

Experiment Number: 928398

Test Type: Genetic Toxicology - Bacterial
Mutagenicity

G06: Ames Summary Data

Test Compound: 2,4-Toluene diisocyanate

CAS Number: 584-84-9

Date Report Requested: 09/17/2018

Time Report Requested: 07:44:36

NTP Study Number:

928398

Study Result:

Positive

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Strain: TA100

Dose (ug/Plate)	Without S9	With 10% Rat S9	With 10% Rat S9	With 10% Rat S9	With 10% Hamster S9
Vehicle Control ¹	101 ± 4.7	120 ± 7.4	91 ± 5.8	113 ± 1.2	118 ± 6.2
33.0	101 ± 3.3	143 ± 7.7	124 ± 11.6	139 ± 15.4	169 ± 2.6
100.0	99 ± 4.9	179 ± 9.2	152 ± 4.8	180 ± 10.8	196 ± 15.8
333.0	98 ± 0.3	280 ± 39.9	163 ± 9.8	248 ± 8.5	226 ± 17.5
666.0			201 ± 18.3	273 ± 11.6	
1000.0	95 ± 2.6 ^p	287 ± 8.1 ^p	160 ± 6.7 ^p	259 ± 5.2 ^p	232 ± 7.7 ^p
1666.0		278 ± 28.6 ^p			179 ± 3.3 ^p
3333.0	11 ± 11.3 ^x				
Trial Summary	Negative	Positive	Weakly Positive	Positive	Positive
Positive Control ²					910 ± 24.5
Positive Control ³		491 ± 7.5	504 ± 37.7	307 ± 10.4	
Positive Control ⁴	640 ± 21.2				

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Strain: TA100

Dose (ug/Plate)	With 10% Hamster S9	With 10% Hamster S9
Vehicle Control ¹	89 ± 6.7	99 ± 5.6
33.0	110 ± 2.5	125 ± 9.8
100.0	141 ± 1.5	195 ± 11.1
333.0	185 ± 27.5	183 ± 7.9
666.0	194 ± 14.1	256 ± 13.8
1000.0	197 ± 17.1 ^p	225 ± 16.8 ^p
1666.0		
3333.0		
Trial Summary	Positive	Positive
Positive Control ²	638 ± 7.6	408 ± 14.0
Positive Control ³		
Positive Control ⁴		

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Strain: TA1535

Dose (ug/Plate)	Without S9	With 10% Rat S9	With 10% Hamster S9
Vehicle Control ¹	19 ± 1.0	9 ± 0.3	11 ± 2.7
33.0	21 ± 4.4	9 ± 0.0	13 ± 1.5
100.0	15 ± 0.3	12 ± 1.5	12 ± 2.2
333.0	15 ± 2.3	8 ± 1.8	10 ± 1.9
1000.0	11 ± 2.3 ^P	8 ± 1.8 ^P	11 ± 2.2 ^P
1666.0		10 ± 2.1 ^P	6 ± 2.3 ^P
3333.0	0 ± 0.0 ^X		
Trial Summary	Negative	Negative	Negative
Positive Control ³			308 ± 7.7
Positive Control ⁴	534 ± 16.4		
Positive Control ⁵		198 ± 8.4	

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Strain: TA97

Dose (ug/Plate)	Without S9	With 10% Rat S9	With 10% Rat S9	With 10% Hamster S9	With 10% Hamster S9
Vehicle Control ¹	120 ± 9.4	197 ± 1.9	120 ± 4.9	157 ± 19.5	109 ± 3.0
33.0	142 ± 13.9	210 ± 6.4	128 ± 6.0	205 ± 7.4	137 ± 16.7
100.0	141 ± 2.6	216 ± 16.9	154 ± 15.0	223 ± 8.3	148 ± 7.4
333.0	139 ± 3.8	228 ± 32.2	178 ± 4.9	245 ± 9.7	150 ± 6.9
1000.0	120 ± 14.3 ^P	202 ± 6.9 ^P	162 ± 5.3 ^P	211 ± 10.3 ^P	147 ± 7.3 ^P
1666.0		213 ± 15.5 ^P	176 ± 11.3 ^P	180 ± 7.7 ^P	168 ± 4.9 ^P
3333.0	11 ± 10.3 ^X				
Trial Summary	Negative	Negative	Equivocal	Equivocal	Equivocal
Positive Control ²				534 ± 21.7	404 ± 18.3
Positive Control ³		373 ± 17.3	327 ± 15.9		
Positive Control ⁶	876 ± 60.1				

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Strain: TA98

Dose (ug/Plate)	Without S9	With 10% Rat S9	With 10% Rat S9	With 10% Hamster S9	With 10% Hamster S9
Vehicle Control ¹	20 ± 2.7	27 ± 2.5	17 ± 0.9	31 ± 3.0	33 ± 2.0
33.0	15 ± 1.0	25 ± 2.9	26 ± 2.4	60 ± 2.6	41 ± 4.4
100.0	11 ± 1.8	31 ± 1.5	38 ± 0.3	120 ± 4.2	73 ± 3.4
333.0	13 ± 3.5	48 ± 3.5	70 ± 3.0	179 ± 3.5	103 ± 0.3
666.0		66 ± 1.2	65 ± 2.1		128 ± 4.3
1000.0	12 ± 2.5 ^p	80 ± 5.0 ^p	68 ± 2.3 ^p	150 ± 11.1 ^p	107 ± 3.7 ^p
1666.0				102 ± 16.2 ^p	
3333.0	5 ± 2.4 ^x				
Trial Summary	Negative	Positive	Positive	Positive	Positive
Positive Control ²				545 ± 48.4	589 ± 61.5
Positive Control ³		455 ± 61.8	274 ± 27.3		
Positive Control ⁷	578 ± 48.8				

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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: 0.5 ug/Plate 2-Aminoanthracene

3: 1.0 ug/Plate 2-Aminoanthracene

4: 1.0 ug/Plate Sodium Azide

5: 2.5 ug/Plate 2-Aminoanthracene

6: 50.0 ug/Plate 9-Aminoacridine

7: 2.5 ug/Plate 4-Nitro-O-Phenylenediamine

p: Precipitate

x: Slight Toxicity and Precipitate

**** END OF REPORT ****