

Experiment Number: 502259

Test Type: Genetic Toxicology - Bacterial  
Mutagenicity

**G06: Ames Summary Data**

Test Compound: Anise oil

CAS Number: 8007-70-3

Date Report Requested: 09/12/2018

Time Report Requested: 05:19:15

**NTP Study Number:**

502259

**Study Result:**

Negative

Experiment Number: 502259

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Mutagenicity

## G06: Ames Summary Data

Test Compound: Anise oil

CAS Number: 8007-70-3

Date Report Requested: 09/12/2018

Time Report Requested: 05:19:15

## Strain: TA100

| Dose (ug/Plate)               | Without S9 | Without S9 | With 5% Rat S9         | With 10% Rat S9        | With 30% Rat S9 |
|-------------------------------|------------|------------|------------------------|------------------------|-----------------|
| Vehicle Control <sup>1</sup>  | 96 ± 5.9   | 107 ± 4.9  | 132 ± 4.8              | 129 ± 2.7              | 138 ± 6.6       |
| 0.3                           | 108 ± 4.2  | 111 ± 1.2  |                        |                        |                 |
| 1.0                           | 99 ± 1.2   | 118 ± 6.4  |                        |                        |                 |
| 3.0                           | 95 ± 1.8   | 114 ± 5.5  |                        |                        |                 |
| 10.0                          | 105 ± 11.6 | 92 ± 7.2   | 133 ± 2.7              | 148 ± 2.4              | 144 ± 7.8       |
| 33.0                          | 112 ± 10.2 | 115 ± 13.6 | 121 ± 2.3              | 131 ± 8.3              | 152 ± 1.2       |
| 100.0                         |            |            | 135 ± 10.0             | 143 ± 12.0             | 176 ± 7.2       |
| 333.0                         |            |            | 129 ± 9.7              | 92 ± 3.9               | 233 ± 11.9      |
| 666.0                         |            |            | 40 ± 22.2 <sup>s</sup> | 26 ± 12.3 <sup>s</sup> |                 |
| 1000.0                        |            |            |                        |                        | 162 ± 4.5       |
| Trial Summary                 | Negative   | Negative   | Negative               | Negative               | Weakly Positive |
| Positive Control <sup>2</sup> |            |            |                        |                        |                 |
| Positive Control <sup>3</sup> |            |            | 355 ± 20.2             | 308 ± 14.4             |                 |
| Positive Control <sup>4</sup> |            |            |                        |                        | 378 ± 29.9      |
| Positive Control <sup>5</sup> | 509 ± 33.7 | 682 ± 34.6 |                        |                        |                 |

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G06: Ames Summary Data  
Test Compound: Anise oil  
CAS Number: 8007-70-3

Date Report Requested: 09/12/2018  
Time Report Requested: 05:19:15

Strain: TA100

| Dose (ug/Plate)               | With 30% Rat S9 | With 10% Hamster S9 | With 30% Hamster S9 |
|-------------------------------|-----------------|---------------------|---------------------|
| Vehicle Control <sup>1</sup>  | 143 ± 5.8       | 117 ± 5.0           | 137 ± 6.3           |
| 0.3                           |                 |                     |                     |
| 1.0                           |                 |                     |                     |
| 3.0                           |                 |                     |                     |
| 10.0                          | 149 ± 6.1       | 104 ± 8.0           | 146 ± 8.0           |
| 33.0                          | 141 ± 3.5       | 101 ± 13.9          | 131 ± 3.0           |
| 100.0                         | 143 ± 2.0       | 107 ± 6.3           | 129 ± 4.0           |
| 333.0                         | 141 ± 2.0       | 103 ± 12.2          | 142 ± 0.3           |
| 666.0                         | 145 ± 1.9       |                     |                     |
| 1000.0                        |                 | Toxic               | 85 ± 6.5            |
| Trial Summary                 | Negative        | Negative            | Negative            |
| Positive Control <sup>2</sup> |                 | 476 ± 18.4          |                     |
| Positive Control <sup>3</sup> |                 |                     | 442 ± 20.0          |
| Positive Control <sup>4</sup> | 355 ± 7.9       |                     |                     |
| Positive Control <sup>5</sup> |                 |                     |                     |

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## G06: Ames Summary Data

Test Compound: Anise oil  
CAS Number: 8007-70-3

Date Report Requested: 09/12/2018

Time Report Requested: 05:19:15

## Strain: TA1535

| Dose (ug/Plate)               | Without S9 | Without S9 | With 5% Rat S9       | With 10% Rat S9 | With 30% Rat S9 |
|-------------------------------|------------|------------|----------------------|-----------------|-----------------|
| Vehicle Control <sup>1</sup>  | 9 ± 0.7    | 10 ± 1.0   | 17 ± 1.8             | 16 ± 0.7        | 14 ± 1.2        |
| 0.3                           | 9 ± 0.6    | 10 ± 0.3   |                      |                 |                 |
| 1.0                           | 9 ± 2.0    | 11 ± 1.8   |                      |                 |                 |
| 3.0                           | 7 ± 0.0    | 9 ± 0.9    |                      |                 |                 |
| 10.0                          | 6 ± 1.0    | 8 ± 0.9    | 15 ± 0.7             | 16 ± 1.5        | 18 ± 0.6        |
| 33.0                          | 7 ± 0.9    | 8 ± 2.1    | 17 ± 1.8             | 15 ± 2.2        | 17 ± 2.5        |
| 100.0                         |            |            | 16 ± 2.5             | 16 ± 1.5        | 19 ± 3.5        |
| 333.0                         |            |            | 14 ± 5.6             | 13 ± 0.7        | 18 ± 1.5        |
| 666.0                         |            |            | 2 ± 0.5 <sup>s</sup> | Toxic           | 17 ± 2.0        |
| 1000.0                        |            |            |                      |                 |                 |
| Trial Summary                 | Negative   | Negative   | Negative             | Negative        | Negative        |
| Positive Control <sup>3</sup> |            |            |                      |                 |                 |
| Positive Control <sup>4</sup> |            |            | 154 ± 1.9            | 168 ± 7.0       |                 |
| Positive Control <sup>5</sup> | 863 ± 22.8 | 634 ± 40.8 |                      |                 |                 |
| Positive Control <sup>6</sup> |            |            |                      |                 | 149 ± 3.8       |

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G06: Ames Summary Data  
Test Compound: Anise oil  
CAS Number: 8007-70-3

Date Report Requested: 09/12/2018  
Time Report Requested: 05:19:15

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Strain: TA1535

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| Dose (ug/Plate)               | With 10% Hamster S9  | With 30% Hamster S9 |
|-------------------------------|----------------------|---------------------|
| Vehicle Control <sup>1</sup>  | 10 ± 0.9             | 9 ± 1.5             |
| 0.3                           |                      |                     |
| 1.0                           |                      |                     |
| 3.0                           |                      |                     |
| 10.0                          | 13 ± 1.9             | 12 ± 1.2            |
| 33.0                          | 9 ± 0.7              | 10 ± 0.6            |
| 100.0                         | 10 ± 1.7             | 7 ± 0.3             |
| 333.0                         | 10 ± 0.7             | 12 ± 1.9            |
| 666.0                         |                      |                     |
| 1000.0                        | 6 ± 3.0 <sup>s</sup> | 8 ± 1.8             |
| Trial Summary                 | Negative             | Negative            |
| Positive Control <sup>3</sup> | 129 ± 6.3            |                     |
| Positive Control <sup>4</sup> |                      | 126 ± 5.2           |
| Positive Control <sup>5</sup> |                      |                     |
| Positive Control <sup>6</sup> |                      |                     |

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Test Type: Genetic Toxicology - Bacterial  
Mutagenicity

## G06: Ames Summary Data

Test Compound: Anise oil

CAS Number: 8007-70-3

Date Report Requested: 09/12/2018

Time Report Requested: 05:19:15

## Strain: TA97

| Dose (ug/Plate)               | Without S9 | Without S9 | With 10% Rat S9 | With 30% Rat S9 | With 10% Hamster S9 |
|-------------------------------|------------|------------|-----------------|-----------------|---------------------|
| Vehicle Control <sup>1</sup>  | 116 ± 6.4  | 121 ± 6.2  | 132 ± 3.8       | 141 ± 8.4       | 132 ± 1.7           |
| 0.3                           | 119 ± 4.4  | 119 ± 5.9  |                 |                 |                     |
| 1.0                           | 114 ± 1.5  | 118 ± 6.2  |                 |                 |                     |
| 3.0                           | 115 ± 4.3  | 121 ± 3.8  |                 |                 |                     |
| 10.0                          | 119 ± 2.5  | 124 ± 3.4  | 139 ± 2.1       | 128 ± 5.0       | 129 ± 7.0           |
| 33.0                          | 124 ± 1.5  | 118 ± 11.0 | 146 ± 3.5       | 139 ± 19.9      | 133 ± 5.8           |
| 100.0                         |            |            | 133 ± 4.0       | 149 ± 10.0      | 139 ± 6.1           |
| 333.0                         |            |            | 104 ± 8.4       | 158 ± 5.4       | 121 ± 7.8           |
| 1000.0                        |            |            | Toxic           | 74 ± 15.9       | Toxic               |
| Trial Summary                 | Negative   | Negative   | Negative        | Negative        | Negative            |
| Positive Control <sup>2</sup> |            |            |                 |                 | 629 ± 30.7          |
| Positive Control <sup>3</sup> |            |            | 373 ± 16.7      |                 |                     |
| Positive Control <sup>4</sup> |            |            |                 | 261 ± 24.2      |                     |
| Positive Control <sup>7</sup> | 345 ± 8.7  | 279 ± 23.6 |                 |                 |                     |

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G06: Ames Summary Data  
Test Compound: Anise oil  
CAS Number: 8007-70-3

Date Report Requested: 09/12/2018  
Time Report Requested: 05:19:15

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Strain: TA97

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| Dose (ug/Plate)               | With 30% Hamster S9  |
|-------------------------------|----------------------|
| Vehicle Control <sup>1</sup>  | 107 ± 2.1            |
| 0.3                           |                      |
| 1.0                           |                      |
| 3.0                           |                      |
| 10.0                          | 103 ± 7.3            |
| 33.0                          | 126 ± 5.8            |
| 100.0                         | 127 ± 7.2            |
| 333.0                         | 143 ± 3.7            |
| 1000.0                        | 0 ± 0.0 <sup>x</sup> |
| Trial Summary                 | Negative             |
| Positive Control <sup>2</sup> |                      |
| Positive Control <sup>3</sup> | 226 ± 9.4            |
| Positive Control <sup>4</sup> |                      |
| Positive Control <sup>7</sup> |                      |

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## G06: Ames Summary Data

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Test Type: Genetic Toxicology - Bacterial  
Mutagenicity

Test Compound: Anise oil

Time Report Requested: 05:19:15

CAS Number: 8007-70-3

## Strain: TA98

| Dose (ug/Plate)               | Without S9 | Without S9 | With 10% Rat S9       | With 30% Rat S9 | With 10% Hamster S9   |
|-------------------------------|------------|------------|-----------------------|-----------------|-----------------------|
| Vehicle Control <sup>1</sup>  | 21 ± 4.8   | 14 ± 0.9   | 10 ± 6.1              | 26 ± 3.0        | 18 ± 1.9              |
| 0.0                           |            |            |                       |                 |                       |
| 0.3                           | 17 ± 0.7   | 15 ± 0.9   |                       |                 |                       |
| 1.0                           | 23 ± 2.9   | 10 ± 2.5   |                       |                 |                       |
| 3.0                           | 19 ± 0.9   | 12 ± 0.3   |                       |                 |                       |
| 10.0                          | 20 ± 2.0   | 15 ± 1.3   | 18 ± 2.2              | 29 ± 0.3        | 15 ± 1.2              |
| 33.0                          | 21 ± 2.0   | 15 ± 1.2   | 17 ± 0.7              | 28 ± 6.5        | 23 ± 2.6              |
| 100.0                         |            |            | 18 ± 1.8              | 34 ± 2.5        | 19 ± 2.6              |
| 333.0                         |            |            | 16 ± 0.6 <sup>s</sup> | 25 ± 1.0        | 15 ± 0.7 <sup>s</sup> |
| 1000.0                        |            |            | Toxic                 | 25 ± 3.3        | Toxic                 |
| Trial Summary                 | Negative   | Negative   | Negative              | Negative        | Negative              |
| Positive Control <sup>2</sup> |            |            |                       |                 | 367 ± 33.4            |
| Positive Control <sup>3</sup> |            |            | 232 ± 13.2            | 164 ± 13.9      |                       |
| Positive Control <sup>8</sup> | 348 ± 13.9 | 291 ± 21.1 |                       |                 |                       |



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Strain: TA98

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| Dose (ug/Plate)               | With 30% Hamster S9 |
|-------------------------------|---------------------|
| Vehicle Control <sup>1</sup>  | 22 ± 1.9            |
| 0.0                           | 0 ± 0.0             |
| 0.3                           |                     |
| 1.0                           |                     |
| 3.0                           |                     |
| 10.0                          | 25 ± 3.4            |
| 33.0                          | 23 ± 1.9            |
| 100.0                         | 24 ± 4.9            |
| 333.0                         | 16 ± 8.5            |
| 1000.0                        | 21 ± 1.9            |
| Trial Summary                 | Negative            |
| Positive Control <sup>2</sup> |                     |
| Positive Control <sup>3</sup> | 227 ± 2.9           |
| Positive Control <sup>8</sup> |                     |

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### **LEGEND**

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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 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

s: Slight Toxicity

x: Slight Toxicity and Precipitate

**\*\* END OF REPORT \*\***