

Experiment Number: 566126

Test Type: **Genetic Toxicology - Bacterial
Mutagenicity**

G06: Ames Summary Data

Test Compound: 1,4-Butanediol

CAS Number: 110-63-4

Date Report Requested: 09/14/2018

Time Report Requested: 04:09:58

NTP Study Number:

566126

Study Result:

Negative

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G06: Ames Summary Data

Test Compound: 1,4-Butanediol

CAS Number: 110-63-4

Date Report Requested: 09/14/2018

Time Report Requested: 04:09:58

Strain: TA100

| Dose (ug/Plate) | Without S9 | Without S9 | With 10% Rat S9 | With 30% Rat S9 | With 10% Hamster S9 |
|-------------------------------|-------------|------------|-----------------|-----------------|---------------------|
| Vehicle Control ¹ | 130 ± 13.3 | 172 ± 7.8 | 174 ± 12.1 | 165 ± 4.7 | 180 ± 14.5 |
| 1.0 | | | | | |
| 3.0 | | | | | |
| 10.0 | | | | | |
| 33.0 | | | | | |
| 100.0 | 109 ± 4.6 | 188 ± 4.9 | 185 ± 7.3 | 184 ± 3.5 | 168 ± 3.0 |
| 333.0 | 140 ± 8.1 | 178 ± 7.2 | 168 ± 9.2 | 172 ± 4.4 | 188 ± 4.5 |
| 1000.0 | 130 ± 4.4 | 164 ± 8.3 | 171 ± 7.3 | 152 ± 7.4 | 162 ± 17.6 |
| 3333.0 | 143 ± 2.8 | 166 ± 6.1 | 172 ± 5.7 | 144 ± 16.9 | 179 ± 3.2 |
| 10000.0 | 148 ± 12.2 | 158 ± 3.2 | 176 ± 7.4 | 131 ± 9.7 | 166 ± 5.3 |
| Trial Summary | Negative | Negative | Negative | Negative | Negative |
| Positive Control ² | | | | | 955 ± 39.0 |
| Positive Control ³ | | | 516 ± 10.3 | | |
| Positive Control ⁴ | | | | 568 ± 22.5 | |
| Positive Control ⁵ | 1036 ± 10.2 | 922 ± 82.6 | | | |

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Strain: TA100

| Dose (ug/Plate) | With 30% Hamster S9 |
|-------------------------------|----------------------------|
| Vehicle Control ¹ | 147 ± 3.1 |
| 1.0 | 146 ± 2.9 |
| 3.0 | 138 ± 12.3 |
| 10.0 | 141 ± 5.5 |
| 33.0 | 138 ± 17.6 |
| 100.0 | 167 ± 2.0 |
| 333.0 | 157 ± 8.6 |
| 1000.0 | 142 ± 13.3 |
| 3333.0 | 136 ± 9.5 |
| 10000.0 | 92 ± 0.6 |
| Trial Summary | Negative |
| Positive Control ² | |
| Positive Control ³ | 832 ± 34.1 |
| Positive Control ⁴ | |
| Positive Control ⁵ | |

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Test Type: Genetic Toxicology - Bacterial
Mutagenicity**G06: Ames Summary Data**

Test Compound: 1,4-Butanediol

CAS Number: 110-63-4

Date Report Requested: 09/14/2018

Time Report Requested: 04:09:58

Strain: TA1535

| Dose (ug/Plate) | Without S9 | Without S9 | With 10% Rat S9 | With 30% Rat S9 | With 10% Hamster S9 |
|-------------------------------|------------|------------|-----------------|-----------------|---------------------|
| Vehicle Control ¹ | 10 ± 2.0 | 11 ± 1.2 | 12 ± 0.6 | 14 ± 1.9 | 11 ± 1.5 |
| 100.0 | 14 ± 2.7 | 8 ± 0.3 | 14 ± 1.2 | 19 ± 2.8 | 11 ± 1.8 |
| 333.0 | 10 ± 0.6 | 9 ± 1.2 | 12 ± 2.1 | 18 ± 0.9 | 11 ± 1.2 |
| 1000.0 | 10 ± 0.9 | 13 ± 0.6 | 10 ± 0.3 | 15 ± 1.8 | 9 ± 2.0 |
| 3333.0 | 9 ± 1.8 | 9 ± 0.6 | 7 ± 0.6 | 16 ± 1.7 | 9 ± 2.2 |
| 10000.0 | 7 ± 1.2 | 9 ± 1.5 | 11 ± 2.6 | 14 ± 2.2 | 11 ± 0.6 |
| Trial Summary | Negative | Negative | Negative | Negative | Negative |
| Positive Control ³ | | | | | 114 ± 8.4 |
| Positive Control ⁴ | | | 95 ± 16.5 | | |
| Positive Control ⁵ | 601 ± 67.2 | 854 ± 57.4 | | | |
| Positive Control ⁶ | | | | 83 ± 11.1 | |

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Mutagenicity

G06: Ames Summary Data
Test Compound: 1,4-Butanediol
CAS Number: 110-63-4

Date Report Requested: 09/14/2018
Time Report Requested: 04:09:58

Strain: TA1535

| Dose (ug/Plate) | With 30% Hamster S9 |
|-------------------------------|---------------------|
| Vehicle Control ¹ | 13 ± 2.5 |
| 100.0 | 13 ± 3.5 |
| 333.0 | 11 ± 0.6 |
| 1000.0 | 13 ± 1.5 |
| 3333.0 | 10 ± 1.7 |
| 10000.0 | 9 ± 2.0 |
| Trial Summary | Negative |
| Positive Control ³ | |
| Positive Control ⁴ | 299 ± 49.9 |
| Positive Control ⁵ | |
| Positive Control ⁶ | |

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G06: Ames Summary Data

Test Compound: 1,4-Butanediol

CAS Number: 110-63-4

Date Report Requested: 09/14/2018

Time Report Requested: 04:09:58

Strain: TA97

| Dose (ug/Plate) | Without S9 | Without S9 | With 10% Rat S9 | With 30% Rat S9 | With 10% Hamster S9 |
|-------------------------------|------------|------------|-----------------|-----------------|---------------------|
| Vehicle Control ¹ | 202 ± 1.0 | 169 ± 10.1 | 179 ± 5.6 | 184 ± 14.6 | 202 ± 3.8 |
| 100.0 | 207 ± 6.5 | 183 ± 6.9 | 206 ± 3.8 | 177 ± 13.8 | 205 ± 3.7 |
| 333.0 | 175 ± 13.9 | 184 ± 15.3 | 200 ± 1.5 | 199 ± 7.1 | 195 ± 3.1 |
| 1000.0 | 194 ± 9.6 | 177 ± 11.3 | 200 ± 7.9 | 208 ± 2.5 | 196 ± 4.2 |
| 3333.0 | 208 ± 9.8 | 177 ± 4.0 | 215 ± 1.8 | 221 ± 4.7 | 203 ± 1.3 |
| 10000.0 | 214 ± 11.3 | 176 ± 8.7 | 203 ± 4.7 | 247 ± 25.3 | 188 ± 5.2 |
| Trial Summary | Negative | Negative | Negative | Negative | Negative |
| Positive Control ² | | | | | 573 ± 24.4 |
| Positive Control ³ | | | 393 ± 20.6 | 410 ± 18.9 | |
| Positive Control ⁷ | 335 ± 25.2 | 740 ± 15.2 | | | |

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Time Report Requested: 04:09:58

Strain: TA97

| Dose (ug/Plate) | With 30% Hamster S9 |
|-------------------------------|---------------------|
| Vehicle Control ¹ | 197 ± 7.6 |
| 100.0 | 190 ± 14.8 |
| 333.0 | 188 ± 4.5 |
| 1000.0 | 198 ± 12.7 |
| 3333.0 | 186 ± 12.6 |
| 10000.0 | 178 ± 26.9 |
| Trial Summary | Negative |
| Positive Control ² | |
| Positive Control ³ | 549 ± 47.2 |
| Positive Control ⁷ | |

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G06: Ames Summary Data

Test Compound: 1,4-Butanediol

CAS Number: 110-63-4

Date Report Requested: 09/14/2018

Time Report Requested: 04:09:58

Strain: TA98

| Dose (ug/Plate) | Without S9 | Without S9 | With 10% Rat S9 | With 30% Rat S9 | With 10% Hamster S9 |
|-------------------------------|------------|------------|-----------------|-----------------|---------------------|
| Vehicle Control ¹ | 26 ± 3.8 | 35 ± 0.6 | 41 ± 1.8 | 42 ± 5.3 | 37 ± 2.8 |
| 100.0 | 32 ± 2.7 | 30 ± 3.9 | 46 ± 1.2 | 33 ± 6.0 | 39 ± 2.2 |
| 333.0 | 27 ± 0.9 | 26 ± 4.3 | 38 ± 4.1 | 19 ± 0.9 | 41 ± 0.3 |
| 1000.0 | 18 ± 0.3 | 32 ± 4.1 | 39 ± 4.7 | 22 ± 2.0 | 37 ± 4.9 |
| 3333.0 | 23 ± 4.0 | 29 ± 1.2 | 37 ± 3.8 | 24 ± 2.6 | 40 ± 1.2 |
| 10000.0 | 26 ± 1.7 | 35 ± 0.9 | 42 ± 4.3 | 36 ± 5.2 | 39 ± 6.2 |
| Trial Summary | Negative | Negative | Negative | Negative | Negative |
| Positive Control ² | | | | | 934 ± 35.5 |
| Positive Control ³ | | | 408 ± 21.2 | 155 ± 14.3 | |
| Positive Control ⁸ | 432 ± 19.0 | 654 ± 57.2 | | | |

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Strain: TA98

| Dose (ug/Plate) | With 30% Hamster S9 |
|-------------------------------|---------------------|
| Vehicle Control ¹ | 31 ± 3.9 |
| 100.0 | 29 ± 2.1 |
| 333.0 | 25 ± 8.5 |
| 1000.0 | 24 ± 4.4 |
| 3333.0 | 23 ± 2.6 |
| 10000.0 | 35 ± 2.9 |
| Trial Summary | Negative |
| Positive Control ² | |
| Positive Control ³ | 467 ± 31.3 |
| Positive Control ⁸ | |

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LEGEND

Values given as Mean or Mean \pm Standard Error Mean

The number of samples = 3, unless samples marked toxic or contaminated were excluded from mean and SEM calculations

CAS Number = Chemical Abstracts Service registry number

1: Vehicle Control: Water

2: 0.5 ug/Plate 2-Aminoanthracene

3: 1.0 ug/Plate 2-Aminoanthracene

4: 2.5 ug/Plate 2-Aminoanthracene

5: 5.0 ug/Plate Sodium Azide

6: 5.0 ug/Plate 2-Aminoanthracene

7: 50.0 ug/Plate 9-Aminoacridine

8: 2.5 ug/Plate 4-Nitro-O-Phenylenediamine

**** END OF REPORT ****