tissues : Not remarkable

Adrenal, Bone+Bone marrow,femoral, Cerebellum(pons), Cerebrum, Epididymis, Eye
Heart, Intestine,duodenum, Intestine,jejunum, Intestine,ileum(Peyer's patch)
Intestine,cecum, Intestine,colon, Intestine,rectum, Kidney
Lymph node,mesenteric, Lymph node,submandibular, Lung(bronchus)
Mammary gland,inguinal, Optic nerve, Parathyroid, Pancreas, Pituitary
Salivary gland,submandibular, Salivary gland,sublingual, Skin,inguinal
Sciatic nerve, Spleen, Stomach, Skeletal muscle,femoral
Seminal vesicle(coagulating gland), Spinal cord,thoracic, Testis, Thymus, Trachea
Thyroid, Urinary bladder

Appendix 9-3(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 1003 Male 0 mg/kg Day 43 End of administration

Gross pathology:

All tissues Not remarkable

Histopathology:

Prostate Cell infiltration: minimal, lymphocytic
ventral

Following tissues : Not remarkable

Adrenal, Bone+Bone marrow,femoral, Cerebellum(pons), Cerebrum, Epididymis, Eye
Heart, Intestine,duodenum, Intestine,jejunum, Intestine,ileum(Peyer's patch)
Intestine,cecum, Intestine,colon, Intestine,rectum, Kidney
Lymph node,mesenteric, Lymph node,submandibular, Liver, Lung(bronchus)
Mammary gland,inguinal, Optic nerve, Parathyroid, Pancreas, Pituitary
Salivary gland,submandibular, Salivary gland,sublingual, Skin,inguinal
Sciatic nerve, Spleen, Stomach, Skeletal muscle,femoral
Seminal vesicle(coagulating gland), Spinal cord,thoracic, Testis, Thymus, Trachea
Thyroid, Urinary bladder

Appendix 9-4(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 1004 Male 0 mg/kg Day 43 End of administration

Gross pathology:

All tissues	Not remarkable

Histopathology:

Prostate	Cell infiltration: minimal, lymphocytic ventral

Following tissues : Not remarkable

Adrenal, Bone+Bone marrow,femoral, Cerebellum(pons), Cerebrum, Epididymis, Eye
Heart, Intestine,duodenum, Intestine,jejunum, Intestine,ileum(Peyer's patch)
Intestine,cecum, Intestine,colon, Intestine,rectum, Kidney
Lymph node,mesenteric, Lymph node,submandibular, Liver, Lung(bronchus)
Mammary gland,inguinal, Optic nerve, Parathyroid, Pancreas, Pituitary
Salivary gland,submandibular, Salivary gland,sublingual, Skin,inguinal
Sciatic nerve, Spleen, Stomach, Skeletal muscle,femoral
Seminal vesicle(coagulating gland), Spinal cord,thoracic, Testis, Thymus, Trachea
Thyroid, Urinary bladder

Appendix 9-5(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 1005 Male 0 mg/kg Day 43 End of administration

Gross pathology:

All tissues	Not remarkable

Histopathology:

Prostate	Cell infiltration: minimal, lymphocytic ventral

Following tissues : Not remarkable

Adrenal, Bone+Bone marrow,femoral, Cerebellum(pons), Cerebrum, Epididymis, Eye
Heart, Intestine,duodenum, Intestine,jejunum, Intestine,ileum(Peyer's patch)
Intestine,cecum, Intestine,colon, Intestine,rectum, Kidney
Lymph node,mesenteric, Lymph node,submandibular, Liver, Lung(bronchus)
Mammary gland,inguinal, Optic nerve, Parathyroid, Pancreas, Pituitary
Salivary gland,submandibular, Salivary gland,sublingual, Skin,inguinal
Sciatic nerve, Spleen, Stomach, Skeletal muscle,femoral
Seminal vesicle(coagulating gland), Spinal cord,thoracic, Testis, Thymus, Trachea
Thyroid, Urinary bladder

Appendix 9-6(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 1006 Male 0 mg/kg Day 43 End of administration

Gross pathology:

Stomach	Focus,dark red,glandular stomach: 1 present 1x1 mm
Other tissues	Not remarkable

Histopathology:

No tissues examined

Appendix 9-7(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 1007 Male 0 mg/kg Day 43 End of administration

Gross pathology:

All tissues Not remarkable

Histopathology:

No tissues examined

Appendix 9-8(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 1008 Male 0 mg/kg Day 57 End of recovery

Gross pathology:

All tissues Not remarkable

Histopathology:

Liver Microgranuloma: minimal

Following tissues : Not remarkable

Adrenal, Bone+Bone marrow,femoral, Cerebellum(pons), Cerebrum, Epididymis, Eye
Heart, Intestine,duodenum, Intestine,jejunum, Intestine,ileum(Peyer's patch)
Intestine,cecum, Intestine,colon, Intestine,rectum, Kidney
Lymph node,mesenteric, Lymph node,submandibular, Lung(bronchus)
Mammary gland,inguinal, Optic nerve, Parathyroid, Pancreas, Pituitary, Prostate
Salivary gland,submandibular, Salivary gland,sublingual, Skin,inguinal
Sciatic nerve, Spleen, Stomach, Skeletal muscle,femoral
Seminal vesicle(coagulating gland), Spinal cord,thoracic, Testis, Thymus, Trachea
Thyroid, Urinary bladder

Appendix 9-9(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 1009 Male 0 mg/kg Day 57 End of recovery

Gross pathology:

Stomach	Focus,dark red,glandular stomach: 3 present 2x1 mm, 2x1 mm, 3x1 mm
Other tissues	Not remarkable

Histopathology:

Kidney	Basophilia,tubular: minimal Urinary cast,hyaline: minimal Fibrosis,focal: minimal
Prostate	Cell infiltration: minimal, lymphocytic ventral
Stomach	Erosion/Ulcer,glandular stomach: mild fundic

Following tissues : Not remarkable

Adrenal, Bone+Bone marrow,femoral, Cerebellum(pons), Cerebrum, Epididymis, Eye
Heart, Intestine,duodenum, Intestine,jejunum, Intestine,ileum(Peyer's patch)
Intestine,cecum, Intestine,colon, Intestine,rectum, Lymph node,mesenteric
Lymph node,submandibular, Liver, Lung(bronchus), Mammary gland,inguinal
Optic nerve, Parathyroid, Pancreas, Pituitary, Salivary gland,submandibular
Salivary gland,sublingual, Skin,inguinal, Sciatic nerve, Spleen
Skeletal muscle,femoral, Seminal vesicle(coagulating gland), Spinal cord,thoracic
Testis, Thymus, Trachea, Thyroid, Urinary bladder

Appendix 9-10(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 1010 Male 0 mg/kg Day 57 End of recovery

Gross pathology:

All tissues	Not remarkable

Histopathology:

Heart	Cell infiltration,focal: minimal

Following tissues : Not remarkable

Adrenal, Bone+Bone marrow,femoral, Cerebellum(pons), Cerebrum, Epididymis, Eye
Intestine,duodenum, Intestine,jejunum, Intestine,ileum(Peyer's patch)
Intestine,cecum, Intestine,colon, Intestine,rectum, Kidney
Lymph node,mesenteric, Lymph node,submandibular, Liver, Lung(bronchus)
Mammary gland,inguinal, Optic nerve, Parathyroid, Pancreas, Pituitary, Prostate
Salivary gland,submandibular, Salivary gland,sublingual, Skin,inguinal
Sciatic nerve, Spleen, Stomach, Skeletal muscle,femoral
Seminal vesicle(coagulating gland), Spinal cord,thoracic, Testis, Thymus, Trachea
Thyroid, Urinary bladder

Appendix 9-11(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 1011 Male 0 mg/kg Day 57 End of recovery

Gross pathology:

All tissues Not remarkable

Histopathology:

Following tissues : Not remarkable

Adrenal, Bone+Bone marrow,femoral, Cerebellum(pons), Cerebrum, Epididymis, Eye
Heart, Intestine,duodenum, Intestine,jejunum, Intestine,ileum(Peyer's patch)
Intestine,cecum, Intestine,colon, Intestine,rectum, Kidney
Lymph node,mesenteric, Lymph node,submandibular, Liver, Lung(bronchus)
Mammary gland,inguinal, Optic nerve, Parathyroid, Pancreas, Pituitary, Prostate
Salivary gland,submandibular, Salivary gland,sublingual, Skin,inguinal
Sciatic nerve, Spleen, Stomach, Skeletal muscle,femoral
Seminal vesicle(coagulating gland), Spinal cord,thoracic, Testis, Thymus, Trachea
Thyroid, Urinary bladder

Appendix 9-12(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 1012 Male 0 mg/kg Day 57 End of recovery

Gross pathology:

All tissues Not remarkable

Histopathology:

Heart Cell infiltration,focal: minimal

Following tissues : Not remarkable

Adrenal, Bone+Bone marrow,femoral, Cerebellum(pons), Cerebrum, Epididymis, Eye
Intestine,duodenum, Intestine,jejunum, Intestine,ileum(Peyer's patch)
Intestine,cecum, Intestine,colon, Intestine,rectum, Kidney
Lymph node,mesenteric, Lymph node,submandibular, Liver, Lung(bronchus)
Mammary gland,inguinal, Optic nerve, Parathyroid, Pancreas, Pituitary, Prostate
Salivary gland,submandibular, Salivary gland,sublingual, Skin,inguinal
Sciatic nerve, Spleen, Stomach, Skeletal muscle,femoral
Seminal vesicle(coagulating gland), Spinal cord,thoracic, Testis, Thymus, Trachea
Thyroid, Urinary bladder

Appendix 9-13(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 2001 Male 100 mg/kg Day 43 End of administration

Gross pathology:

All tissues	Not remarkable

Histopathology:

Stomach	Cell infiltration,submucosal,glandular: minimal Hyperplasia,squamous cell,limiting ridge: minimal

Following tissues : Not remarkable

Epididymis, Testis

Appendix 9-14(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 2002 Male 100 mg/kg Day 43 End of administration

Gross pathology:

All tissues	Not remarkable

Histopathology:

Epididymis	Cell debris,luminal: minimal, bilateral head
Stomach	Cell infiltration,submucosal,glandular: mild Erosion/Ulcer,glandular stomach: minimal fundic Hyperplasia,squamous cell,limiting ridge: minimal
Testis	Atrophy,seminiferous tubular: mild, bilateral

Appendix 9-15(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 2003 Male 100 mg/kg Day 43 End of administration

Gross pathology:

All tissues	Not remarkable

Histopathology:

Stomach	Cell infiltration,submucosal,glandular: mild Hyperplasia,squamous cell,limiting ridge: mild

Following tissues : Not remarkable

Epididymis, Testis

Appendix 9-16(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 2004 Male 100 mg/kg Day 43 End of administration

Gross pathology:

All tissues	Not remarkable

Histopathology:

Stomach	Cell infiltration,submucosal,glandular: mild Hyperplasia,squamous cell,limiting ridge: mild

Following tissues : Not remarkable

Epididymis, Testis

Appendix 9-17(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 2005 Male 100 mg/kg Day 43 End of administration

Gross pathology:

All tissues	Not remarkable

Histopathology:

Stomach	Cell infiltration,submucosal,glandular: minimal Hyperplasia,squamous cell,limiting ridge: mild

Following tissues : Not remarkable

Epididymis, Testis

Appendix 9-18(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 2006 Male 100 mg/kg Day 43 End of administration

Gross pathology:

All tissues Not remarkable

Histopathology:

No tissues examined

Appendix 9-19(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 2007 Male 100 mg/kg Day 43 End of administration

Gross pathology:

All tissues Not remarkable

Histopathology:

No tissues examined

Appendix 9-20(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 2008 Male 100 mg/kg Day 43 End of administration

Gross pathology:

All tissues Not remarkable

Histopathology:

No tissues examined

Appendix 9-21(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 2009 Male 100 mg/kg Day 43 End of administration

Gross pathology:

All tissues Not remarkable

Histopathology:

No tissues examined

Appendix 9-22(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 2010 Male 100 mg/kg Day 43 End of administration

Gross pathology:

All tissues Not remarkable

Histopathology:

No tissues examined

Appendix 9-23(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 2011 Male 100 mg/kg Day 43 End of administration

Gross pathology:

All tissues Not remarkable

Histopathology:

No tissues examined

Appendix 9-24(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 2012 Male 100 mg/kg Day 43 End of administration

Gross pathology:

All tissues Not remarkable

Histopathology:

No tissues examined

Appendix 9-25(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 3001 Male 300 mg/kg Day 43 End of administration

Gross pathology:

All tissues	Not remarkable

Histopathology:

Stomach	Cell infiltration,submucosal,glandular: mild Hyperplasia,squamous cell,limiting ridge: mild

Following tissues : Not remarkable

Epididymis, Testis

Appendix 9-26(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 3002 Male 300 mg/kg Day 43 End of administration

Gross pathology:

All tissues	Not remarkable

Histopathology:

Stomach	Cell infiltration,submucosal,glandular: mild Hyperplasia,squamous cell,limiting ridge: mild

Following tissues : Not remarkable

Epididymis, Testis

Appendix 9-27(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 3003 Male 300 mg/kg Day 43 End of administration

Gross pathology:

All tissues	Not remarkable

Histopathology:

Stomach	Cell infiltration,submucosal,glandular: mild Erosion/Ulcer,glandular stomach: minimal fundic Hyperplasia,squamous cell,limiting ridge: mild

Following tissues : Not remarkable

Epididymis, Testis

Appendix 9-28(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 3004 Male 300 mg/kg Day 43 End of administration

Gross pathology:

All tissues	Not remarkable

Histopathology:

Stomach	Cell infiltration,submucosal,glandular: minimal Hyperplasia,squamous cell,limiting ridge: minimal

Following tissues : Not remarkable

Epididymis, Testis

Appendix 9-29(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 3005 Male 300 mg/kg Day 43 End of administration

Gross pathology:

All tissues	Not remarkable

Histopathology:

Stomach	Cell infiltration,submucosal,glandular: minimal Hyperplasia,squamous cell,limiting ridge: mild

Following tissues : Not remarkable

Epididymis, Testis

Appendix 9-30(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 3006 Male 300 mg/kg Day 43 End of administration

Gross pathology:

All tissues Not remarkable

Histopathology:

No tissues examined

Appendix 9-31(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 3007 Male 300 mg/kg Day 43 End of administration

Gross pathology:

All tissues Not remarkable

Histopathology:

No tissues examined

Appendix 9-32(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 3008 Male 300 mg/kg Day 43 End of administration

Gross pathology:

All tissues Not remarkable

Histopathology:

No tissues examined

Appendix 9-33(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 3009 Male 300 mg/kg Day 43 End of administration

Gross pathology:

All tissues Not remarkable

Histopathology:

No tissues examined

Appendix 9-34(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 3010 Male 300 mg/kg Day 43 End of administration

Gross pathology:

All tissues Not remarkable

Histopathology:

No tissues examined

Appendix 9-35(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 3011 Male 300 mg/kg Day 43 End of administration

Gross pathology:

All tissues Not remarkable

Histopathology:

No tissues examined

Appendix 9-36(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 3012 Male 300 mg/kg Day 43 End of administration

Gross pathology:

Skin+Subcutis	Nodule: 1 present 35x20x15 mm, cervical, subcutaneous
Other tissues	Not remarkable

Histopathology:

No tissues examined

Appendix 9-37(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 4001 Male 1000 mg/kg Day 43 End of administration

Gross pathology:

All tissues	Not remarkable

Histopathology:

Epididymis	Cell debris,luminal: minimal, bilateral head
Kidney	Basophilia,tubular: minimal
Prostate	Cell infiltration: minimal, lymphocytic ventral
Stomach	Cell infiltration,submucosal,glandular: mild Erosion/Ulcer,glandular stomach: minimal pyloric Hyperplasia,squamous cell,limiting ridge: mild
Testis	Atrophy,seminiferous tubular: minimal, bilateral

Following tissues : Not remarkable

Adrenal, Bone+Bone marrow,femoral, Cerebellum(pons), Cerebrum, Eye, Heart
Intestine,duodenum, Intestine,jejunum, Intestine,ileum(Peyer's patch)
Intestine,cecum, Intestine,colon, Intestine,rectum, Lymph node,mesenteric
Lymph node,submandibular, Liver, Lung(bronchus), Mammary gland,inguinal
Optic nerve, Parathyroid, Pancreas, Pituitary, Salivary gland,submandibular
Salivary gland,sublingual, Skin,inguinal, Sciatic nerve, Spleen
Skeletal muscle,femoral, Seminal vesicle(coagulating gland), Spinal cord,thoracic
Thymus, Trachea, Thyroid, Urinary bladder

Appendix 9-38(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 4002 Male 1000 mg/kg Day 43 End of administration

Gross pathology:

All tissues	Not remarkable

Histopathology:

Kidney	Basophilia,tubular: minimal
Pituitary	Cyst,pars distalis: minimal
Prostate	Cell infiltration: minimal, lymphocytic ventral
Stomach	Cell infiltration,submucosal,glandular: minimal Hyperplasia,squamous cell,limiting ridge: mild

Following tissues : Not remarkable

Adrenal, Bone+Bone marrow,femoral, Cerebellum(pons), Cerebrum, Epididymis, Eye
Heart, Intestine,duodenum, Intestine,jejunum, Intestine,ileum(Peyer's patch)
Intestine,cecum, Intestine,colon, Intestine,rectum, Lymph node,mesenteric
Lymph node,submandibular, Liver, Lung(bronchus), Mammary gland,inguinal
Optic nerve, Parathyroid, Pancreas, Salivary gland,submandibular
Salivary gland,sublingual, Skin,inguinal, Sciatic nerve, Spleen
Skeletal muscle,femoral, Seminal vesicle(coagulating gland), Spinal cord,thoracic
Testis, Thymus, Trachea, Thyroid, Urinary bladder

Appendix 9-39(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 4003 Male 1000 mg/kg Day 43 End of administration

Gross pathology:

Kidney	Nodule: 1 present, right 8x5x3 mm
Other tissues	Not remarkable

Histopathology:

Kidney	NEPHROBLASTOMA: 1 present
Prostate	Cell infiltration: minimal, lymphocytic ventral
Stomach	Cell infiltration,submucosal,glandular: mild Hyperplasia,squamous cell,limiting ridge: mild

Following tissues : Not remarkable

Adrenal, Bone+Bone marrow,femoral, Cerebellum(pons), Cerebrum, Epididymis, Eye
Heart, Intestine,duodenum, Intestine,jejunum, Intestine,ileum(Peyer's patch)
Intestine,cecum, Intestine,colon, Intestine,rectum, Lymph node,mesenteric
Lymph node,submandibular, Liver, Lung(bronchus), Mammary gland,inguinal
Optic nerve, Parathyroid, Pancreas, Pituitary, Salivary gland,submandibular
Salivary gland,sublingual, Skin,inguinal, Sciatic nerve, Spleen
Skeletal muscle,femoral, Seminal vesicle(coagulating gland), Spinal cord,thoracic
Testis, Thymus, Trachea, Thyroid, Urinary bladder

Appendix 9-40(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 4004 Male 1000 mg/kg Day 43 End of administration

Gross pathology:

All tissues Not remarkable

Histopathology:

Kidney Urinary cast,hyaline: minimal

Following tissues : Not remarkable

Adrenal, Bone+Bone marrow,femoral, Cerebellum(pons), Cerebrum, Epididymis, Eye
Heart, Intestine,duodenum, Intestine,jejunum, Intestine,ileum(Peyer's patch)
Intestine,cecum, Intestine,colon, Intestine,rectum, Lymph node,mesenteric
Lymph node,submandibular, Liver, Lung(bronchus), Mammary gland,inguinal
Optic nerve, Parathyroid, Pancreas, Pituitary, Prostate
Salivary gland,submandibular, Salivary gland,sublingual, Skin,inguinal
Sciatic nerve, Spleen, Stomach, Skeletal muscle,femoral
Seminal vesicle(coagulating gland), Spinal cord,thoracic, Testis, Thymus, Trachea
Thyroid, Urinary bladder

Appendix 9-41(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 4005 Male 1000 mg/kg Day 43 End of administration

Gross pathology:

All tissues	Not remarkable

Histopathology:

Stomach	Hyperplasia,squamous cell,limiting ridge: minimal
Testis	Atrophy,seminiferous tubular: minimal, bilateral

Following tissues : Not remarkable

Adrenal, Bone+Bone marrow,femoral, Cerebellum(pons), Cerebrum, Epididymis, Eye
Heart, Intestine,duodenum, Intestine,jejunum, Intestine,ileum(Peyer's patch)
Intestine,cecum, Intestine,colon, Intestine,rectum, Kidney
Lymph node,mesenteric, Lymph node,submandibular, Liver, Lung(bronchus)
Mammary gland,inguinal, Optic nerve, Parathyroid, Pancreas, Pituitary, Prostate
Salivary gland,submandibular, Salivary gland,sublingual, Skin,inguinal
Sciatic nerve, Spleen, Skeletal muscle,femoral, Seminal vesicle(coagulating gland)
Spinal cord,thoracic, Thymus, Trachea, Thyroid, Urinary bladder

Appendix 9-42(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 4006 Male 1000 mg/kg Day 43 End of administration

Gross pathology:

All tissues Not remarkable

Histopathology:

No tissues examined

Appendix 9-43(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 4007 Male 1000 mg/kg Day 43 End of administration

Gross pathology:

All tissues Not remarkable

Histopathology:

No tissues examined

Appendix 9-44(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 4008 Male 1000 mg/kg Day 57 End of recovery

Gross pathology:

All tissues	Not remarkable

Histopathology:

Stomach	Cell infiltration,submucosal,glandular: minimal Hyperplasia,squamous cell,limiting ridge: minimal

Following tissues : Not remarkable

Adrenal, Bone+Bone marrow,femoral, Cerebellum(pons), Cerebrum, Epididymis, Eye
Heart, Intestine,duodenum, Intestine,jejunum, Intestine,ileum(Peyer's patch)
Intestine,cecum, Intestine,colon, Intestine,rectum, Kidney
Lymph node,mesenteric, Lymph node,submandibular, Liver, Lung(bronchus)
Mammary gland,inguinal, Optic nerve, Parathyroid, Pancreas, Pituitary, Prostate
Salivary gland,submandibular, Salivary gland,sublingual, Skin,inguinal
Sciatic nerve, Spleen, Skeletal muscle,femoral, Seminal vesicle(coagulating gland)
Spinal cord,thoracic, Testis, Thymus, Trachea, Thyroid, Urinary bladder

Appendix 9-45(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 4009 Male 1000 mg/kg Day 57 End of recovery

Gross pathology:

All tissues	Not remarkable

Histopathology:

Stomach	Hyperplasia,squamous cell,limiting ridge: minimal

Following tissues : Not remarkable

Adrenal, Bone+Bone marrow,femoral, Cerebellum(pons), Cerebrum, Epididymis, Eye
Heart, Intestine,duodenum, Intestine,jejunum, Intestine,ileum(Peyer's patch)
Intestine,cecum, Intestine,colon, Intestine,rectum, Kidney
Lymph node,mesenteric, Lymph node,submandibular, Liver, Lung(bronchus)
Mammary gland,inguinal, Optic nerve, Parathyroid, Pancreas, Pituitary, Prostate
Salivary gland,submandibular, Salivary gland,sublingual, Skin,inguinal
Sciatic nerve, Spleen, Skeletal muscle,femoral, Seminal vesicle(coagulating gland)
Spinal cord,thoracic, Testis, Thymus, Trachea, Thyroid, Urinary bladder

Appendix 9-46(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 4010 Male 1000 mg/kg Day 57 End of recovery

Gross pathology:

All tissues	Not remarkable

Histopathology:

Lung(bronchus)	Aggregation,alveolar macrophage: minimal
Stomach	Cell infiltration,submucosal,glandular: minimal Hyperplasia,squamous cell,limiting ridge: minimal

Following tissues : Not remarkable

Adrenal, Bone+Bone marrow,femoral, Cerebellum(pons), Cerebrum, Epididymis, Eye
Heart, Intestine,duodenum, Intestine,jejunum, Intestine,ileum(Peyer's patch)
Intestine,cecum, Intestine,colon, Intestine,rectum, Kidney
Lymph node,mesenteric, Lymph node,submandibular, Liver, Mammary gland,inguinal
Optic nerve, Parathyroid, Pancreas, Pituitary, Prostate
Salivary gland,submandibular, Salivary gland,sublingual, Skin,inguinal
Sciatic nerve, Spleen, Skeletal muscle,femoral, Seminal vesicle(coagulating gland)
Spinal cord,thoracic, Testis, Thymus, Trachea, Thyroid, Urinary bladder

Appendix 9-47(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 4011 Male 1000 mg/kg Day 57 End of recovery

Gross pathology:

All tissues	Not remarkable

Histopathology:

Stomach	Cell infiltration,submucosal,glandular: minimal Hyperplasia,squamous cell,limiting ridge: mild

Following tissues : Not remarkable

Adrenal, Bone+Bone marrow,femoral, Cerebellum(pons), Cerebrum, Epididymis, Eye
Heart, Intestine,duodenum, Intestine,jejunum, Intestine,ileum(Peyer's patch)
Intestine,cecum, Intestine,colon, Intestine,rectum, Kidney
Lymph node,mesenteric, Lymph node,submandibular, Liver, Lung(bronchus)
Mammary gland,inguinal, Optic nerve, Parathyroid, Pancreas, Pituitary, Prostate
Salivary gland,submandibular, Salivary gland,sublingual, Skin,inguinal
Sciatic nerve, Spleen, Skeletal muscle,femoral, Seminal vesicle(coagulating gland)
Spinal cord,thoracic, Testis, Thymus, Trachea, Thyroid, Urinary bladder

Appendix 9-48(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 4012 Male 1000 mg/kg Day 57 End of recovery

Gross pathology:

Stomach	Focus,dark red,glandular stomach: 1 present 1x1 mm
Other tissues	Not remarkable

Histopathology:

Stomach	Cell infiltration,submucosal,glandular: minimal Erosion/Ulcer,glandular stomach: minimal fundic Hyperplasia,squamous cell,limiting ridge: minimal

Following tissues : Not remarkable

Adrenal, Bone+Bone marrow,femoral, Cerebellum(pons), Cerebrum, Epididymis, Eye
Heart, Intestine,duodenum, Intestine,jejunum, Intestine,ileum(Peyer's patch)
Intestine,cecum, Intestine,colon, Intestine,rectum, Kidney
Lymph node,mesenteric, Lymph node,submandibular, Liver, Lung(bronchus)
Mammary gland,inguinal, Optic nerve, Parathyroid, Pancreas, Pituitary, Prostate
Salivary gland,submandibular, Salivary gland,sublingual, Skin,inguinal
Sciatic nerve, Spleen, Skeletal muscle,femoral, Seminal vesicle(coagulating gland)
Spinal cord,thoracic, Testis, Thymus, Trachea, Thyroid, Urinary bladder

Appendix 9-49(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 1101 Female 0 mg/kg Day 45 End of administration,Dams

Gross pathology:

All tissues Not remarkable

Histopathology:

No tissues examined

Appendix 9-50(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 1102 Female 0 mg/kg Day 45 End of administration,Dams

Gross pathology:

All tissues Not remarkable

Histopathology:

No tissues examined

Appendix 9-51(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 1103 Female 0 mg/kg Day 44 End of administration,Dams

Gross pathology:

All tissues Not remarkable

Histopathology:

No tissues examined

Appendix 9-52(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 1104 Female 0 mg/kg Day 42 End of administration,Dams

Gross pathology:

Stomach	Focus,dark red,glandular stomach: 1 present 1x2 mm
Other tissues	Not remarkable

Histopathology:

Stomach	Erosion/Ulcer,glandular stomach: minimal fundic

Following tissues : Not remarkable

Adrenal, Bone+Bone marrow,femoral, Cerebellum(pons), Cerebrum, Eye, Heart
Intestine,duodenum, Intestine,jejunum, Intestine,ileum(Peyer's patch)
Intestine,cecum, Intestine,colon, Intestine,rectum, Kidney
Lymph node,mesenteric, Lymph node,submandibular, Liver, Lung(bronchus)
Mammary gland,inguinal, Optic nerve, Ovary, Parathyroid, Pancreas, Pituitary
Salivary gland,submandibular, Salivary gland,sublingual, Skin,inguinal
Sciatic nerve, Spleen, Skeletal muscle,femoral, Spinal cord,thoracic, Thymus
Trachea, Thyroid, Urinary bladder, Uterus, Vagina

Appendix 9-53(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 1105 Female 0 mg/kg Day 43 End of administration,Dams

Gross pathology:

All tissues Not remarkable

Histopathology:

Following tissues : Not remarkable

Adrenal, Bone+Bone marrow,femoral, Cerebellum(pons), Cerebrum, Eye, Heart
Intestine,duodenum, Intestine,jejunum, Intestine,ileum(Peyer's patch)
Intestine,cecum, Intestine,colon, Intestine,rectum, Kidney
Lymph node,mesenteric, Lymph node,submandibular, Liver, Lung(bronchus)
Mammary gland,inguinal, Optic nerve, Ovary, Parathyroid, Pancreas, Pituitary
Salivary gland,submandibular, Salivary gland,sublingual, Skin,inguinal
Sciatic nerve, Spleen, Stomach, Skeletal muscle,femoral, Spinal cord,thoracic
Thymus, Trachea, Thyroid, Urinary bladder, Uterus, Vagina

Appendix 9-54(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 1106 Female 0 mg/kg Day 45 End of administration,Dams

Gross pathology:

All tissues Not remarkable

Histopathology:

No tissues examined

Appendix 9-55(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 1107 Female 0 mg/kg Day 43 End of administration,Dams

Gross pathology:

All tissues	Not remarkable

Histopathology:

Stomach	Erosion/Ulcer,glandular stomach: minimal fundic

Following tissues : Not remarkable

Adrenal, Bone+Bone marrow,femoral, Cerebellum(pons), Cerebrum, Eye, Heart
Intestine,duodenum, Intestine,jejunum, Intestine,ileum(Peyer's patch)
Intestine,cecum, Intestine,colon, Intestine,rectum, Kidney
Lymph node,mesenteric, Lymph node,submandibular, Liver, Lung(bronchus)
Mammary gland,inguinal, Optic nerve, Ovary, Parathyroid, Pancreas, Pituitary
Salivary gland,submandibular, Salivary gland,sublingual, Skin,inguinal
Sciatic nerve, Spleen, Skeletal muscle,femoral, Spinal cord,thoracic, Thymus
Trachea, Thyroid, Urinary bladder, Uterus, Vagina

Appendix 9-56(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 1108 Female 0 mg/kg Day 45 End of administration,Dams

Gross pathology:

All tissues Not remarkable

Histopathology:

No tissues examined

Appendix 9-57(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 1109 Female 0 mg/kg Day 43 End of administration,Dams

Gross pathology:

All tissues Not remarkable

Histopathology:

Following tissues : Not remarkable

Adrenal, Bone+Bone marrow,femoral, Cerebellum(pons), Cerebrum, Eye, Heart
Intestine,duodenum, Intestine,jejunum, Intestine,ileum(Peyer's patch)
Intestine,cecum, Intestine,colon, Intestine,rectum, Kidney
Lymph node,mesenteric, Lymph node,submandibular, Liver, Lung(bronchus)
Mammary gland,inguinal, Optic nerve, Ovary, Parathyroid, Pancreas, Pituitary
Salivary gland,submandibular, Salivary gland,sublingual, Skin,inguinal
Sciatic nerve, Spleen, Stomach, Skeletal muscle,femoral, Spinal cord,thoracic
Thymus, Trachea, Thyroid, Urinary bladder, Uterus, Vagina

Appendix 9-58(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 1110 Female 0 mg/kg Day 45 End of administration,Dams

Gross pathology:

Stomach	Focus,dark red,glandular stomach: 1 present 2x7 mm
Other tissues	Not remarkable

Histopathology:

No tissues examined

Appendix 9-59(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 1111 Female 0 mg/kg Day 43 End of administration,Dams

Gross pathology:

All tissues Not remarkable

Histopathology:

Following tissues : Not remarkable

Adrenal, Bone+Bone marrow,femoral, Cerebellum(pons), Cerebrum, Eye, Heart
Intestine,duodenum, Intestine,jejunum, Intestine,ileum(Peyer's patch)
Intestine,cecum, Intestine,colon, Intestine,rectum, Kidney
Lymph node,mesenteric, Lymph node,submandibular, Liver, Lung(bronchus)
Mammary gland,inguinal, Optic nerve, Ovary, Parathyroid, Pancreas, Pituitary
Salivary gland,submandibular, Salivary gland,sublingual, Skin,inguinal
Sciatic nerve, Spleen, Stomach, Skeletal muscle,femoral, Spinal cord,thoracic
Thymus, Trachea, Thyroid, Urinary bladder, Uterus, Vagina

Appendix 9-60(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 1112 Female 0 mg/kg Day 43 End of administration,Dams

Gross pathology:

All tissues Not remarkable

Histopathology:

No tissues examined

Appendix 9-61(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 2101 Female 100 mg/kg Day 46 End of administration,Dams

Gross pathology:

All tissues Not remarkable

Histopathology:

No tissues examined

Appendix 9-62(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 2102 Female 100 mg/kg Day 45 End of administration,Dams

Gross pathology:

All tissues Not remarkable

Histopathology:

No tissues examined

Appendix 9-63(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 2103 Female 100 mg/kg Day 46 End of administration,Dams

Gross pathology:

All tissues Not remarkable

Histopathology:

No tissues examined

Appendix 9-64(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 2104 Female 100 mg/kg Day 44 End of administration,Dams

Gross pathology:

All tissues Not remarkable

Histopathology:

Following tissues : Not remarkable

Stomach

Appendix 9-65(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 2105 Female 100 mg/kg Day 44 End of administration,Dams

Gross pathology:

Stomach	Focus,dark red,glandular stomach: 1 present 1x2 mm
Other tissues	Not remarkable

Histopathology:

Stomach	Erosion/Ulcer,glandular stomach: minimal fundic Hyperplasia,squamous cell,limiting ridge: minimal

Appendix 9-66(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 2106 Female 100 mg/kg Day 43 End of administration,Dams

Gross pathology:

All tissues	Not remarkable

Histopathology:

Stomach	Cell infiltration,submucosal,glandular: mild Hyperplasia,squamous cell,limiting ridge: mild

Appendix 9-67(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 2107 Female 100 mg/kg Day 44 End of administration,Dams

Gross pathology:

All tissues Not remarkable

Histopathology:

No tissues examined

Appendix 9-68(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 2108 Female 100 mg/kg Day 47 End of administration,Dams

Gross pathology:

All tissues Not remarkable

Histopathology:

No tissues examined

Appendix 9-69(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 2109 Female 100 mg/kg Day 43 End of administration,Dams

Gross pathology:

All tissues	Not remarkable

Histopathology:

Stomach	Cell infiltration,submucosal,glandular: minimal Hyperplasia,squamous cell,limiting ridge: minimal

Appendix 9-70(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 2110 Female 100 mg/kg Day 43 End of administration,Dams

Gross pathology:

All tissues Not remarkable

Histopathology:

Following tissues : Not remarkable

Stomach

Appendix 9-71(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 2111 Female 100 mg/kg Day 45 End of administration,Dams

Gross pathology:

All tissues Not remarkable

Histopathology:

No tissues examined

Appendix 9-72(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 2112 Female 100 mg/kg Day 46 End of administration,Dams

Gross pathology:

All tissues Not remarkable

Histopathology:

No tissues examined

Appendix 9-73(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 3101 Female 300 mg/kg Day 44 End of administration,Dams

Gross pathology:

All tissues	Not remarkable

Histopathology:

Stomach	Cell infiltration,submucosal,glandular: minimal Erosion/Ulcer,glandular stomach: minimal fundic Hyperplasia,squamous cell,limiting ridge: minimal

Appendix 9-74(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 3102 Female 300 mg/kg Day 44 End of administration,Dams

Gross pathology:

All tissues	Not remarkable

Histopathology:

Stomach	Hyperplasia,squamous cell,limiting ridge: minimal

Appendix 9-75(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 3103 Female 300 mg/kg Day 46 End of administration,Dams

Gross pathology:

All tissues Not remarkable

Histopathology:

No tissues examined

Appendix 9-76(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 3104 Female 300 mg/kg Day 43 End of administration,Dams

Gross pathology:

All tissues Not remarkable

Histopathology:

Following tissues : Not remarkable

Stomach

Appendix 9-77(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 3105 Female 300 mg/kg Day 44 End of administration,Dams

Gross pathology:

All tissues	Not remarkable

Histopathology:

Stomach	Cell infiltration,submucosal,glandular: minimal Hyperplasia,squamous cell,limiting ridge: minimal

Appendix 9-78(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 3106 Female 300 mg/kg Day 44 End of administration,Dams

Gross pathology:

All tissues Not remarkable

Histopathology:

No tissues examined

Appendix 9-79(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 3107 Female 300 mg/kg Day 44 End of administration,Dams

Gross pathology:

All tissues Not remarkable

Histopathology:

No tissues examined

Appendix 9-80(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 3108 Female 300 mg/kg Day 44 End of administration,Dams

Gross pathology:

All tissues Not remarkable

Histopathology:

No tissues examined

Appendix 9-81(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 3109 Female 300 mg/kg Day 43 End of administration,Dams

Gross pathology:

Liver	Focus,white: 1 present 2x2 mm
Other tissues	Not remarkable

Histopathology:

Stomach	Cell infiltration,submucosal,glandular: minimal Hyperplasia,squamous cell,limiting ridge: minimal

Appendix 9-82(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 3110 Female 300 mg/kg Day 44 End of administration,Dams

Gross pathology:

All tissues Not remarkable

Histopathology:

No tissues examined

Appendix 9-83(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 3111 Female 300 mg/kg Day 44 End of administration,Dams

Gross pathology:

All tissues Not remarkable

Histopathology:

No tissues examined

Appendix 9-84(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 3112 Female 300 mg/kg Day 46 End of administration,Dams

Gross pathology:

Stomach	Focus,dark red,glandular stomach: 1 present 1x1 mm
Other tissues	Not remarkable

Histopathology:

No tissues examined

Appendix 9-85(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 4101 Female 1000 mg/kg Day 44 End of administration,Dams

Gross pathology:

Stomach	Focus,dark red,glandular stomach: 1 present 2x1 mm
Other tissues	Not remarkable

Histopathology:

No tissues examined

Appendix 9-86(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 4102 Female 1000 mg/kg Day 43 End of administration,Dams

Gross pathology:

All tissues Not remarkable

Histopathology:

Stomach Hyperplasia,squamous cell,limiting ridge: minimal

Following tissues : Not remarkable

Adrenal, Bone+Bone marrow,femoral, Cerebellum(pons), Cerebrum, Eye, Heart
Intestine,duodenum, Intestine,jejunum, Intestine,ileum(Peyer's patch)
Intestine,cecum, Intestine,colon, Intestine,rectum, Kidney
Lymph node,mesenteric, Lymph node,submandibular, Liver, Lung(bronchus)
Mammary gland,inguinal, Optic nerve, Ovary, Parathyroid, Pancreas, Pituitary
Salivary gland,submandibular, Salivary gland,sublingual, Skin,inguinal
Sciatic nerve, Spleen, Skeletal muscle,femoral, Spinal cord,thoracic, Thymus
Trachea, Thyroid, Urinary bladder, Uterus, Vagina

Appendix 9-87(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 4103 Female 1000 mg/kg Day 43 End of administration,Dams

Gross pathology:

All tissues	Not remarkable

Histopathology:

Stomach	Cell infiltration,submucosal,glandular: minimal Hyperplasia,squamous cell,limiting ridge: minimal

Following tissues : Not remarkable

Adrenal, Bone+Bone marrow,femoral, Cerebellum(pons), Cerebrum, Eye, Heart
Intestine,duodenum, Intestine,jejunum, Intestine,ileum(Peyer's patch)
Intestine,cecum, Intestine,colon, Intestine,rectum, Kidney
Lymph node,mesenteric, Lymph node,submandibular, Liver, Lung(bronchus)
Mammary gland,inguinal, Optic nerve, Ovary, Parathyroid, Pancreas, Pituitary
Salivary gland,submandibular, Salivary gland,sublingual, Skin,inguinal
Sciatic nerve, Spleen, Skeletal muscle,femoral, Spinal cord,thoracic, Thymus
Trachea, Thyroid, Urinary bladder, Uterus, Vagina

Appendix 9-88(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 4104 Female 1000 mg/kg Day 43 End of administration,Dams

Gross pathology:

All tissues Not remarkable

Histopathology:

Following tissues : Not remarkable

Adrenal, Bone+Bone marrow,femoral, Cerebellum(pons), Cerebrum, Eye, Heart
Intestine,duodenum, Intestine,jejunum, Intestine,ileum(Peyer's patch)
Intestine,cecum, Intestine,colon, Intestine,rectum, Kidney
Lymph node,mesenteric, Lymph node,submandibular, Liver, Lung(bronchus)
Mammary gland,inguinal, Optic nerve, Ovary, Parathyroid, Pancreas, Pituitary
Salivary gland,submandibular, Salivary gland,sublingual, Skin,inguinal
Sciatic nerve, Spleen, Stomach, Skeletal muscle,femoral, Spinal cord,thoracic
Thymus, Trachea, Thyroid, Urinary bladder, Uterus, Vagina

Appendix 9-89(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 4105 Female 1000 mg/kg Day 42 End of administration,Dams

Gross pathology:

All tissues	Not remarkable

Histopathology:

Stomach	Cell infiltration,submucosal,glandular: minimal Hyperplasia,squamous cell,limiting ridge: minimal

Following tissues : Not remarkable

Adrenal, Bone+Bone marrow,femoral, Cerebellum(pons), Cerebrum, Eye, Heart
Intestine,duodenum, Intestine,jejunum, Intestine,ileum(Peyer's patch)
Intestine,cecum, Intestine,colon, Intestine,rectum, Kidney
Lymph node,mesenteric, Lymph node,submandibular, Liver, Lung(bronchus)
Mammary gland,inguinal, Optic nerve, Ovary, Parathyroid, Pancreas, Pituitary
Salivary gland,submandibular, Salivary gland,sublingual, Skin,inguinal
Sciatic nerve, Spleen, Skeletal muscle,femoral, Spinal cord,thoracic, Thymus
Trachea, Thyroid, Urinary bladder, Uterus, Vagina

Appendix 9-90(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 4106 Female 1000 mg/kg Day 43 End of administration,Dams

Gross pathology:

All tissues Not remarkable

Histopathology:

No tissues examined

Appendix 9-91(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 4107 Female 1000 mg/kg Day 44 End of administration,Dams

Gross pathology:

All tissues Not remarkable

Histopathology:

No tissues examined

Appendix 9-92(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 4108 Female 1000 mg/kg Day 45 End of administration,Dams

Gross pathology:

All tissues Not remarkable

Histopathology:

No tissues examined

Appendix 9-93(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 4109 Female 1000 mg/kg Day 43 End of administration,Dams

Gross pathology:

All tissues Not remarkable

Histopathology:

No tissues examined

Appendix 9-94(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 4110 Female 1000 mg/kg Day 44 End of administration,Dams

Gross pathology:

All tissues Not remarkable

Histopathology:

No tissues examined

Appendix 9-95(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 4111 Female 1000 mg/kg Day 42 End of administration,Dams

Gross pathology:

All tissues Not remarkable

Histopathology:

Following tissues : Not remarkable

Adrenal, Bone+Bone marrow,femoral, Cerebellum(pons), Cerebrum, Eye, Heart
Intestine,duodenum, Intestine,jejunum, Intestine,ileum(Peyer's patch)
Intestine,cecum, Intestine,colon, Intestine,rectum, Kidney
Lymph node,mesenteric, Lymph node,submandibular, Liver, Lung(bronchus)
Mammary gland,inguinal, Optic nerve, Ovary, Parathyroid, Pancreas, Pituitary
Salivary gland,submandibular, Salivary gland,sublingual, Skin,inguinal
Sciatic nerve, Spleen, Stomach, Skeletal muscle,femoral, Spinal cord,thoracic
Thymus, Trachea, Thyroid, Urinary bladder, Uterus, Vagina

Appendix 9-96(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 4112 Female 1000 mg/kg Day 46 End of administration,Dams

Gross pathology:

All tissues Not remarkable

Histopathology:

No tissues examined

Appendix 9-97(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 5101 Female 0 mg/kg Day 43 End of administration

Gross pathology:

All tissues Not remarkable

Histopathology:

Following tissues : Not remarkable

Adrenal, Bone+Bone marrow,femoral, Cerebellum(pons), Cerebrum, Eye, Heart
Intestine,duodenum, Intestine,jejunum, Intestine,ileum(Peyer's patch)
Intestine,cecum, Intestine,colon, Intestine,rectum, Kidney
Lymph node,mesenteric, Lymph node,submandibular, Liver, Lung(bronchus)
Mammary gland,inguinal, Optic nerve, Ovary, Parathyroid, Pancreas, Pituitary
Salivary gland,submandibular, Salivary gland,sublingual, Skin,inguinal
Sciatic nerve, Spleen, Stomach, Skeletal muscle,femoral, Spinal cord,thoracic
Thymus, Trachea, Thyroid, Urinary bladder, Uterus, Vagina

Appendix 9-98(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 5102 Female 0 mg/kg Day 43 End of administration

Gross pathology:

All tissues	Not remarkable

Histopathology:

Uterus	Atrophy: minimal
Vagina	Atrophy: minimal

Following tissues : Not remarkable

Adrenal, Bone+Bone marrow,femoral, Cerebellum(pons), Cerebrum, Eye, Heart
Intestine,duodenum, Intestine,jejunum, Intestine,ileum(Peyer's patch)
Intestine,cecum, Intestine,colon, Intestine,rectum, Kidney
Lymph node,mesenteric, Lymph node,submandibular, Liver, Lung(bronchus)
Mammary gland,inguinal, Optic nerve, Ovary, Parathyroid, Pancreas, Pituitary
Salivary gland,submandibular, Salivary gland,sublingual, Skin,inguinal
Sciatic nerve, Spleen, Stomach, Skeletal muscle,femoral, Spinal cord,thoracic
Thymus, Trachea, Thyroid, Urinary bladder

Appendix 9-99(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 5103 Female 0 mg/kg Day 43 End of administration

Gross pathology:

All tissues	Not remarkable

Histopathology:

Heart	Cell infiltration,focal: minimal

Following tissues : Not remarkable

Adrenal, Bone+Bone marrow,femoral, Cerebellum(pons), Cerebrum, Eye
Intestine,duodenum, Intestine,jejunum, Intestine,ileum(Peyer's patch)
Intestine,cecum, Intestine,colon, Intestine,rectum, Kidney
Lymph node,mesenteric, Lymph node,submandibular, Liver, Lung(bronchus)
Mammary gland,inguinal, Optic nerve, Ovary, Parathyroid, Pancreas, Pituitary
Salivary gland,submandibular, Salivary gland,sublingual, Skin,inguinal
Sciatic nerve, Spleen, Stomach, Skeletal muscle,femoral, Spinal cord,thoracic
Thymus, Trachea, Thyroid, Urinary bladder, Uterus, Vagina

Appendix 9-100(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 5104 Female 0 mg/kg Day 43 End of administration

Gross pathology:

All tissues Not remarkable

Histopathology:

Following tissues : Not remarkable

Adrenal, Bone+Bone marrow,femoral, Cerebellum(pons), Cerebrum, Eye, Heart
Intestine,duodenum, Intestine,jejunum, Intestine,ileum(Peyer's patch)
Intestine,cecum, Intestine,colon, Intestine,rectum, Kidney
Lymph node,mesenteric, Lymph node,submandibular, Liver, Lung(bronchus)
Mammary gland,inguinal, Optic nerve, Ovary, Parathyroid, Pancreas, Pituitary
Salivary gland,submandibular, Salivary gland,sublingual, Skin,inguinal
Sciatic nerve, Spleen, Stomach, Skeletal muscle,femoral, Spinal cord,thoracic
Thymus, Trachea, Thyroid, Urinary bladder, Uterus, Vagina

Appendix 9-101(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 5105 Female 0 mg/kg Day 43 End of administration

Gross pathology:

All tissues	Not remarkable

Histopathology:

Kidney	Fibrosis,focal: minimal
Ovary	Atrophy: minimal, bilateral

Following tissues : Not remarkable

Adrenal, Bone+Bone marrow,femoral, Cerebellum(pons), Cerebrum, Eye, Heart
Intestine,duodenum, Intestine,jejunum, Intestine,ileum(Peyer's patch)
Intestine,cecum, Intestine,colon, Intestine,rectum, Lymph node,mesenteric
Lymph node,submandibular, Liver, Lung(bronchus), Mammary gland,inguinal
Optic nerve, Parathyroid, Pancreas, Pituitary, Salivary gland,submandibular
Salivary gland,sublingual, Skin,inguinal, Sciatic nerve, Spleen, Stomach
Skeletal muscle,femoral, Spinal cord,thoracic, Thymus, Trachea, Thyroid
Urinary bladder, Uterus, Vagina

Appendix 9-102(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 5106 Female 0 mg/kg Day 57 End of recovery

Gross pathology:

All tissues Not remarkable

Histopathology:

Following tissues : Not remarkable

Adrenal, Bone+Bone marrow,femoral, Cerebellum(pons), Cerebrum, Eye, Heart
Intestine,duodenum, Intestine,jejunum, Intestine,ileum(Peyer's patch)
Intestine,cecum, Intestine,colon, Intestine,rectum, Kidney
Lymph node,mesenteric, Lymph node,submandibular, Liver, Lung(bronchus)
Mammary gland,inguinal, Optic nerve, Ovary, Parathyroid, Pancreas, Pituitary
Salivary gland,submandibular, Salivary gland,sublingual, Skin,inguinal
Sciatic nerve, Spleen, Stomach, Skeletal muscle,femoral, Spinal cord,thoracic
Thymus, Trachea, Thyroid, Urinary bladder, Uterus, Vagina

Appendix 9-103(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 5107 Female 0 mg/kg Day 57 End of recovery

Gross pathology:

All tissues Not remarkable

Histopathology:

Ovary Atrophy: minimal, bilateral

Following tissues : Not remarkable

Adrenal, Bone+Bone marrow,femoral, Cerebellum(pons), Cerebrum, Eye, Heart
Intestine,duodenum, Intestine,jejunum, Intestine,ileum(Peyer's patch)
Intestine,cecum, Intestine,colon, Intestine,rectum, Kidney
Lymph node,mesenteric, Lymph node,submandibular, Liver, Lung(bronchus)
Mammary gland,inguinal, Optic nerve, Parathyroid, Pancreas, Pituitary
Salivary gland,submandibular, Salivary gland,sublingual, Skin,inguinal
Sciatic nerve, Spleen, Stomach, Skeletal muscle,femoral, Spinal cord,thoracic
Thymus, Trachea, Thyroid, Urinary bladder, Uterus, Vagina

Appendix 9-104(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 5108 Female 0 mg/kg Day 57 End of recovery

Gross pathology:

All tissues Not remarkable

Histopathology:

Following tissues : Not remarkable

Adrenal, Bone+Bone marrow,femoral, Cerebellum(pons), Cerebrum, Eye, Heart
Intestine,duodenum, Intestine,jejunum, Intestine,ileum(Peyer's patch)
Intestine,cecum, Intestine,colon, Intestine,rectum, Kidney
Lymph node,mesenteric, Lymph node,submandibular, Liver, Lung(bronchus)
Mammary gland,inguinal, Optic nerve, Ovary, Parathyroid, Pancreas, Pituitary
Salivary gland,submandibular, Salivary gland,sublingual, Skin,inguinal
Sciatic nerve, Spleen, Stomach, Skeletal muscle,femoral, Spinal cord,thoracic
Thymus, Trachea, Thyroid, Urinary bladder, Uterus, Vagina

Appendix 9-105(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 5109 Female 0 mg/kg Day 57 End of recovery

Gross pathology:

All tissues Not remarkable

Histopathology:

Ovary Atrophy: minimal, bilateral

Following tissues : Not remarkable

Adrenal, Bone+Bone marrow,femoral, Cerebellum(pons), Cerebrum, Eye, Heart
Intestine,duodenum, Intestine,jejunum, Intestine,ileum(Peyer's patch)
Intestine,cecum, Intestine,colon, Intestine,rectum, Kidney
Lymph node,mesenteric, Lymph node,submandibular, Liver, Lung(bronchus)
Mammary gland,inguinal, Optic nerve, Parathyroid, Pancreas, Pituitary
Salivary gland,submandibular, Salivary gland,sublingual, Skin,inguinal
Sciatic nerve, Spleen, Stomach, Skeletal muscle,femoral, Spinal cord,thoracic
Thymus, Trachea, Thyroid, Urinary bladder, Uterus, Vagina

Appendix 9-106(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 5110 Female 0 mg/kg Day 57 End of recovery

Gross pathology:

All tissues Not remarkable

Histopathology:

Following tissues : Not remarkable

Adrenal, Bone+Bone marrow,femoral, Cerebellum(pons), Cerebrum, Eye, Heart
Intestine,duodenum, Intestine,jejunum, Intestine,ileum(Peyer's patch)
Intestine,cecum, Intestine,colon, Intestine,rectum, Kidney
Lymph node,mesenteric, Lymph node,submandibular, Liver, Lung(bronchus)
Mammary gland,inguinal, Optic nerve, Ovary, Parathyroid, Pancreas, Pituitary
Salivary gland,submandibular, Salivary gland,sublingual, Skin,inguinal
Sciatic nerve, Spleen, Stomach, Skeletal muscle,femoral, Spinal cord,thoracic
Thymus, Trachea, Thyroid, Urinary bladder, Uterus, Vagina

Appendix 9-107(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 6101 Female 1000 mg/kg Day 43 End of administration

Gross pathology:

All tissues	Not remarkable

Histopathology:

Ovary	Atrophy: minimal, bilateral
Uterus	Atrophy: minimal

Following tissues : Not remarkable

Adrenal, Bone+Bone marrow,femoral, Cerebellum(pons), Cerebrum, Eye, Heart
Intestine,duodenum, Intestine,jejunum, Intestine,ileum(Peyer's patch)
Intestine,cecum, Intestine,colon, Intestine,rectum, Kidney
Lymph node,mesenteric, Lymph node,submandibular, Liver, Lung(bronchus)
Mammary gland,inguinal, Optic nerve, Parathyroid, Pancreas, Pituitary
Salivary gland,submandibular, Salivary gland,sublingual, Skin,inguinal
Sciatic nerve, Spleen, Stomach, Skeletal muscle,femoral, Spinal cord,thoracic
Thymus, Trachea, Thyroid, Urinary bladder, Vagina

Appendix 9-108(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 6102 Female 1000 mg/kg Day 43 End of administration

Gross pathology:

All tissues	Not remarkable

Histopathology:

Stomach	Cell infiltration,submucosal,glandular: minimal Hyperplasia,squamous cell,limiting ridge: minimal

Following tissues : Not remarkable

Adrenal, Bone+Bone marrow,femoral, Cerebellum(pons), Cerebrum, Eye, Heart
Intestine,duodenum, Intestine,jejunum, Intestine,ileum(Peyer's patch)
Intestine,cecum, Intestine,colon, Intestine,rectum, Kidney
Lymph node,mesenteric, Lymph node,submandibular, Liver, Lung(bronchus)
Mammary gland,inguinal, Optic nerve, Ovary, Parathyroid, Pancreas, Pituitary
Salivary gland,submandibular, Salivary gland,sublingual, Skin,inguinal
Sciatic nerve, Spleen, Skeletal muscle,femoral, Spinal cord,thoracic, Thymus
Trachea, Thyroid, Urinary bladder, Uterus, Vagina

Appendix 9-109(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 6103 Female 1000 mg/kg Day 43 End of administration

Gross pathology:

All tissues Not remarkable

Histopathology:

Following tissues : Not remarkable

Adrenal, Bone+Bone marrow,femoral, Cerebellum(pons), Cerebrum, Eye, Heart
Intestine,duodenum, Intestine,jejunum, Intestine,ileum(Peyer's patch)
Intestine,cecum, Intestine,colon, Intestine,rectum, Kidney
Lymph node,mesenteric, Lymph node,submandibular, Liver, Lung(bronchus)
Mammary gland,inguinal, Optic nerve, Ovary, Parathyroid, Pancreas, Pituitary
Salivary gland,submandibular, Salivary gland,sublingual, Skin,inguinal
Sciatic nerve, Spleen, Stomach, Skeletal muscle,femoral, Spinal cord,thoracic
Thymus, Trachea, Thyroid, Urinary bladder, Uterus, Vagina

Appendix 9-110(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 6104 Female 1000 mg/kg Day 43 End of administration

Gross pathology:

All tissues	Not remarkable

Histopathology:

Stomach	Cell infiltration,submucosal,glandular: minimal Hyperplasia,squamous cell,limiting ridge: mild

Following tissues : Not remarkable

Adrenal, Bone+Bone marrow,femoral, Cerebellum(pons), Cerebrum, Eye, Heart
Intestine,duodenum, Intestine,jejunum, Intestine,ileum(Peyer's patch)
Intestine,cecum, Intestine,colon, Intestine,rectum, Kidney
Lymph node,mesenteric, Lymph node,submandibular, Liver, Lung(bronchus)
Mammary gland,inguinal, Optic nerve, Ovary, Parathyroid, Pancreas, Pituitary
Salivary gland,submandibular, Salivary gland,sublingual, Skin,inguinal
Sciatic nerve, Spleen, Skeletal muscle,femoral, Spinal cord,thoracic, Thymus
Trachea, Thyroid, Urinary bladder, Uterus, Vagina

Appendix 9-111(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 6105 Female 1000 mg/kg Day 43 End of administration

Gross pathology:

All tissues	Not remarkable

Histopathology:

Ovary	Atrophy: minimal, bilateral
Stomach	Cell infiltration,submucosal,glandular: minimal Hyperplasia,squamous cell,limiting ridge: minimal
Vagina	Atrophy: minimal

Following tissues : Not remarkable

Adrenal, Bone+Bone marrow,femoral, Cerebellum(pons), Cerebrum, Eye, Heart
Intestine,duodenum, Intestine,jejunum, Intestine,ileum(Peyer's patch)
Intestine,cecum, Intestine,colon, Intestine,rectum, Kidney
Lymph node,mesenteric, Lymph node,submandibular, Liver, Lung(bronchus)
Mammary gland,inguinal, Optic nerve, Parathyroid, Pancreas, Pituitary
Salivary gland,submandibular, Salivary gland,sublingual, Skin,inguinal
Sciatic nerve, Spleen, Skeletal muscle,femoral, Spinal cord,thoracic, Thymus
Trachea, Thyroid, Urinary bladder, Uterus

Appendix 9-112(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 6106 Female 1000 mg/kg Day 57 End of recovery

Gross pathology:

All tissues Not remarkable

Histopathology:

Following tissues : Not remarkable

Adrenal, Bone+Bone marrow,femoral, Cerebellum(pons), Cerebrum, Eye, Heart
Intestine,duodenum, Intestine,jejunum, Intestine,ileum(Peyer's patch)
Intestine,cecum, Intestine,colon, Intestine,rectum, Kidney
Lymph node,mesenteric, Lymph node,submandibular, Liver, Lung(bronchus)
Mammary gland,inguinal, Optic nerve, Ovary, Parathyroid, Pancreas, Pituitary
Salivary gland,submandibular, Salivary gland,sublingual, Skin,inguinal
Sciatic nerve, Spleen, Stomach, Skeletal muscle,femoral, Spinal cord,thoracic
Thymus, Trachea, Thyroid, Urinary bladder, Uterus, Vagina

Appendix 9-113(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 6107 Female 1000 mg/kg Day 57 End of recovery

Gross pathology:

All tissues Not remarkable

Histopathology:

Following tissues : Not remarkable

Adrenal, Bone+Bone marrow,femoral, Cerebellum(pons), Cerebrum, Eye, Heart
Intestine,duodenum, Intestine,jejunum, Intestine,ileum(Peyer's patch)
Intestine,cecum, Intestine,colon, Intestine,rectum, Kidney
Lymph node,mesenteric, Lymph node,submandibular, Liver, Lung(bronchus)
Mammary gland,inguinal, Optic nerve, Ovary, Parathyroid, Pancreas, Pituitary
Salivary gland,submandibular, Salivary gland,sublingual, Skin,inguinal
Sciatic nerve, Spleen, Stomach, Skeletal muscle,femoral, Spinal cord,thoracic
Thymus, Trachea, Thyroid, Urinary bladder, Uterus, Vagina

Appendix 9-114(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 6108 Female 1000 mg/kg Day 57 End of recovery

Gross pathology:

All tissues Not remarkable

Histopathology:

Following tissues : Not remarkable

Adrenal, Bone+Bone marrow,femoral, Cerebellum(pons), Cerebrum, Eye, Heart
Intestine,duodenum, Intestine,jejunum, Intestine,ileum(Peyer's patch)
Intestine,cecum, Intestine,colon, Intestine,rectum, Kidney
Lymph node,mesenteric, Lymph node,submandibular, Liver, Lung(bronchus)
Mammary gland,inguinal, Optic nerve, Ovary, Parathyroid, Pancreas, Pituitary
Salivary gland,submandibular, Salivary gland,sublingual, Skin,inguinal
Sciatic nerve, Spleen, Stomach, Skeletal muscle,femoral, Spinal cord,thoracic
Thymus, Trachea, Thyroid, Urinary bladder, Uterus, Vagina

Appendix 9-115(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 6109 Female 1000 mg/kg Day 57 End of recovery

Gross pathology:

All tissues Not remarkable

Histopathology:

Following tissues : Not remarkable

Adrenal, Bone+Bone marrow,femoral, Cerebellum(pons), Cerebrum, Eye, Heart
Intestine,duodenum, Intestine,jejunum, Intestine,ileum(Peyer's patch)
Intestine,cecum, Intestine,colon, Intestine,rectum, Kidney
Lymph node,mesenteric, Lymph node,submandibular, Liver, Lung(bronchus)
Mammary gland,inguinal, Optic nerve, Ovary, Parathyroid, Pancreas, Pituitary
Salivary gland,submandibular, Salivary gland,sublingual, Skin,inguinal
Sciatic nerve, Spleen, Stomach, Skeletal muscle,femoral, Spinal cord,thoracic
Thymus, Trachea, Thyroid, Urinary bladder, Uterus, Vagina

Appendix 9-116(1/1) 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Individual gross and histopathological findings

Animal No. 6110 Female 1000 mg/kg Day 57 End of recovery

Gross pathology:

All tissues	Not remarkable

Histopathology:

Lung(bronchus)	Aggregation,alveolar macrophage: minimal
Stomach	Cell infiltration,submucosal,glandular: mild Hyperplasia,squamous cell,limiting ridge: mild

Following tissues : Not remarkable

Adrenal, Bone+Bone marrow,femoral, Cerebellum(pons), Cerebrum, Eye, Heart
Intestine,duodenum, Intestine,jejunum, Intestine,ileum(Peyer's patch)
Intestine,cecum, Intestine,colon, Intestine,rectum, Kidney
Lymph node,mesenteric, Lymph node,submandibular, Liver, Mammary gland,inguinal
Optic nerve, Ovary, Parathyroid, Pancreas, Pituitary
Salivary gland,submandibular, Salivary gland,sublingual, Skin,inguinal
Sciatic nerve, Spleen, Skeletal muscle,femoral, Spinal cord,thoracic, Thymus
Trachea, Thyroid, Urinary bladder, Uterus, Vagina

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1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Study No. : R-1193

Estrus cycles and copulation

Generation : F0 Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	/Before mating (day) 1	2	3	4	5	6	7	8	9	10	11	12	13	14
1101	D	P	E	M	D	P	E	M	D	P	E	M	D	P
1102	P	E	M	D	P	E	M	D	P	E	M	D	P	E
1103	P	E	M	D	P	E	M	D	P	E	M	D	P	E
1104	E	M	D	D	P	E	M	D	D	P	E	M	D	D
1105	M	D	P	E	M	D	P	E	M	D	P	E	M	D
1106	P	E	M	D	P	E	M	D	P	E	M	D	P	E
1107	E	M	D	P	E	M	D	P	E	M	D	P	E	M
1108	D	P	E	M	D	P	E	M	D	P	E	M	D	P
1109	E	M	D	P	E	E	M	D	P	E	E	M	D	P
1110	P	E	M	D	P	E	M	D	P	E	M	D	P	E
1111	M	D	P	E	M	D	P	E	M	D	P	E	M	D
1112	M	D	P	E	M	D	P	E	M	D	P	E	M	D

P : Proestrus, E : Estrus, M : Metestrus, D : Diestrus

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 10 - 2

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Estrus cycles and copulation

Study No. : R-1193

Generation : F0 Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	/Before mating (day) 15	Length of estrous cycle (days)			Mean	Number of estrus	Animal with abnormal estrous cycle
1101	E	4	4	4	4.0	4	-
1102	M	4	4	4	4.0	4	-
1103	M	4	4	4	4.0	4	-
1104	P	5	5		5.0	3	-
1105	P	4	4		4.0	3	-
1106	M	4	4	4	4.0	4	-
1107	D	4	4	4	4.0	4	-
1108	E	4	4	4	4.0	4	-
1109	E	4	5	5	4.7	4	-
1110	M	4	4	4	4.0	4	-
1111	P	4	4		4.0	3	-
1112	P	4	4		4.0	3	-

P : Proestrus, E : Estrus, M : Metestrus, D : Diestrus

+ : Animal with abnormal estrous cycle, - : Animal with normal and regular cycle

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 10 - 3

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Study No. : R-1193

Estrus cycles and copulation

Generation : F0 Dose : BTetCA 100 mg/kg Species : Rat

Animal No.	/Before mating (day) 1	2	3	4	5	6	7	8	9	10	11	12	13	14
2101	D	P	E	M	D	P	E	M	D	P	E	M	D	P
2102	D	P	E	M	D	P	E	M	D	P	E	M	D	P
2103	D	P	E	M	D	P	E	M	D	P	E	M	D	P
2104	D	P	E	M	D	P	E	M	D	P	E	E	M	D
2105	D	P	E	M	D	D	P	E	M	D	D	P	E	M
2106	M	D	P	E	M	D	P	E	M	D	P	E	M	D
2107	E	M	D	P	E	M	D	P	E	M	D	P	E	M
2108	M	D	D	P	E	M	D	D	P	E	M	D	D	P
2109	M	D	P	E	M	D	P	E	M	D	P	E	M	D
2110	D	P	E	M	D	P	E	E	M	D	P	E	E	M
2111	P	E	M	D	P	E	M	D	P	E	M	D	P	E
2112	M	D	P	E	M	D	P	E	E	M	D	D	P	E

P : Proestrus, E : Estrus, M : Metestrus, D : Diestrus
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 10 - 4

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Study No. : R-1193

Estrus cycles and copulation

Generation : F0 Dose : BTetCA 100 mg/kg Species : Rat

Animal No.	/Before mating (day) 15	Length of estrous cycle (days)			Mean	Number of estrus	Animal with abnormal estrous cycle
2101	E	4	4	4	4.0	4	-
2102	E	4	4	4	4.0	4	-
2103	E	4	4	4	4.0	4	-
2104	P	4	4		4.0	3	-
2105	D	5	5		5.0	3	-
2106	P	4	4		4.0	3	-
2107	D	4	4	4	4.0	4	-
2108	E	5	5		5.0	3	-
2109	P	4	4		4.0	3	-
2110	D	4	5		4.5	3	-
2111	M	4	4	4	4.0	4	-
2112	M	4	6		5.0	3	+

P : Proestrus, E : Estrus, M : Metestrus, D : Diestrus

+ : Animal with abnormal estrous cycle, - : Animal with normal and regular cycle

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 10 - 5

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Study No. : R-1193

Estrus cycles and copulation

Generation : F0 Dose : BTetCA 300 mg/kg Species : Rat

Animal No.	/Before mating (day) 1	2	3	4	5	6	7	8	9	10	11	12	13	14
3101	E	M	D	P	E	M	D	P	E	M	D	P	E	M
3102	E	M	D	P	E	M	D	P	E	M	D	P	E	M
3103	D	P	E	M	D	P	E	M	D	P	E	M	D	P
3104	M	D	P	E	M	D	P	E	M	D	P	E	M	D
3105	E	M	D	P	E	M	D	P	E	M	D	P	E	M
3106	P	E	M	D	P	E	M	D	P	E	M	D	P	E
3107	M	D	P	E	M	D	P	E	M	D	P	E	M	D
3108	E	M	D	P	E	M	D	P	E	M	D	P	E	M
3109	M	D	P	E	M	D	P	E	M	D	P	E	M	D
3110	P	E	M	D	P	E	M	D	P	E	M	D	P	E
3111	P	E	M	D	P	E	M	D	P	E	M	D	P	E
3112	M	D	D	P	E	M	D	D	P	E	M	D	D	P

P : Proestrus, E : Estrus, M : Metestrus, D : Diestrus
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 10 - 6

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Study No. : R-1193

Estrus cycles and copulation

Generation : F0 Dose : BTetCA 300 mg/kg Species : Rat

Animal No.	/Before mating (day) 15	Length of estrous cycle (days)			Mean	Number of estrus	Animal with abnormal estrous cycle
3101	D	4	4	4	4.0	4	-
3102	D	4	4	4	4.0	4	-
3103	E	4	4	4	4.0	4	-
3104	P	4	4		4.0	3	-
3105	D	4	4	4	4.0	4	-
3106	M	4	4	4	4.0	4	-
3107	P	4	4		4.0	3	-
3108	D	4	4	4	4.0	4	-
3109	P	4	4		4.0	3	-
3110	M	4	4	4	4.0	4	-
3111	M	4	4	4	4.0	4	-
3112	E	5	5		5.0	3	-

P : Proestrus, E : Estrus, M : Metestrus, D : Diestrus

+ : Animal with abnormal estrous cycle, - : Animal with normal and regular cycle

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 10 - 7

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Study No. : R-1193

Estrus cycles and copulation

Generation : F0 Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	/Before mating (day) 1	2	3	4	5	6	7	8	9	10	11	12	13	14
4101	E	M	D	P	E	M	D	P	E	M	D	P	E	M
4102	M	D	P	E	M	D	P	E	M	D	P	E	M	D
4103	M	D	P	E	M	D	P	E	M	D	P	E	M	D
4104	E	M	D	P	E	E	M	D	P	E	E	M	D	P
4105	E	M	D	D	P	E	M	D	D	P	E	M	D	D
4106	M	D	P	E	M	D	P	E	M	D	P	E	M	D
4107	M	D	P	E	M	D	P	E	E	M	D	P	E	M
4108	E	M	D	D	P	E	M	D	P	E	M	D	P	E
4109	M	D	P	E	M	D	P	E	M	D	P	E	M	D
4110	P	E	M	D	P	E	M	D	P	E	M	D	P	E
4111	M	D	P	E	M	D	P	E	M	D	P	E	M	D
4112	D	P	E	M	D	P	E	M	D	P	E	M	D	P

P : Proestrus, E : Estrus, M : Metestrus, D : Diestrus
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 10 - 8

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Estrus cycles and copulation

Study No. : R-1193

Generation : F0 Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	/Before mating (day) 15	Length of estrous cycle (days)			Mean	Number of estrus	Animal with abnormal estrous cycle
4101	D	4	4	4	4.0	4	-
4102	P	4	4		4.0	3	-
4103	P	4	4		4.0	3	-
4104	E	4	5	5	4.7	4	-
4105	P	5	5		5.0	3	-
4106	P	4	4		4.0	3	-
4107	D	4	5		4.5	3	-
4108	M	5	4	4	4.3	4	-
4109	P	4	4		4.0	3	-
4110	M	4	4	4	4.0	4	-
4111	P	4	4		4.0	3	-
4112	E	4	4	4	4.0	4	-

P : Proestrus, E : Estrus, M : Metestrus, D : Diestrus

+ : Animal with abnormal estrous cycle, - : Animal with normal and regular cycle

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 11 - 1 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Reproductive performance

Generation : F0 Sex : Male Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Elapsed day of conceiving a)	1st mating Paired animal	Copulation b)	Fertility c)
1001	4	1101	+	+
1002	3	1102	+	+
1003	3	1103	+	+
1004	1	1104	+	+
1005	1	1105	+	+
1006	3	1106	+	+
1007	2	1107	+	+
1008	4	1108	+	+
1009	1	1109	+	+
1010	3	1110	+	+
1011	1	1111	+	+
1012	1	1112	+	+
n	12		12	12
Mean	2.3			
S.D.	1.2			
No. of positives			12	12
%			100.0 d)	100.0 e)

a)-: Not copulation
b)+: Copulation, -: Not copulation
c)+: Pregnant, -: Non-pregnant
d): (Number of copulated animals / Number of mated animals)×100
e): (Number of males which impregnated females / Number of copulated males)×100
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 11 - 2 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Reproductive performance

Generation : F0 Sex : Male Dose : BTetCA 100 mg/kg Species : Rat

Animal No.	Elapsed day of conceiving a)	1st mating Paired animal	Copulation b)	Fertility c)
2001	4	2101	+	+
2002	4	2102	+	+
2003	4	2103	+	+
2004	2	2104	+	+
2005	2	2105	+	+
2006	1	2106	+	+
2007	2	2107	+	+
2008	5	2108	+	+
2009	1	2109	+	+
2010	2	2110	+	+
2011	3	2111	+	+
2012	4	2112	+	+
n	12		12	12
Mean	2.8			
S.D.	1.3			
No. of positives			12	12
%			100.0 d)	100.0 e)

a)-: Not copulation
b)+: Copulation, -: Not copulation
c)+: Pregnant, -: Non-pregnant
d): (Number of copulated animals / Number of mated animals)×100
e): (Number of males which impregnated females / Number of copulated males)×100
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 11 - 3 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Reproductive performance

Generation : F0 Sex : Male Dose : BTetCA 300 mg/kg Species : Rat

Animal No.	Elapsed day of conceiving a)	1st mating Paired animal	Copulation b)	Fertility c)
3001	2	3101	+	+
3002	2	3102	+	+
3003	4	3103	+	+
3004	1	3104	+	+
3005	2	3105	+	+
3006	3	3106	+	+
3007	1	3107	+	+
3008	2	3108	+	+
3009	2	3109	+	+
3010	3	3110	+	+
3011	3	3111	+	+
3012	4	3112	+	+
n	12		12	12
Mean	2.4			
S.D.	1.0			
No. of positives			12	12
%			100.0 d)	100.0 e)

a)-: Not copulation
b)+: Copulation, -: Not copulation
c)+: Pregnant, -: Non-pregnant
d): (Number of copulated animals / Number of mated animals)×100
e): (Number of males which impregnated females / Number of copulated males)×100
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 11 - 4 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Reproductive performance

Generation : F0 Sex : Male Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Elapsed day of conceiving a)	1st mating Paired animal	Copulation b)	Fertility c)
4001	2	4101	+	+
4002	1	4102	+	+
4003	1	4103	+	+
4004	1	4104	+	+
4005	1	4105	+	+
4006	1	4106	+	+
4007	2	4107	+	+
4008	3	4108	+	+
4009	1	4109	+	+
4010	3	4110	+	+
4011	1	4111	+	+
4012	5	4112	+	+
n	12		12	12
Mean	1.8			
S.D.	1.3			
No. of positives			12	12
%			100.0 d)	100.0 e)

a)-: Not copulation
b)+: Copulation, -: Not copulation
c)+: Pregnant, -: Non-pregnant
d): (Number of copulated animals / Number of mated animals)×100
e): (Number of males which impregnated females / Number of copulated males)×100
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 11 - 5 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Reproductive performance

Generation : F0 Sex : Female Dose : BTetCA 0 mg/kg Species : Rat

Animal No.	Elapsed day of conceiving a)	1st mating Paired animal	Copulation b)	Fertility c)
1101	4	1001	+	+
1102	3	1002	+	+
1103	3	1003	+	+
1104	1	1004	+	+
1105	1	1005	+	+
1106	3	1006	+	+
1107	2	1007	+	+
1108	4	1008	+	+
1109	1	1009	+	+
1110	3	1010	+	+
1111	1	1011	+	+
1112	1	1012	+	+
n	12		12	12
Mean	2.3			
S.D.	1.2			
No. of positives			12	12
%			100.0 d)	100.0 e)

a)-: Not copulation
b)+: Copulation, -: Not copulation
c)+: Pregnant, -: Non-pregnant
d): (Number of copulated animals / Number of mated animals)×100
e): (Number of pregnant females / Number of copulated females)×100
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Reproductive performance

Generation : F0 Sex : Female Dose : BTetCA 100 mg/kg Species : Rat

Animal No.	Elapsed day of conceiving a)	1st mating Paired animal	Copulation b)	Fertility c)
2101	4	2001	+	+
2102	4	2002	+	+
2103	4	2003	+	+
2104	2	2004	+	+
2105	2	2005	+	+
2106	1	2006	+	+
2107	2	2007	+	+
2108	5	2008	+	+
2109	1	2009	+	+
2110	2	2010	+	+
2111	3	2011	+	+
2112	4	2012	+	+
n	12		12	12
Mean	2.8			
S.D.	1.3			
No. of positives			12	12
%			100.0 d)	100.0 e)

a)-: Not copulation
b)+: Copulation, -: Not copulation
c)+: Pregnant, -: Non-pregnant
d): (Number of copulated animals / Number of mated animals)×100
e): (Number of pregnant females / Number of copulated females)×100
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Reproductive performance

Generation : F0 Sex : Female Dose : BTetCA 300 mg/kg Species : Rat

Animal No.	Elapsed day of conceiving a)	1st mating Paired animal	Copulation b)	Fertility c)
3101	2	3001	+	+
3102	2	3002	+	+
3103	4	3003	+	+
3104	1	3004	+	+
3105	2	3005	+	+
3106	3	3006	+	+
3107	1	3007	+	+
3108	2	3008	+	+
3109	2	3009	+	+
3110	3	3010	+	+
3111	3	3011	+	+
3112	4	3012	+	+
n	12		12	12
Mean	2.4			
S.D.	1.0			
No. of positives			12	12
%			100.0 d)	100.0 e)

a)-: Not copulation
b)+: Copulation, -: Not copulation
c)+: Pregnant, -: Non-pregnant
d): (Number of copulated animals / Number of mated animals)×100
e): (Number of pregnant females / Number of copulated females)×100
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 11 - 8 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Reproductive performance

Generation : F0 Sex : Female Dose : BTetCA 1000 mg/kg Species : Rat

Animal No.	Elapsed day of conceiving a)	1st mating Paired animal	Copulation b)	Fertility c)
4101	2	4001	+	+
4102	1	4002	+	+
4103	1	4003	+	+
4104	1	4004	+	+
4105	1	4005	+	+
4106	1	4006	+	+
4107	2	4007	+	+
4108	3	4008	+	+
4109	1	4009	+	+
4110	3	4010	+	+
4111	1	4011	+	+
4112	5	4012	+	+
n	12		12	12
Mean	1.8			
S.D.	1.3			
No. of positives			12	12
%			100.0 d)	100.0 e)

a)-: Not copulation
b)+: Copulation, -: Not copulation
c)+: Pregnant, -: Non-pregnant
d): (Number of copulated animals / Number of mated animals)×100
e): (Number of pregnant females / Number of copulated females)×100
BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Delivery data

Generation : F0 | Dose : BTetCA 0 mg/kg | Species : Rat

Dam No.	Gestation period (day)	Number of corpora lutea	Number of implan-tation	Preimplan-tation loss (%) a)	Implantation index (%) b)	Delivery index (%) c)	Live birth index (%) d)	Number of offspring	Number of live newborns			Number of dead newborns			
									M	F	Total	M	F	U	Total
1101	21.5	17(10/7)	17(10/7)	0.0	100.0	100.0	100.0	17	8	9	17	0	0	0	0
1102	22	14(9/5)	14(9/5)	0.0	100.0	100.0	100.0	14	10	4	14	0	0	0	0
1103	21.5	15(6/9)	15(6/9)	0.0	100.0	93.3	100.0	14	6	8	14	0	0	0	0
1104	21.5	16(12/4)	16(12/4)	0.0	100.0	87.5	100.0	14	8	6	14	0	0	0	0
1105	22.5	16(8/8)	15(7/8)	6.3	93.8	93.3	100.0	14	9	5	14	0	0	0	0
1106	22.5	15(5/10)	15(5/10)	0.0	100.0	100.0	100.0	15	6	9	15	0	0	0	0
1107	21.5	16(9/7)	16(9/7)	0.0	100.0	81.3	100.0	13	5	8	13	0	0	0	0
1108	21.5	16(10/6)	16(10/6)	0.0	100.0	93.8	100.0	15	5	10	15	0	0	0	0
1109	22.5	15(8/7)	15(8/7)	0.0	100.0	86.7	100.0	13	5	8	13	0	0	0	0
1110	22	15(7/8)	15(7/8)	0.0	100.0	86.7	100.0	13	6	7	13	0	0	0	0
1111	22	16(8/8)	16(8/8)	0.0	100.0	100.0	100.0	16	11	5	16	0	0	0	0
1112	22	16(7/9)	16(7/9)	0.0	100.0	100.0	100.0	16	8	8	16	0	0	0	0
n	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
Mean	21.9	15.6	15.5	0.5	99.5	93.6	100.0	14.5	7.3	7.3	14.5	0.0	0.0	0.0	0.0
S.D.	0.4	0.8	0.8	1.8	1.8	6.7	0.0	1.3	2.1	1.9	1.3	0.0	0.0	0.0	0.0

(/) : Right/Left, M : Male, F : Female, U : Unable to be sexed

a): [(Number of corpora lutea - Number of implantation) / Number of corpora lutea]×100

b): (Number of implantation / Number of corpora lutea)×100

c): (Number of delivered pups / Number of implantation)×100

d): (Number of live borns / Number of delivered pups)×100

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Delivery data

Generation : F0 Dose : BTetCA 100 mg/kg Species : Rat

Dam No.	Gestation period (day)	Number of corpora lutea	Number of implan-tation	Preimplan-tation loss (%) a)	Implantation index (%) b)	Delivery index (%) c)	Live birth index (%) d)	Number of offspring	Number of live newborns			Number of dead newborns			
									M	F	Total	M	F	U	Total
2101	22.5	14(6/8)	14(6/8)	0.0	100.0	85.7	100.0	12	8	4	12	0	0	0	0
2102	21.5	14(8/6)	14(8/6)	0.0	100.0	100.0	100.0	14	6	8	14	0	0	0	0
2103	22.5	16(6/10)	15(6/9)	6.3	93.8	100.0	100.0	15	10	5	15	0	0	0	0
2104	22.5	15(6/9)	15(6/9)	0.0	100.0	80.0	100.0	12	5	7	12	0	0	0	0
2105	22	18(7/11)	18(7/11)	0.0	100.0	100.0	100.0	18	9	9	18	0	0	0	0
2106	22	15(5/10)	15(5/10)	0.0	100.0	100.0	100.0	15	6	9	15	0	0	0	0
2107	22	17(9/8)	17(9/8)	0.0	100.0	88.2	100.0	15	10	5	15	0	0	0	0
2108	22.5	16(10/6)	16(10/6)	0.0	100.0	100.0	100.0	16	6	10	16	0	0	0	0
2109	22	14(8/6)	14(8/6)	0.0	100.0	78.6	100.0	11	6	5	11	0	0	0	0
2110	21.5	16(8/8)	15(8/7)	6.3	93.8	100.0	100.0	15	8	7	15	0	0	0	0
2111	22	14(8/6)	14(8/6)	0.0	100.0	92.9	100.0	13	5	8	13	0	0	0	0
2112	22	16(10/6)	16(10/6)	0.0	100.0	81.3	100.0	13	8	5	13	0	0	0	0
n	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
Mean	22.1	15.4	15.3	1.1	99.0	92.2	100.0	14.1	7.3	6.8	14.1	0.0	0.0	0.0	0.0
S.D.	0.4	1.3	1.3	2.5	2.4	8.9	0.0	2.0	1.8	2.0	2.0	0.0	0.0	0.0	0.0

(/) : Right/Left, M : Male, F : Female, U : Unable to be sexed

a): [(Number of corpora lutea - Number of implantation) / Number of corpora lutea]×100

b): (Number of implantation / Number of corpora lutea)×100

c): (Number of delivered pups / Number of implantation)×100

d): (Number of live borns / Number of delivered pups)×100

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Delivery data

Generation : F0 Dose : BTetCA 300 mg/kg Species : Rat

Dam No.	Gestation period (day)	Number of corpora lutea	Number of implan-tation	Preimplan-tation loss (%) a)	Implantation index (%) b)	Delivery index (%) c)	Live birth index (%) d)	Number of offspring	Number of live newborns			Number of dead newborns			
									M	F	Total	M	F	U	Total
3101	22	13(10/3)	13(10/3)	0.0	100.0	100.0	100.0	13	8	5	13	0	0	0	0
3102	22	12(5/7)	12(5/7)	0.0	100.0	100.0	100.0	12	6	6	12	0	0	0	0
3103	22	16(8/8)	16(8/8)	0.0	100.0	81.3	100.0	13	8	5	13	0	0	0	0
3104	22	16(7/9)	15(6/9)	6.3	93.8	93.3	100.0	14	10	4	14	0	0	0	0
3105	22	15(8/7)	14(7/7)	6.7	93.3	92.9	100.0	13	8	5	13	0	0	0	0
3106	21.5	16(7/9)	16(7/9)	0.0	100.0	81.3	100.0	13	7	6	13	0	0	0	0
3107	23	17(10/7)	15(10/5)	11.8	88.2	100.0	100.0	15	10	5	15	0	0	0	0
3108	22	19(7/12)	18(6/12)	5.3	94.7	100.0	100.0	18	12	6	18	0	0	0	0
3109	21.5	14(6/8)	14(6/8)	0.0	100.0	100.0	100.0	14	9	5	14	0	0	0	0
3110	21.5	16(11/5)	15(11/4)	6.3	93.8	86.7	100.0	13	8	5	13	0	0	0	0
3111	21.5	12(7/5)	12(7/5)	0.0	100.0	100.0	100.0	12	8	4	12	0	0	0	0
3112	22.5	15(6/9)	15(6/9)	0.0	100.0	100.0	100.0	15	8	7	15	0	0	0	0
n	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
Mean	22.0	15.1	14.6	3.0	97.0	94.6	100.0	13.8	8.5	5.3	13.8	0.0	0.0	0.0	0.0
S.D.	0.5	2.1	1.7	4.1	4.0	7.5	0.0	1.7	1.6	0.9	1.7	0.0	0.0	0.0	0.0

(/) : Right/Left, M : Male, F : Female, U : Unable to be sexed

a): [(Number of corpora lutea - Number of implantation) / Number of corpora lutea]×100

b): (Number of implantation / Number of corpora lutea)×100

c): (Number of delivered pups / Number of implantation)×100

d): (Number of live borns / Number of delivered pups)×100

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Delivery data

Generation : F0 Dose : BTetCA 1000 mg/kg Species : Rat

Dam No.	Gestation period (day)	Number of corpora lutea	Number of implan-tation	Preimplan-tation loss (%) a)	Implantation index (%) b)	Delivery index (%) c)	Live birth index (%) d)	Number of offspring	Number of live newborns			Number of dead newborns			
									M	F	Total	M	F	U	Total
4101	22.5	9(4/5)	6(2/4)	33.3	66.7	66.7	100.0	4	2	2	4	0	0	0	0
4102	22	16(6/10)	15(5/10)	6.3	93.8	86.7	100.0	13	7	6	13	0	0	0	0
4103	22	16(6/10)	15(5/10)	6.3	93.8	100.0	100.0	15	8	7	15	0	0	0	0
4104	22	13(6/7)	13(6/7)	0.0	100.0	100.0	100.0	13	4	9	13	0	0	0	0
4105	21.5	16(8/8)	16(8/8)	0.0	100.0	81.3	100.0	13	6	7	13	0	0	0	0
4106	22	14(7/7)	13(6/7)	7.1	92.9	100.0	100.0	13	7	6	13	0	0	0	0
4107	22	14(5/9)	14(5/9)	0.0	100.0	92.9	100.0	13	3	10	13	0	0	0	0
4108	22.5	15(7/8)	15(7/8)	0.0	100.0	93.3	100.0	14	7	7	14	0	0	0	0
4109	22.5	13(7/6)	13(7/6)	0.0	100.0	92.3	100.0	12	5	7	12	0	0	0	0
4110	21.5	13(7/6)	13(7/6)	0.0	100.0	92.3	100.0	12	7	5	12	0	0	0	0
4111	21.5	17(13/4)	17(13/4)	0.0	100.0	82.4	100.0	14	3	11	14	0	0	0	0
4112	21.5	13(7/6)	13(7/6)	0.0	100.0	92.3	100.0	12	7	5	12	0	0	0	0
n	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
Mean	22.0	14.1	13.6	4.4	95.6	90.0	100.0	12.3	5.5	6.8	12.3	0.0	0.0	0.0	0.0
S.D.	0.4	2.2	2.7	9.6	9.6	9.6	0.0	2.8	2.0	2.4	2.8	0.0	0.0	0.0	0.0

(/) : Right/Left, M : Male, F : Female, U : Unable to be sexed

a): [(Number of corpora lutea - Number of implantation) / Number of corpora lutea]×100

b): (Number of implantation / Number of corpora lutea)×100

c): (Number of delivered pups / Number of implantation)×100

d): (Number of live borns / Number of delivered pups)×100

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 13 - 1 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

External examination of offspring Unit : Number of anomalous offspring (incidence %) Days after birth : 0

Generation : F0 Dose : BTetCA 0 mg/kg Species : Rat

Dam No.	Number of offspring examined	/Findings	Number of offspring with any anomaly (%)a)
1101	17	No anomaly	0 (0.0)
1102	14	No anomaly	0 (0.0)
1103	14	No anomaly	0 (0.0)
1104	14	No anomaly	0 (0.0)
1105	14	No anomaly	0 (0.0)
1106	15	No anomaly	0 (0.0)
1107	13	No anomaly	0 (0.0)
1108	15	No anomaly	0 (0.0)
1109	13	No anomaly	0 (0.0)
1110	13	No anomaly	0 (0.0)
1111	16	No anomaly	0 (0.0)
1112	16	No anomaly	0 (0.0)
Total	174		0
n	12		12
Mean			(0.0)
S.D.			(0.0)

Mean : Average of incidence (%)

a) : (Number of offspring with any anomaly / Number of offspring) x 100

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 13 - 2 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

External examination of offspring Unit : Number of anomalous offspring (incidence %) Days after birth : 0

Generation : F0 Dose : BTetCA 100 mg/kg Species : Rat

Dam No.	Number of offspring examined	/Findings	Number of offspring with any anomaly (%)a)
2101	12	No anomaly	0 (0.0)
2102	14	No anomaly	0 (0.0)
2103	15	No anomaly	0 (0.0)
2104	12	No anomaly	0 (0.0)
2105	18	No anomaly	0 (0.0)
2106	15	No anomaly	0 (0.0)
2107	15	No anomaly	0 (0.0)
2108	16	No anomaly	0 (0.0)
2109	11	No anomaly	0 (0.0)
2110	15	No anomaly	0 (0.0)
2111	13	No anomaly	0 (0.0)
2112	13	No anomaly	0 (0.0)
Total	169		0
n	12		12
Mean			(0.0)
S.D.			(0.0)

Mean : Average of incidence (%)

a) : (Number of offspring with any anomaly / Number of offspring) x 100

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 13 - 3 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

External examination of offspring Unit : Number of anomalous offspring (incidence %) Days after birth : 0

Generation : F0 Dose : BTetCA 300 mg/kg Species : Rat

Dam No.	Number of offspring examined	/Findings	Number of offspring with any anomaly (%)a)
3101	13	No anomaly	0 (0.0)
3102	12	No anomaly	0 (0.0)
3103	13	No anomaly	0 (0.0)
3104	14	No anomaly	0 (0.0)
3105	13	No anomaly	0 (0.0)
3106	13	No anomaly	0 (0.0)
3107	15	No anomaly	0 (0.0)
3108	18	No anomaly	0 (0.0)
3109	14	No anomaly	0 (0.0)
3110	13	No anomaly	0 (0.0)
3111	12	No anomaly	0 (0.0)
3112	15	No anomaly	0 (0.0)
Total	165		0
n	12		12
Mean			(0.0)
S.D.			(0.0)

Mean : Average of incidence (%)

a) : (Number of offspring with any anomaly / Number of offspring) x 100

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 13 - 4 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

External examination of offspring Unit : Number of anomalous offspring (incidence %) Days after birth : 0

Generation : F0 Dose : BTetCA 1000 mg/kg Species : Rat

Dam No.	Number of offspring examined	/Findings	Number of offspring with any anomaly (%)a)
4101	4	No anomaly	0 (0.0)
4102	13	No anomaly	0 (0.0)
4103	15	No anomaly	0 (0.0)
4104	13	No anomaly	0 (0.0)
4105	13	No anomaly	0 (0.0)
4106	13	No anomaly	0 (0.0)
4107	13	No anomaly	0 (0.0)
4108	14	No anomaly	0 (0.0)
4109	12	No anomaly	0 (0.0)
4110	12	No anomaly	0 (0.0)
4111	14	No anomaly	0 (0.0)
4112	12	No anomaly	0 (0.0)
Total	148		0
n	12		12
Mean			(0.0)
S.D.			(0.0)

Mean : Average of incidence (%)

a) : (Number of offspring with any anomaly / Number of offspring) x 100

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 13 - 5 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

External examination of offspring Unit : Number of anomalous offspring Days after birth : 4

Generation : F0 Dose : BTetCA 0 mg/kg Species : Rat

Dam No.	Number of offspring examined	/Findings
1101	16	No anomaly
1102	12	No anomaly
1103	14	No anomaly
1104	14	No anomaly
1105	14	No anomaly
1106	15	No anomaly
1107	13	No anomaly
1108	15	No anomaly
1109	13	No anomaly
1110	13	No anomaly
1111	15	No anomaly
1112	16	No anomaly
Total	170	
n	12	

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 13 - 6 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

External examination of offspring Unit : Number of anomalous offspring Days after birth : 4

Generation : F0 Dose : BTetCA 100 mg/kg Species : Rat

Dam No.	Number of offspring examined	/Findings
2101	12	No anomaly
2102	14	No anomaly
2103	15	No anomaly
2104	12	No anomaly
2105	17	No anomaly
2106	15	No anomaly
2107	15	No anomaly
2108	16	No anomaly
2109	11	No anomaly
2110	15	No anomaly
2111	13	No anomaly
2112	13	No anomaly
Total	168	
n	12	

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 13 - 7 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

External examination of offspring Unit : Number of anomalous offspring Days after birth : 4

Generation : F0 Dose : BTetCA 300 mg/kg Species : Rat

Dam No.	Number of offspring examined	/Findings
3101	13	No anomaly
3102	12	No anomaly
3103	13	No anomaly
3104	14	No anomaly
3105	13	No anomaly
3106	13	No anomaly
3107	15	No anomaly
3108	18	No anomaly
3109	14	No anomaly
3110	13	No anomaly
3111	12	No anomaly
3112	15	No anomaly
Total	165	
n	12	

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 13 - 8 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

External examination of offspring Unit : Number of anomalous offspring Days after birth : 4

Generation : F0 Dose : BTetCA 1000 mg/kg Species : Rat

Dam No.	Number of offspring examined	/Findings
4101	4	No anomaly
4102	13	No anomaly
4103	15	No anomaly
4104	13	No anomaly
4105	13	No anomaly
4106	13	No anomaly
4107	13	No anomaly
4108	14	No anomaly
4109	12	No anomaly
4110	11	No anomaly
4111	13	No anomaly
4112	12	No anomaly
Total	146	
n	12	

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 14 - 1

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Viability index and sex ratio of offspring on day 4 after birth

Study No. : R-1193

Generation : F0 Dose : BTetCA 0 mg/kg Species : Rat

Dam No.	Number of live offspring Day 0	Number of live offspring Day 4	Viability index (%)a)	Day 4 Number of live offspring Male	Day 4 Number of live offspring Female	Sex ratio (%)b)
1101	17	16	94.1	7	9	
1102	14	12	85.7	8	4	
1103	14	14	100.0	6	8	
1104	14	14	100.0	8	6	
1105	14	14	100.0	9	5	
1106	15	15	100.0	6	9	
1107	13	13	100.0	5	8	
1108	15	15	100.0	5	10	
1109	13	13	100.0	5	8	
1110	13	13	100.0	6	7	
1111	16	15	93.8	11	4	
1112	16	16	100.0	8	8	
n	12	12	12			84/170
Mean	14.5	14.2	97.8			49.4
S.D.	1.3	1.3	4.5			

a) : (Number of live offspring on day 4 after birth / Number of live newborns) × 100

b) : (Number of live males on day 4 after birth / Number of live offspring on day 4 after birth) × 100

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 14 - 2

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Viability index and sex ratio of offspring on day 4 after birth

Study No. : R-1193

Generation : F0 Dose : BTetCA 100 mg/kg Species : Rat

Dam No.	Number of live offspring Day 0	Number of live offspring Day 4	Viability index (%)a)	Day 4 Number of live offspring Male	Day 4 Number of live offspring Female	Sex ratio (%)b)
2101	12	12	100.0	8	4	
2102	14	14	100.0	6	8	
2103	15	15	100.0	10	5	
2104	12	12	100.0	5	7	
2105	18	17	94.4	9	8	
2106	15	15	100.0	6	9	
2107	15	15	100.0	10	5	
2108	16	16	100.0	6	10	
2109	11	11	100.0	6	5	
2110	15	15	100.0	8	7	
2111	13	13	100.0	5	8	
2112	13	13	100.0	8	5	
n	12	12	12			87/168
Mean	14.1	14.0	99.5			51.8
S.D.	2.0	1.8	1.6			

a) : (Number of live offspring on day 4 after birth / Number of live newborns) × 100

b) : (Number of live males on day 4 after birth / Number of live offspring on day 4 after birth) × 100

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 14 - 3

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Viability index and sex ratio of offspring on day 4 after birth

Study No. : R-1193

Generation : F0 Dose : BTetCA 300 mg/kg Species : Rat

Dam No.	Number of live offspring Day 0	Number of live offspring Day 4	Viability index (%)a)	Day 4 Number of live offspring Male	Day 4 Number of live offspring Female	Sex ratio (%)b)
3101	13	13	100.0	8	5	
3102	12	12	100.0	6	6	
3103	13	13	100.0	8	5	
3104	14	14	100.0	10	4	
3105	13	13	100.0	8	5	
3106	13	13	100.0	7	6	
3107	15	15	100.0	10	5	
3108	18	18	100.0	12	6	
3109	14	14	100.0	9	5	
3110	13	13	100.0	8	5	
3111	12	12	100.0	8	4	
3112	15	15	100.0	8	7	
n	12	12	12			102/165
Mean	13.8	13.8	100.0			61.8
S.D.	1.7	1.7	0.0			

a) : (Number of live offspring on day 4 after birth / Number of live newborns) × 100

b) : (Number of live males on day 4 after birth / Number of live offspring on day 4 after birth) × 100

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 14 - 4

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Study No. : R-1193

Viability index and sex ratio of offspring on day 4 after birth

Generation : F0 Dose : BTetCA 1000 mg/kg Species : Rat

Dam No.	Number of live offspring Day 0	Number of live offspring Day 4	Viability index (%)a)	Day 4 Number of live offspring Male	Day 4 Number of live offspring Female	Sex ratio (%)b)
4101	4	4	100.0	2	2	
4102	13	13	100.0	7	6	
4103	15	15	100.0	8	7	
4104	13	13	100.0	4	9	
4105	13	13	100.0	6	7	
4106	13	13	100.0	7	6	
4107	13	13	100.0	3	10	
4108	14	14	100.0	7	7	
4109	12	12	100.0	5	7	
4110	12	11	91.7	7	4	
4111	14	13	92.9	3	10	
4112	12	12	100.0	7	5	
n	12	12	12			66/146
Mean	12.3	12.2	98.7			45.2
S.D.	2.8	2.8	3.0			

a) : (Number of live offspring on day 4 after birth / Number of live newborns) × 100

b) : (Number of live males on day 4 after birth / Number of live offspring on day 4 after birth) × 100

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 15 - 1 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Body weight of offspring

Generation : F0 Dose : BTetCA 0 mg/kg Unit : g Species : Rat

		/Days after birth			
		0		4/Pre-culled	
Dam No.	Sex	n	B.W.	n	B.W.
1101	Male	8	6.0	7	8.9
	Female	9	5.8	9	8.7
1102	Male	10	6.3	8	9.6
	Female	4	6.2	4	9.9
1103	Male	6	6.2	6	8.7
	Female	8	5.9	8	8.5
1104	Male	8	5.9	8	9.4
	Female	6	5.5	6	8.9
1105	Male	9	7.4	9	11.1
	Female	5	7.2	5	11.1
1106	Male	6	6.7	6	10.0
	Female	9	6.5	9	9.6
1107	Male	5	5.7	5	9.1
	Female	8	5.5	8	9.3
1108	Male	5	5.9	5	9.0
	Female	10	5.5	10	7.9
1109	Male	5	7.1	5	11.2
	Female	8	6.9	8	10.6
1110	Male	6	6.8	6	11.0
	Female	7	6.7	7	11.1
1111	Male	11	6.3	11	10.2
	Female	5	6.1	4	10.0
1112	Male	8	6.9	8	10.5
	Female	8	6.5	8	9.8
n	Male	87		84	
	Female	87		86	
Mean	Male		6.4		9.9
	Female		6.2		9.6
S.D.	Male		0.5		0.9
	Female		0.6		1.0

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 15 - 2 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Body weight of offspring

Generation : F0 Dose : BTetCA 100 mg/kg Unit : g Species : Rat

		/Days after birth			
		0		4/Pre-culled	
Dam No.	Sex	n	B.W.	n	B.W.
2101	Male	8	7.5	8	12.1
	Female	4	7.2	4	11.3
2102	Male	6	6.0	6	9.1
	Female	8	5.6	8	8.8
2103	Male	10	6.7	10	9.9
	Female	5	6.4	5	9.6
2104	Male	5	7.6	5	11.7
	Female	7	7.1	7	10.8
2105	Male	9	5.8	9	7.7
	Female	9	5.6	8	8.5
2106	Male	6	6.4	6	10.8
	Female	9	6.2	9	10.5
2107	Male	10	6.6	10	9.5
	Female	5	6.2	5	9.2
2108	Male	6	6.9	6	10.1
	Female	10	6.5	10	9.7
2109	Male	6	7.2	6	12.8
	Female	5	6.5	5	12.0
2110	Male	8	6.0	8	8.8
	Female	7	5.7	7	8.5
2111	Male	5	6.5	5	10.3
	Female	8	6.1	8	9.8
2112	Male	8	6.7	8	10.5
	Female	5	6.5	5	10.6
n	Male	87		87	
	Female	82		81	
Mean	Male		6.7		10.3
	Female		6.3		9.9
S.D.	Male		0.6		1.4
	Female		0.5		1.1

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 15 - 3 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Body weight of offspring

Generation : F0 Dose : BTetCA 300 mg/kg Unit : g Species : Rat

		/Days after birth			
		0		4/Pre-culled	
Dam No.	Sex	n	B.W.	n	B.W.
3101	Male	8	7.0	8	11.2
	Female	5	6.5	5	10.4
3102	Male	6	7.0	6	11.6
	Female	6	6.6	6	11.4
3103	Male	8	6.7	8	10.7
	Female	5	6.5	5	10.4
3104	Male	10	7.0	10	11.3
	Female	4	6.6	4	10.3
3105	Male	8	6.9	8	11.7
	Female	5	5.9	5	9.6
3106	Male	7	6.1	7	9.9
	Female	6	6.0	6	10.0
3107	Male	10	6.6	10	10.1
	Female	5	6.5	5	9.7
3108	Male	12	5.1	12	8.7
	Female	6	4.6	6	7.8
3109	Male	9	6.3	9	9.4
	Female	5	5.6	5	7.5
3110	Male	8	5.7	8	8.8
	Female	5	5.5	5	8.5
3111	Male	8	6.4	8	11.0
	Female	4	5.9	4	10.0
3112	Male	8	6.7	8	10.3
	Female	7	6.4	7	9.9
n	Male	102		102	
	Female	63		63	
Mean	Male		6.5		10.4
	Female		6.1		9.6
S.D.	Male		0.6		1.0
	Female		0.6		1.1

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 15 - 4 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Body weight of offspring

Generation : F0 Dose : BTetCA 1000 mg/kg Unit : g Species : Rat

/Days after birth

		0		4/Pre-culled	
Dam No.	Sex	n	B.W.	n	B.W.
4101	Male	2	8.0	2	12.5
	Female	2	7.2	2	11.2
4102	Male	7	6.1	7	10.5
	Female	6	5.7	6	9.9
4103	Male	8	6.4	8	11.3
	Female	7	6.3	7	11.2
4104	Male	4	6.4	4	11.0
	Female	9	6.2	9	10.9
4105	Male	6	6.0	6	9.5
	Female	7	5.4	7	8.8
4106	Male	7	6.4	7	9.9
	Female	6	6.3	6	9.7
4107	Male	3	6.7	3	11.1
	Female	10	6.4	10	10.5
4108	Male	7	6.2	7	10.2
	Female	7	5.8	7	9.6
4109	Male	5	7.4	5	11.6
	Female	7	6.9	7	11.1
4110	Male	7	6.4	7	10.9
	Female	5	6.1	4	10.1
4111	Male	3	6.0	3	8.9
	Female	11	5.5	10	8.6
4112	Male	7	6.2	7	9.8
	Female	5	5.7	5	8.9
n	Male	66		66	
	Female	82		80	
Mean	Male		6.5		10.6
	Female		6.1		10.0
S.D.	Male		0.6		1.0
	Female		0.5		1.0

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 15 - 5 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Body weight gain of offspring Base : Day 4 after birth

Generation : F0 Dose : BTetCA 0 mg/kg Unit : g Species : Rat

Dam No.	Sex	/Days after birth /Before culling n	0-4
1101	Male	7	2.9
	Female	9	2.9
1102	Male	8	3.3
	Female	4	3.7
1103	Male	6	2.5
	Female	8	2.6
1104	Male	8	3.5
	Female	6	3.4
1105	Male	9	3.7
	Female	5	3.9
1106	Male	6	3.3
	Female	9	3.1
1107	Male	5	3.4
	Female	8	3.8
1108	Male	5	3.1
	Female	10	2.4
1109	Male	5	4.1
	Female	8	3.7
1110	Male	6	4.2
	Female	7	4.4
1111	Male	11	3.9
	Female	4	3.9
1112	Male	8	3.6
	Female	8	3.3
n	Male	84	
	Female	86	
Mean	Male		3.5
	Female		3.4
S.D.	Male		0.5
	Female		0.6

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 15 - 6

1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats

Study No. : R-1193

Body weight gain of offspring

Base : Day 4 after birth

Generation : F0 Dose : BTetCA 100 mg/kg Unit : g Species : Rat

Dam No.	Sex	/Days after birth /Before culling n	0-4
2101	Male	8	4.6
	Female	4	4.1
2102	Male	6	3.1
	Female	8	3.2
2103	Male	10	3.2
	Female	5	3.2
2104	Male	5	4.1
	Female	7	3.7
2105	Male	9	1.9
	Female	8	2.9
2106	Male	6	4.4
	Female	9	4.3
2107	Male	10	2.9
	Female	5	3.0
2108	Male	6	3.2
	Female	10	3.2
2109	Male	6	5.6
	Female	5	5.5
2110	Male	8	2.8
	Female	7	2.8
2111	Male	5	3.8
	Female	8	3.7
2112	Male	8	3.8
	Female	5	4.1
n	Male	87	
	Female	81	
Mean	Male		3.6
	Female		3.6
S.D.	Male		1.0
	Female		0.8

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 15 - 7 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Body weight gain of offspring Base : Day 4 after birth

Generation : F0 Dose : BTetCA 300 mg/kg Unit : g Species : Rat

Dam No.	Sex	/Days after birth /Before culling n	0-4
3101	Male	8	4.2
	Female	5	3.9
3102	Male	6	4.6
	Female	6	4.8
3103	Male	8	4.0
	Female	5	3.9
3104	Male	10	4.3
	Female	4	3.7
3105	Male	8	4.8
	Female	5	3.7
3106	Male	7	3.8
	Female	6	4.0
3107	Male	10	3.5
	Female	5	3.2
3108	Male	12	3.6
	Female	6	3.2
3109	Male	9	3.1
	Female	5	1.9
3110	Male	8	3.1
	Female	5	3.0
3111	Male	8	4.6
	Female	4	4.1
3112	Male	8	3.6
	Female	7	3.5
n	Male	102	
	Female	63	
Mean	Male		3.9
	Female		3.6
S.D.	Male		0.6
	Female		0.7

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 15 - 8 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

Body weight gain of offspring Base : Day 4 after birth

Generation : F0 Dose : BTetCA 1000 mg/kg Unit : g Species : Rat

Dam No.	Sex	/Days after birth /Before culling n	0-4
4101	Male	2	4.5
	Female	2	4.0
4102	Male	7	4.4
	Female	6	4.2
4103	Male	8	4.9
	Female	7	4.9
4104	Male	4	4.6
	Female	9	4.7
4105	Male	6	3.5
	Female	7	3.4
4106	Male	7	3.5
	Female	6	3.4
4107	Male	3	4.4
	Female	10	4.1
4108	Male	7	4.0
	Female	7	3.8
4109	Male	5	4.2
	Female	7	4.2
4110	Male	7	4.5
	Female	4	4.0
4111	Male	3	2.9
	Female	10	3.1
4112	Male	7	3.6
	Female	5	3.2
n	Male	66	
	Female	80	
Mean	Male		4.1
	Female		3.9
S.D.	Male		0.6
	Female		0.6

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 16 - 1 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

External examination of dead offspring Unit : Number of anomalous offspring

Generation : F0 Dose : BTetCA 0 mg/kg Species : Rat

Dam No.	Number of offspring examined	/Findings
1101	0	
1102	2	No anomaly
1103	0	
1104	0	
1105	0	
1106	0	
1107	0	
1108	0	
1109	0	
1110	0	
1111	1	No anomaly
1112	0	
Total	3	
n	12	

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 16 - 2 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

External examination of dead offspring Unit : Number of anomalous offspring

Generation : F0 Dose : BTetCA 100 mg/kg Species : Rat

Dam No.	Number of offspring examined	/Findings
2101	0	
2102	0	
2103	0	
2104	0	
2105	1	No anomaly
2106	0	
2107	0	
2108	0	
2109	0	
2110	0	
2111	0	
2112	0	
Total	1	
n	12	

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 16 - 3 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

External examination of dead offspring Unit : Number of anomalous offspring

Generation : F0 Dose : BTetCA 300 mg/kg Species : Rat

Dam No.	Number of offspring examined	/Findings
3101	0	
3102	0	
3103	0	
3104	0	
3105	0	
3106	0	
3107	0	
3108	0	
3109	0	
3110	0	
3111	0	
3112	0	
Total	0	
n	12	

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

Appendix 16 - 4 1,2,4,5-Benzenetetracarboxylic anhydride: An oral combined repeated dose toxicity study with the reproduction/developmental toxicity screening test in rats Study No. : R-1193

External examination of dead offspring Unit : Number of anomalous offspring

Generation : F0 Dose : BTetCA 1000 mg/kg Species : Rat

Dam No.	Number of offspring examined	/Findings
4101	0	
4102	0	
4103	0	
4104	0	
4105	0	
4106	0	
4107	0	
4108	0	
4109	0	
4110	0	
4111	0	
4112	0	
Total	0	
n	12	

BTetCA: 1,2,4,5-Benzenetetracarboxylic anhydride

信頼性保証書（1/3）

試験番号　：　R-1193

試験表題　：　1，2，4，5-ベンゼンテトラカルボン酸無水物：ラットを用いた経口投与による反復投与毒性・生殖発生毒性併合試験

本試験は以下に示す基準を遵守して実施されたことを保証致します。

- 「新規化学物質等に係る試験を実施する試験施設に関する基準」（平成23年3月31日：薬食発0331第8号、平成23･03･29製局第6号、環保企発第110331010号）

なお、調査は下記の通り実施致しました。

2017年 3月30日
株式会社ボゾリサーチセンター
信頼性保証部門 [redacted]

試験における調査

項　目	担当者	調　査　日	試験責任者及び運営管理者への報告日
試験計画書	[redacted]	2016年 10月 4日	2016年 10月 4日
作業予定表・コンピュータプロトコール		2016年 10月 12日	2016年 10月 12日
試験計画書変更書（1）		2016年 10月 17日	2016年 10月 18日
被験物質の特性		2016年 10月 18日	2016年 10月 21日
調製・保存（被験物質）		2016年 10月 21日	2016年 10月 21日
投与液の濃度・均一性確認		2016年 10月 21日	2016年 10月 21日
群分け		2016年 10月 25日	2016年 10月 26日
体重・摂餌量測定・投与・一般状態の観察・膣垢検査		2016年 10月 26日	2016年 10月 26日

信頼性保証書（2/3）

項　目	担当者	調　査　日	試験責任者及び運営管理者への報告日
詳細な一般状態の観察	[redacted]	2016年 10月 27日	2016年 10月 28日
試験計画書変更書（2）		2016年 11月 7日	2016年 11月 7日
交配		2016年 11月 10日	2016年 11月 11日
機能検査・握力・自発運動量の測定		2016年 12月 1日	2016年 12月 2日
分娩・哺育観察・体重測定		2016年 12月 1日	2016年 12月 2日
尿検査（尿量・色調・定性・沈渣）		2016年 12月 2日	2016年 12月 2日
採血・剖検		2016年 12月 6日	2016年 12月 7日
病理組織学検査（切り出し）		2016年 12月 16日	2016年 12月 16日
被験物質の安定性		2016年 12月 26日	2016年 12月 26日
生データ		2017年 2月 22日	
		2017年 2月 24日	
		2017年 2月 27日	
		2017年 2月 28日	
		2017年 3月 1日	
		2017年 3月 3日	
		2017年 3月 29日	2017年 3月 29日
改善確認		2017年 3月 30日	2017年 3月 30日
図・表・付表		2017年 2月 22日	
		2017年 2月 23日	
		2017年 2月 24日	
		2017年 2月 27日	
		2017年 2月 28日	
		2017年 3月 1日	
		2017年 3月 2日	
		2017年 3月 3日	
		2017年 3月 25日	2017年 3月 25日
改善確認		2017年 3月 28日	2017年 3月 28日

信頼性保証書（3/3）

項　目	担当者	調　査　日	試験責任者及び運営管理者への報告日
最終報告書草案	[redacted]	2017年　3月 16日	
		2017年　3月 17日	
		2017年　3月 21日	
		2017年　3月 27日	2017年　3月 28日
改善確認		2017年　3月 29日	2017年　3月 30日
最終報告書		2017年　3月 30日	2017年　3月 30日

プロセス調査

項　目	試験番号	担当者	調　査　日	試験責任者及び運営管理者への報告日
動物入荷	B-8043	[redacted]	2016年　8月　8日	2016年　8月　8日
検疫・馴化	B-8043		2016年　8月　8日	2016年　8月　8日
	B-8043		2016年　8月 15日	2016年　8月 15日
尿検査（浸透圧・電解質）	B-8044		2016年 10月 17日	2016年 10月 17日
血液学検査・血液化学検査	B-8123		2016年 10月 13日	2016年 10月 14日
病理組織学検査（包埋・薄切・染色）	B-8082		2016年 10月　3日	2016年 10月　3日
	B-8082		2016年 10月　4日	2016年 10月　4日
	B-8082		2016年 10月　6日	2016年 10月　7日
	R-1192		2017年　1月　4日	2017年　1月　4日
	R-1192		2017年　1月　5日	2017年　1月　6日
	R-1192		2017年　1月　6日	2017年　1月　6日