

Experiment Number: 930390

Test Type: Genetic Toxicology - Bacterial
Mutagenicity

G06: Ames Summary Data

Test Compound: 2,2-Dichloroethanol

CAS Number: 598-38-9

Date Report Requested: 09/17/2018

Time Report Requested: 08:03:34

NTP Study Number:

930390

Study Result:

Weakly Positive

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G06: Ames Summary Data
Test Compound: 2,2-Dichloroethanol
CAS Number: 598-38-9

Date Report Requested: 09/17/2018
Time Report Requested: 08:03:34

Strain: TA100

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 30% Rat S9	With 10% Hamster S9
Vehicle Control ¹	127 ± 12.7	139 ± 8.9	136 ± 4.8	129 ± 7.3	130 ± 17.2
100.0	111 ± 1.3	143 ± 3.0	162 ± 1.2	133 ± 9.5	151 ± 5.5
333.0	135 ± 10.1	141 ± 3.5	151 ± 10.6	150 ± 7.1	154 ± 13.5
1000.0	126 ± 2.7	131 ± 7.5	150 ± 19.1	161 ± 1.3	151 ± 8.0
3333.0	133 ± 3.7	133 ± 9.8	151 ± 4.0	158 ± 15.7	147 ± 11.9
10000.0	123 ± 14.6	153 ± 8.3	143 ± 9.3	154 ± 3.9	164 ± 4.7
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ²					759 ± 34.6
Positive Control ³			505 ± 48.4		
Positive Control ⁴				430 ± 24.3	
Positive Control ⁵	647 ± 32.9	695 ± 36.1			

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Strain: TA100

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	141 ± 0.9
100.0	147 ± 2.4
333.0	155 ± 5.2
1000.0	162 ± 6.1
3333.0	168 ± 7.4
10000.0	164 ± 20.2
Trial Summary	Negative
Positive Control ²	
Positive Control ³	580 ± 21.1
Positive Control ⁴	
Positive Control ⁵	

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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	11 ± 1.3	9 ± 2.0	12 ± 1.2	14 ± 1.7	13 ± 3.5
100.0	10 ± 1.8	7 ± 2.1	12 ± 0.9	14 ± 0.9	8 ± 2.0
333.0	6 ± 1.3	13 ± 1.2	14 ± 1.9	11 ± 0.3	9 ± 1.5
1000.0	7 ± 0.9	11 ± 1.5	11 ± 2.3	12 ± 1.2	10 ± 2.0
3333.0	10 ± 2.0	9 ± 1.7	13 ± 2.5	6 ± 0.3	8 ± 1.2
10000.0	10 ± 1.5	10 ± 1.5	12 ± 1.7	11 ± 2.0	13 ± 1.5
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ³					120 ± 9.0
Positive Control ⁴			69 ± 2.5		
Positive Control ⁵	271 ± 17.8	595 ± 21.4			
Positive Control ⁶				82 ± 4.3	

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Strain: TA1535

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	10 ± 0.3
100.0	11 ± 1.0
333.0	9 ± 0.9
1000.0	10 ± 0.7
3333.0	12 ± 1.3
10000.0	11 ± 1.8
Trial Summary	Negative
Positive Control ³	
Positive Control ⁴	221 ± 13.4
Positive Control ⁵	
Positive Control ⁶	

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Strain: TA97

Dose (ug/Plate)	Without S9	Without S9	Without S9	With 5% Rat S9	With 10% Rat S9
Vehicle Control ⁷		177 ± 17.5			
Vehicle Control ¹	230 ± 4.4		217 ± 10.7	226 ± 9.5	207 ± 9.2
100.0	262 ± 1.0		244 ± 5.0	230 ± 11.5	221 ± 15.8
333.0	238 ± 2.8	221 ± 0.6	228 ± 2.3	205 ± 15.0	236 ± 4.5
666.0					
1000.0	241 ± 6.2	201 ± 8.1	238 ± 11.8	227 ± 7.4	255 ± 10.8
1666.0					
3333.0	248 ± 12.2	215 ± 4.9	248 ± 3.1	229 ± 4.9	264 ± 10.9
6666.0		206 ± 10.4			
10000.0	304 ± 52.5	218 ± 10.9	238 ± 4.0	233 ± 3.5	236 ± 5.8
Trial Summary	Negative	Negative	Negative	Negative	Equivocal
Positive Control ²					
Positive Control ³				663 ± 12.8	430 ± 10.5
Positive Control ⁴					
Positive Control ⁸	379 ± 16.7	457 ± 6.8	595 ± 9.8		

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Test Compound: 2,2-Dichloroethanol

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Strain: TA97

Dose (ug/Plate)	With 10% Rat S9	With 30% Rat S9	With 5% Hamster S9	With 10% Hamster S9	With 30% Hamster S9
Vehicle Control ⁷					
Vehicle Control ¹	226 ± 4.0	222 ± 2.5	188 ± 14.1	198 ± 11.7	199 ± 3.8
100.0	246 ± 19.2	219 ± 20.3			237 ± 3.8
333.0	237 ± 8.3	193 ± 5.8	140 ± 11.4	170 ± 9.3	227 ± 7.5
666.0			164 ± 7.9	179 ± 19.5	
1000.0	223 ± 7.0	191 ± 10.8	161 ± 8.2	184 ± 1.5	296 ± 15.8
1666.0			180 ± 3.5	180 ± 11.1	
3333.0	234 ± 10.3	148 ± 10.4	201 ± 15.7	201 ± 16.7	316 ± 17.2
6666.0			202 ± 11.6	180 ± 18.9	
10000.0	241 ± 5.7	160 ± 9.4			293 ± 23.3
Trial Summary	Negative	Negative	Negative	Negative	Weakly Positive
Positive Control ²			561 ± 19.3		
Positive Control ³	425 ± 13.7			483 ± 26.5	366 ± 14.3
Positive Control ⁴		364 ± 15.9			
Positive Control ⁸					

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Strain: TA97

Dose (ug/Plate)	With 30% Hamster S9	With 30% Hamster S9	With 30% Hamster S9
Vehicle Control ⁷			
Vehicle Control ¹	180 ± 10.1	213 ± 8.1	189 ± 14.5
100.0			
333.0	181 ± 4.0	257 ± 17.1	218 ± 6.1
666.0	190 ± 9.2		
1000.0	228 ± 8.4	305 ± 9.2	234 ± 17.9
1666.0	178 ± 18.6	328 ± 14.4	273 ± 2.4
3333.0	199 ± 10.7	336 ± 5.7	288 ± 10.6
6666.0	169 ± 1.9	348 ± 22.9	241 ± 15.2
10000.0		185 ± 94.7	206 ± 36.7
Trial Summary	Equivocal	Weakly Positive	Weakly Positive
Positive Control ²			
Positive Control ³	372 ± 16.2	513 ± 29.8	379 ± 25.8
Positive Control ⁴			
Positive Control ⁸			

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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	26 ± 1.5	26 ± 5.2	28 ± 1.7	27 ± 3.8	25 ± 1.0
100.0	27 ± 3.3	19 ± 3.3	25 ± 2.4	27 ± 3.5	34 ± 1.7
333.0	32 ± 3.7	28 ± 1.2	22 ± 4.4	23 ± 3.0	28 ± 2.1
1000.0	29 ± 4.9	22 ± 1.2	23 ± 1.5	33 ± 5.8	28 ± 1.8
3333.0	29 ± 1.2	17 ± 1.2	25 ± 0.7	23 ± 2.1	28 ± 4.9
10000.0	19 ± 0.6	23 ± 2.3	24 ± 4.3	21 ± 1.9	25 ± 4.0
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ²					626 ± 42.2
Positive Control ³			329 ± 27.2	104 ± 11.6	
Positive Control ⁹	495 ± 31.1	483 ± 23.5			

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Strain: TA98

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	22 ± 2.3
100.0	25 ± 2.2
333.0	32 ± 2.4
1000.0	30 ± 0.6
3333.0	30 ± 1.2
10000.0	29 ± 3.5
Trial Summary	Negative
Positive Control ²	
Positive Control ³	414 ± 21.4
Positive Control ⁹	

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Strain: TA102

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	254 ± 13.3
333.0	246 ± 26.3
1000.0	223 ± 6.3
1666.0	231 ± 14.4
3333.0	246 ± 14.8
6666.0	244 ± 16.2
10000.0	221 ± 12.3
Trial Summary	Negative
Positive Control ⁶	557 ± 31.6

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CAS Number: 598-38-9

Date Report Requested: 09/17/2018
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Strain: TA104

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	455 ± 19.2
333.0	434 ± 6.8
1000.0	449 ± 12.4
1666.0	485 ± 11.3
3333.0	500 ± 8.7
6666.0	454 ± 4.9
10000.0	383 ± 28.4
Trial Summary	Negative
Positive Control ⁴	756 ± 33.0

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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: Water
- 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: Vehicle Control: Dimethyl Sulfoxide
- 8: 50.0 ug/Plate 9-Aminoacridine
- 9: 2.5 ug/Plate 4-Nitro-O-Phenylenediamine

**** END OF REPORT ****