

Experiment Number: 453451

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

G06: Ames Summary Data

Test Compound: **Isoprene**

CAS Number: **78-79-5**

Date Report Requested: **09/11/2018**

Time Report Requested: **04:01:01**

NTP Study Number:

453451

Study Result:

Negative

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Mutagenicity

G06: Ames Summary Data

Test Compound: Isoprene

CAS Number: 78-79-5

Date Report Requested: 09/11/2018

Time Report Requested: 04:01:01

Strain: TA100

| Dose (ug/Plate) | Without S9 | Without S9 | With 10% Rat S9 | With 10% Rat S9 | With 10% Hamster S9 |
|-------------------------------|-----------------------|-----------------------|-----------------------|-----------------|------------------------|
| Vehicle Control ¹ | 90 ± 6.0 | 95 ± 10.4 | 105 ± 11.6 | 97 ± 3.5 | 111 ± 9.8 |
| 100.0 | 103 ± 6.7 | 83 ± 3.7 | 90 ± 4.7 | 93 ± 7.8 | 109 ± 5.4 |
| 333.0 | 111 ± 9.9 | 85 ± 8.7 | 101 ± 6.4 | 80 ± 3.5 | 108 ± 4.4 |
| 1000.0 | 92 ± 4.1 | 81 ± 3.8 | 109 ± 10.5 | 94 ± 3.9 | 110 ± 2.7 |
| 3333.0 | 98 ± 13.6 | 73 ± 7.5 | 97 ± 6.4 | 90 ± 6.7 | 102 ± 8.1 |
| 10000.0 | 83 ± 3.7 ^s | 56 ± 9.2 ^s | 90 ± 6.4 ^s | 94 ± 6.9 | 84 ± 12.2 ^s |
| Trial Summary | Negative | Negative | Negative | Negative | Negative |
| Positive Control ² | 377 ± 7.5 | 288 ± 2.0 | | | |
| Positive Control ³ | | | 399 ± 24.4 | 491 ± 19.1 | 1379 ± 19.9 |

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Time Report Requested: **04:01:01**

Strain: TA100

| Dose (ug/Plate) | With 10% Hamster S9 |
|-------------------------------|----------------------------|
| Vehicle Control ¹ | 101 ± 5.5 |
| 100.0 | 87 ± 8.5 |
| 333.0 | 117 ± 5.1 |
| 1000.0 | 102 ± 1.9 |
| 3333.0 | 79 ± 2.4 |
| 10000.0 | 85 ± 5.4 |
| Trial Summary | Negative |
| Positive Control ² | |
| Positive Control ³ | 1071 ± 51.0 |

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Test Compound: Isoprene

CAS Number: 78-79-5

Date Report Requested: 09/11/2018

Time Report Requested: 04:01:01

Strain: TA1535

| Dose (ug/Plate) | Without S9 | Without S9 | With 10% Rat S9 | With 10% Rat S9 | With 10% Hamster S9 |
|-------------------------------|----------------------|----------------------|----------------------|-----------------|----------------------|
| Vehicle Control ¹ | 28 ± 5.4 | 20 ± 3.7 | 7 ± 0.3 | 5 ± 0.3 | 9 ± 3.3 |
| 100.0 | 23 ± 2.5 | 16 ± 2.5 | 10 ± 1.2 | 5 ± 0.0 | 9 ± 1.3 |
| 333.0 | 24 ± 4.3 | 15 ± 2.0 | 12 ± 1.5 | 6 ± 0.3 | 11 ± 2.5 |
| 1000.0 | 20 ± 4.6 | 12 ± 3.7 | 6 ± 0.6 | 6 ± 0.7 | 8 ± 0.9 |
| 3333.0 | 14 ± 0.7 | 10 ± 0.0 | 11 ± 1.2 | 6 ± 1.5 | 6 ± 0.3 |
| 10000.0 | 9 ± 2.2 ^s | 0 ± 0.0 ^s | 5 ± 1.8 ^s | 2 ± 0.3 | 5 ± 1.2 ^s |
| Trial Summary | Negative | Negative | Negative | Negative | Negative |
| Positive Control ² | 440 ± 6.9 | 282 ± 15.0 | | | |
| Positive Control ⁴ | | | 162 ± 6.1 | 136 ± 10.9 | 482 ± 29.5 |

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Time Report Requested: **04:01:01**

Strain: TA1535

| Dose (ug/Plate) | With 10% Hamster S9 |
|-------------------------------|----------------------------|
| Vehicle Control ¹ | 7 ± 0.9 |
| 100.0 | 5 ± 0.0 |
| 333.0 | 8 ± 2.8 |
| 1000.0 | 7 ± 1.0 |
| 3333.0 | 6 ± 0.3 |
| 10000.0 | 6 ± 1.5 |
| Trial Summary | Negative |
| Positive Control ² | |
| Positive Control ⁴ | 331 ± 20.1 |

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Test Compound: Isoprene

CAS Number: 78-79-5

Date Report Requested: 09/11/2018

Time Report Requested: 04:01:01

Strain: TA1537

| Dose (ug/Plate) | Without S9 | Without S9 | With 10% Rat S9 | With 10% Rat S9 | With 10% Hamster S9 |
|-------------------------------|----------------------|----------------------|----------------------|-----------------|----------------------|
| Vehicle Control ¹ | 6 ± 1.2 | 7 ± 1.8 | 8 ± 1.2 | 6 ± 1.5 | 8 ± 0.9 |
| 100.0 | 5 ± 1.2 | 3 ± 0.6 | 8 ± 0.9 | 6 ± 0.7 | 6 ± 0.9 |
| 333.0 | 5 ± 1.5 | 4 ± 0.7 | 9 ± 1.0 | 4 ± 0.3 | 7 ± 0.7 |
| 1000.0 | 7 ± 1.8 | 4 ± 0.9 | 7 ± 0.7 | 4 ± 0.6 | 5 ± 0.9 |
| 3333.0 | 5 ± 0.9 | 2 ± 0.0 | 3 ± 0.6 | 2 ± 0.3 | 5 ± 1.0 |
| 10000.0 | 4 ± 1.0 ^s | 4 ± 1.0 ^s | 5 ± 0.9 ^s | 6 ± 0.6 | 4 ± 1.2 ^s |
| Trial Summary | Negative | Negative | Negative | Negative | Negative |
| Positive Control ⁴ | | | 163 ± 25.6 | 141 ± 12.3 | 457 ± 9.5 |
| Positive Control ⁵ | 317 ± 31.7 | 178 ± 49.6 | | | |

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Date Report Requested: **09/11/2018**

Time Report Requested: **04:01:01**

Strain: TA1537

| Dose (ug/Plate) | With 10% Hamster S9 |
|-------------------------------|----------------------------|
| Vehicle Control ¹ | 5 ± 2.0 |
| 100.0 | 6 ± 1.2 |
| 333.0 | 5 ± 1.2 |
| 1000.0 | 7 ± 1.2 |
| 3333.0 | 7 ± 1.2 |
| 10000.0 | 3 ± 0.9 |
| Trial Summary | Negative |
| Positive Control ⁴ | 224 ± 47.5 |
| Positive Control ⁵ | |

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Date Report Requested: 09/11/2018

Time Report Requested: 04:01:01

Strain: TA98

| Dose (ug/Plate) | Without S9 | Without S9 | With 10% Rat S9 | With 10% Rat S9 | With 10% Hamster S9 |
|-------------------------------|-----------------------|----------------------|-----------------------|-----------------|-----------------------|
| Vehicle Control ¹ | 16 ± 1.2 | 15 ± 1.2 | 24 ± 1.0 | 22 ± 4.4 | 27 ± 4.6 |
| 100.0 | 16 ± 1.8 | 13 ± 2.5 | 26 ± 1.5 | 16 ± 4.0 | 22 ± 5.1 |
| 333.0 | 16 ± 1.5 | 16 ± 4.4 | 22 ± 3.7 | 20 ± 0.9 | 22 ± 4.4 |
| 1000.0 | 17 ± 2.1 | 13 ± 2.8 | 19 ± 2.0 | 15 ± 4.9 | 21 ± 3.0 |
| 3333.0 | 13 ± 0.3 | 13 ± 1.8 | 22 ± 1.0 | 17 ± 2.2 | 20 ± 2.3 |
| 10000.0 | 10 ± 3.4 ^s | 2 ± 2.3 ^s | 18 ± 1.5 ^s | 13 ± 2.6 | 17 ± 3.7 ^s |
| Trial Summary | Negative | Negative | Negative | Negative | Negative |
| Positive Control ³ | | | 285 ± 17.7 | 465 ± 14.7 | 1128 ± 60.2 |
| Positive Control ⁶ | 388 ± 21.7 | 300 ± 21.9 | | | |

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Test Compound: **Isoprene**

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Date Report Requested: **09/11/2018**

Time Report Requested: **04:01:01**

Strain: TA98

| Dose (ug/Plate) | With 10% Hamster S9 |
|-------------------------------|----------------------------|
| Vehicle Control ¹ | 22 ± 1.7 |
| 100.0 | 21 ± 2.1 |
| 333.0 | 16 ± 1.3 |
| 1000.0 | 22 ± 2.7 |
| 3333.0 | 22 ± 1.5 |
| 10000.0 | 17 ± 1.9 |
| Trial Summary | Negative |
| Positive Control ³ | 926 ± 57.1 |
| Positive Control ⁶ | |

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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: 1.0 ug/Plate Sodium Azide

3: 1.0 ug/Plate 2-Aminoanthracene

4: 2.5 ug/Plate 2-Aminoanthracene

5: 50.0 ug/Plate 9-Aminoacridine

6: 5.0 ug/Plate 4-Nitro-O-Phenylenediamine

s: Slight Toxicity

**** END OF REPORT ****