

Experiment Number: **A40902**

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

G06: Ames Summary Data

Test Compound: **Lemon oil**

CAS Number: **8008-56-8**

Date Report Requested: **09/16/2018**

Time Report Requested: **21:52:37**

NTP Study Number:

A40902

Study Result:

Negative

Experiment Number: A40902

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G06: Ames Summary Data

Test Compound: Lemon oil
CAS Number: 8008-56-8

Date Report Requested: 09/16/2018

Time Report Requested: 21:52:37

Strain: TA100

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 30% Rat S9	With 10% Hamster S9
Vehicle Control ¹	144 ± 12.3	159 ± 11.0	176 ± 8.2	147 ± 4.0	161 ± 5.1
1.0	153 ± 6.3	174 ± 3.3			
3.3	130 ± 2.9	177 ± 2.0	147 ± 9.5	127 ± 3.5	138 ± 6.1
10.0	166 ± 2.3	147 ± 6.8	169 ± 9.0	125 ± 0.9	152 ± 6.4
20.0	130 ± 5.2	131 ± 1.9 ^s			
33.0	137 ± 6.9 ^s	70 ± 8.3 ^s	156 ± 4.5	143 ± 2.2	152 ± 7.3
100.0			132 ± 2.1	121 ± 5.6	108 ± 2.9
333.0			97 ± 10.2 ^s	136 ± 2.0 ^s	83 ± 23.1 ^s
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ²					989 ± 59.5
Positive Control ³	332 ± 28.1	560 ± 22.2			
Positive Control ⁴			783 ± 64.8		
Positive Control ⁵					
Positive Control ⁶				375 ± 10.6	

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Time Report Requested: 21:52:37

Strain: TA100

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	133 ± 9.8
1.0	
3.3	145 ± 7.9
10.0	137 ± 3.5
20.0	
33.0	147 ± 4.5
100.0	123 ± 7.2
333.0	111 ± 7.9 ^s
Trial Summary	Negative
Positive Control ²	
Positive Control ³	
Positive Control ⁴	
Positive Control ⁵	758 ± 42.8
Positive Control ⁶	

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Date Report Requested: 09/16/2018
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Strain: TA1535

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 30% Rat S9	With 10% Hamster S9
Vehicle Control ¹	26 ± 1.5	20 ± 3.3	12 ± 2.2	21 ± 1.3	12 ± 0.6
1.0	33 ± 1.3	22 ± 3.2			
3.3	31 ± 2.9	15 ± 2.0	14 ± 0.7	18 ± 3.3	12 ± 2.5
10.0	32 ± 4.5	19 ± 0.9	13 ± 2.3	16 ± 0.0	13 ± 2.2
20.0	22 ± 2.7	15 ± 4.4			
33.0	18 ± 0.3 ^s	10 ± 1.3 ^s	11 ± 1.7	22 ± 2.5	11 ± 1.9
100.0			14 ± 1.0	23 ± 5.0	8 ± 0.9
333.0			7 ± 2.9 ^s	15 ± 1.5 ^s	6 ± 1.2 ^s
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ²					138 ± 5.5
Positive Control ³	258 ± 29.7	311 ± 12.7			
Positive Control ⁵					
Positive Control ⁶			271 ± 28.3	207 ± 10.9	

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Test Compound: Lemon oil
CAS Number: 8008-56-8

Date Report Requested: 09/16/2018
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Strain: TA1535

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	22 ± 2.6
1.0	
3.3	17 ± 1.5
10.0	24 ± 4.8
20.0	
33.0	19 ± 5.7
100.0	21 ± 5.5
333.0	11 ± 1.2 ^s
Trial Summary	Negative
Positive Control ²	
Positive Control ³	
Positive Control ⁵	224 ± 5.6
Positive Control ⁶	

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Date Report Requested: 09/16/2018
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Strain: TA97

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 30% Rat S9	With 10% Hamster S9
Vehicle Control ¹	134 ± 5.8	167 ± 13.9	181 ± 10.3	178 ± 7.4	182 ± 9.0
1.0	149 ± 14.7	170 ± 6.6			
3.3	134 ± 4.0	178 ± 6.0	172 ± 6.6	175 ± 14.2	194 ± 2.3
10.0	99 ± 20.2	157 ± 6.0	169 ± 9.9	167 ± 14.2	191 ± 6.4
20.0	133 ± 2.7	145 ± 8.6			
33.0	76 ± 8.1 ^s	93 ± 10.2 ^s	156 ± 2.3	168 ± 8.7	197 ± 3.5
100.0			161 ± 14.5	157 ± 11.9	139 ± 11.6
333.0			113 ± 8.8 ^s	100 ± 5.5 ^s	102 ± 11.3 ^s
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ⁴					1393 ± 140.5
Positive Control ⁶			1295 ± 89.5	646 ± 25.1	
Positive Control ⁷	621 ± 9.8	612 ± 29.5			

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Date Report Requested: 09/16/2018
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Strain: TA97

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	170 ± 8.3
1.0	
3.3	171 ± 14.8
10.0	177 ± 11.4
20.0	
33.0	195 ± 8.4
100.0	152 ± 14.2
333.0	132 ± 20.2 ^s
Trial Summary	Negative
Positive Control ⁴	
Positive Control ⁶	1486 ± 40.6
Positive Control ⁷	

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Strain: TA98

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 30% Rat S9	With 10% Hamster S9
Vehicle Control ¹	17 ± 1.2	14 ± 2.0	21 ± 3.8	22 ± 3.8	22 ± 2.0
1.0	15 ± 2.5	14 ± 1.2			
3.3	14 ± 2.0	18 ± 5.0	22 ± 3.3	20 ± 4.1	26 ± 1.2
10.0	14 ± 0.6	17 ± 0.3	28 ± 2.2	17 ± 2.3	26 ± 0.9
20.0	12 ± 2.6	12 ± 1.5			
33.0	8 ± 0.9 ^s	9 ± 2.5 ^s	22 ± 11.0	17 ± 2.1	19 ± 0.7
100.0			21 ± 0.9	16 ± 2.0	21 ± 2.5
333.0			13 ± 1.8 ^s	20 ± 0.3 ^s	7 ± 3.1 ^s
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ²			455 ± 32.3		969 ± 65.4
Positive Control ⁵				127 ± 26.6	
Positive Control ⁸	75 ± 11.4	102 ± 8.2			

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Strain: TA98

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	22 ± 1.8
1.0	
3.3	18 ± 1.5
10.0	32 ± 2.7
20.0	
33.0	25 ± 1.9
100.0	17 ± 1.2
333.0	15 ± 1.2 ^s
Trial Summary	Negative
Positive Control ²	
Positive Control ⁵	717 ± 41.1
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: Dimethyl Sulfoxide
- 2: 0.4 ug/Plate 2-Aminoanthracene
- 3: 0.5 ug/Plate Sodium Azide
- 4: 0.75 ug/Plate 2-Aminoanthracene
- 5: 1.0 ug/Plate 2-Aminoanthracene
- 6: 2.0 ug/Plate 2-Aminoanthracene
- 7: 24.0 ug/Plate 9-Aminoacridine
- 8: 1.0 ug/Plate 4-Nitro-O-Phenylenediamine
- s: Slight Toxicity

** END OF REPORT **