

Experiment Number: 983397

Test Type: Genetic Toxicology - Bacterial
Mutagenicity

G06: Ames Summary Data

Test Compound: Isobutyl nitrite

CAS Number: 542-56-3

Date Report Requested: 09/18/2018

Time Report Requested: 07:07:57

NTP Study Number:

983397

Study Result:

Positive

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CAS Number: 542-56-3

Date Report Requested: 09/18/2018

Time Report Requested: 07:07:57

Strain: TA100

| Dose (ug/Plate) | Without S9 | With 30% Rat S9 | With 30% Rat S9 | With 30% Rat S9 | With 30% Rat S9 |
|-------------------------------|-------------------------|-------------------------|------------------------|------------------------|-----------------|
| Vehicle Control ¹ | 103 ± 1.5 | 150 ± 11.0 | 98 ± 8.2 | 110 ± 7.2 | 126 ± 5.2 |
| 33.0 | 105 ± 1.2 | 122 ± 4.2 | 116 ± 3.0 | | 149 ± 10.5 |
| 100.0 | 105 ± 5.0 | 159 ± 8.3 | 120 ± 2.7 | 119 ± 1.5 | 144 ± 11.7 |
| 333.0 | 110 ± 6.7 | 164 ± 7.5 | 151 ± 17.3 | | 140 ± 2.1 |
| 500.0 | | | | 175 ± 3.4 | |
| 667.0 | | | | | 193 ± 0.9 |
| 1000.0 | 133 ± 2.7 ^s | 246 ± 13.2 | 217 ± 33.0 | 231 ± 13.6 | 217 ± 7.8 |
| 1500.0 | | | | 169 ± 6.4 ^s | |
| 2000.0 | | | | 132 ± 3.4 ^s | |
| 3333.0 | 136 ± 15.9 ^s | 180 ± 13.8 ^s | 126 ± 4.0 ^s | | |
| Trial Summary | Negative | Equivocal | Weakly Positive | Positive | Weakly Positive |
| Positive Control ² | 328 ± 10.4 | | | | |
| Positive Control ³ | | | | | |
| Positive Control ⁴ | | 1243 ± 45.4 | 1392 ± 75.3 | 1951 ± 52.8 | 812 ± 7.9 |

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Strain: TA100

| Dose (ug/Plate) | With 30% Rat S9 | With 30% Hamster S9 | With 30% Hamster S9 | With 30% Hamster S9 | With 30% Hamster S9 |
|-------------------------------|-------------------------|------------------------|-------------------------|-------------------------|-------------------------|
| Vehicle Control ¹ | 101 ± 3.2 | 130 ± 5.5 | 100 ± 5.5 | 115 ± 3.3 | 136 ± 3.8 |
| 33.0 | | 131 ± 7.3 | 92 ± 1.9 | | 129 ± 5.4 |
| 100.0 | 101 ± 6.6 | 140 ± 5.6 | 106 ± 3.8 | 116 ± 8.5 | 146 ± 7.4 |
| 333.0 | 167 ± 7.3 | 154 ± 11.3 | 116 ± 3.8 | | |
| 500.0 | | | | 128 ± 3.2 | 145 ± 4.7 |
| 667.0 | 196 ± 4.9 | | | | |
| 1000.0 | 274 ± 3.3 | 242 ± 3.1 | 203 ± 16.2 | 184 ± 16.6 | 186 ± 9.0 |
| 1500.0 | 160 ± 21.0 ^s | | | 290 ± 18.5 | 171 ± 10.4 ^s |
| 2000.0 | | | | 184 ± 13.0 ^s | |
| 3333.0 | | 171 ± 5.4 ^s | 169 ± 11.6 ^s | | |
| Trial Summary | Positive | Weakly Positive | Weakly Positive | Positive | Equivocal |
| Positive Control ² | | | | | |
| Positive Control ³ | | 827 ± 31.2 | 1035 ± 47.9 | 441 ± 13.9 | 438 ± 13.3 |
| Positive Control ⁴ | 1369 ± 63.2 | | | | |

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Strain: TA100

| Dose (ug/Plate) | With 30% Hamster S9 |
|-------------------------------|------------------------|
| Vehicle Control ¹ | 108 ± 3.7 |
| 33.0 | |
| 100.0 | 99 ± 4.5 |
| 333.0 | 107 ± 1.5 |
| 500.0 | |
| 667.0 | 169 ± 10.7 |
| 1000.0 | 249 ± 18.2 |
| 1500.0 | 211 ± 3.9 ^s |
| 2000.0 | |
| 3333.0 | |
| Trial Summary | Positive |
| Positive Control ² | |
| Positive Control ³ | 502 ± 6.7 |
| Positive Control ⁴ | |

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

Test Compound: Isobutyl nitrite

CAS Number: 542-56-3

Date Report Requested: 09/18/2018

Time Report Requested: 07:07:57

Strain: TA1535

| Dose (ug/Plate) | With 30% Rat S9 | With 30% Rat S9 | With 30% Hamster S9 | With 30% Hamster S9 |
|-------------------------------|-----------------|-----------------------|-----------------------|-----------------------|
| Vehicle Control ¹ | 21 ± 2.0 | 14 ± 0.9 | 20 ± 1.9 | 9 ± 1.9 |
| 33.0 | 17 ± 3.0 | | 16 ± 1.5 | |
| 100.0 | 16 ± 1.2 | 14 ± 1.5 | 16 ± 0.7 | 12 ± 1.8 |
| 333.0 | 26 ± 1.7 | 22 ± 1.2 | | 19 ± 1.5 |
| 500.0 | | | 22 ± 1.7 | |
| 667.0 | 35 ± 2.7 | 37 ± 5.4 | | 30 ± 2.9 |
| 1000.0 | 45 ± 4.2 | 58 ± 4.9 | 53 ± 12.6 | 38 ± 3.8 |
| 1500.0 | | 49 ± 2.9 ^s | 69 ± 6.1 ^s | 70 ± 6.7 ^s |
| Trial Summary | Weakly Positive | Positive | Positive | Positive |
| Positive Control ³ | | | 170 ± 7.6 | 122 ± 5.0 |
| Positive Control ⁴ | 116 ± 9.0 | 263 ± 15.6 | | |

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G06: Ames Summary Data

Test Compound: Isobutyl nitrite

CAS Number: 542-56-3

Date Report Requested: 09/18/2018

Time Report Requested: 07:07:57

Strain: TA98

| Dose (ug/Plate) | Without S9 | With 30% Rat S9 | With 30% Hamster S9 |
|-------------------------------|-----------------------|------------------------|----------------------------|
| Vehicle Control ¹ | 18 ± 2.0 | 31 ± 1.2 | 34 ± 2.2 |
| 33.0 | 21 ± 1.5 | 31 ± 3.2 | 29 ± 0.9 |
| 100.0 | 15 ± 1.9 | 32 ± 4.7 | 30 ± 2.1 |
| 333.0 | 19 ± 4.0 | 32 ± 4.9 | 37 ± 1.0 |
| 1000.0 | 15 ± 0.6 ^s | 44 ± 2.8 | 43 ± 5.0 |
| 3333.0 | 8 ± 0.3 ^s | 27 ± 4.2 ^s | 21 ± 2.8 ^s |
| Trial Summary | Negative | Negative | Negative |
| Positive Control ⁵ | | | 169 ± 10.4 |
| Positive Control ³ | | 412 ± 6.8 | |
| Positive Control ⁶ | 321 ± 22.4 | | |

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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: Dimethyl Sulfoxide

2: 0.5 ug/Plate Sodium Azide

3: 1.0 ug/Plate 2-Aminoanthracene

4: 2.0 ug/Plate 2-Aminoanthracene

5: 0.4 ug/Plate 2-Aminoanthracene

6: 1.0 ug/Plate 4-Nitro-O-Phenylenediamine

s: Slight Toxicity

**** END OF REPORT ****