

Experiment Number: **680724**

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

G06: Ames Summary Data

Test Compound: **Formaldehyde**

CAS Number: **50-00-0**

Date Report Requested: **09/12/2018**

Time Report Requested: **06:54:49**

NTP Study Number:

680724

Study Result:

Positive

Experiment Number: 680724
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G06: Ames Summary Data
 Test Compound: Formaldehyde
 CAS Number: 50-00-0

Date Report Requested: 09/12/2018
 Time Report Requested: 06:54:49

Strain: TA100

Dose (ug/Plate)	Without S9	Without S9	Without S9	With 10% Rat S9	With 10% Rat S9
Vehicle Control ¹	113 ± 8.1	110 ± 1.5	100 ± 11.9	116 ± 3.2	133 ± 8.0
3.0	125 ± 0.5	94 ± 7.8		136 ± 11.7	
10.0	135 ± 32.0	96 ± 3.5	137 ± 2.4	124 ± 5.5	149 ± 7.2
33.0	108 ± 3.2	172 ± 10.0	232 ± 8.4	114 ± 57.1	216 ± 9.6
66.0			242 ± 7.8		244 ± 17.9
100.0	82 ± 3.1	209 ± 6.7	226 ± 9.1	217 ± 7.8	209 ± 10.0
166.0		193 ± 8.6	215 ± 25.7	232 ± 17.3	169 ± 8.4 ^s
333.0	5 ± 1.7 ^s				
Trial Summary	Negative	Positive	Positive	Positive	Weakly Positive
Positive Control ²					
Positive Control ³				502 ± 43.8	663 ± 30.3
Positive Control ⁴	465 ± 9.3	388 ± 6.5	532 ± 3.0		

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Date Report Requested: 09/12/2018

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Strain: TA100

Dose (ug/Plate)	With 30% Rat S9	With 10% Hamster S9	With 10% Hamster S9	With 30% Hamster S9
Vehicle Control ¹	136 ± 10.6	123 ± 9.2	138 ± 14.5	142 ± 13.9
3.0	125 ± 8.5	142 ± 14.2		164 ± 14.4
10.0	153 ± 18.7	125 ± 13.9	161 ± 10.7	152 ± 17.8
33.0	211 ± 2.3	122 ± 60.9	230 ± 5.5	169 ± 12.7
66.0			237 ± 9.0	
100.0	149 ± 9.5	262 ± 13.1	204 ± 15.2	82 ± 3.3
166.0		286 ± 13.1	150 ± 10.2 ^s	
333.0	114 ± 10.7 ^s			14 ± 4.2 ^s
Trial Summary	Equivocal	Positive	Weakly Positive	Negative
Positive Control ²		510 ± 37.5	518 ± 69.3	
Positive Control ³	211 ± 107.0			380 ± 14.6
Positive Control ⁴				

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Date Report Requested: 09/12/2018

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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	21 ± 1.9	23 ± 4.0	11 ± 1.0	11 ± 3.8	14 ± 3.3
3.0	15 ± 1.3	21 ± 4.2	13 ± 2.0	9 ± 1.2	9 ± 2.3
10.0	16 ± 0.0	21 ± 2.3	10 ± 1.7	9 ± 2.3	13 ± 3.0
33.0	15 ± 0.3	17 ± 1.2	10 ± 2.2	9 ± 2.1	10 ± 3.5
100.0	9 ± 2.5	12 ± 0.6	9 ± 2.1	10 ± 0.6	10 ± 1.2
166.0	9 ± 0.3	10 ± 2.3	6 ± 0.7	7 ± 0.6	12 ± 2.8
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ³					206 ± 19.6
Positive Control ⁴	434 ± 3.2	416 ± 13.5			
Positive Control ⁵			184 ± 13.0	101 ± 7.2	

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Test Compound: Formaldehyde

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Date Report Requested: 09/12/2018

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Strain: TA1535

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	14 ± 2.5
3.0	11 ± 1.2
10.0	13 ± 0.3
33.0	9 ± 2.3
100.0	9 ± 2.7
166.0	7 ± 0.7
Trial Summary	Negative
Positive Control ³	
Positive Control ⁴	
Positive Control ⁵	284 ± 29.9

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Strain: TA1537

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 30% Rat S9	With 10% Hamster S9
Vehicle Control ¹	7 ± 1.0	6 ± 1.5	6 ± 1.0	6 ± 1.5	8 ± 0.3
3.0	6 ± 1.5	6 ± 0.9	5 ± 0.7	9 ± 0.0	9 ± 2.3
10.0	4 ± 0.7	6 ± 1.5	8 ± 2.3	10 ± 2.3	10 ± 3.7
33.0	6 ± 1.7	8 ± 2.6	6 ± 1.2	8 ± 1.5	8 ± 2.8
100.0	6 ± 0.7	8 ± 1.2	9 ± 2.0	5 ± 0.9	9 ± 1.3
166.0	7 ± 1.7	6 ± 1.9	11 ± 2.7	6 ± 1.5	11 ± 2.0
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ²					55 ± 7.8
Positive Control ³			50 ± 1.2		
Positive Control ⁵				54 ± 6.2	
Positive Control ⁶	338 ± 33.0	163 ± 8.7			

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Date Report Requested: 09/12/2018

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Strain: TA1537

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	11 ± 1.9
3.0	9 ± 1.5
10.0	10 ± 1.5
33.0	9 ± 1.5
100.0	9 ± 1.8
166.0	8 ± 0.3
Trial Summary	Negative
Positive Control ²	
Positive Control ³	48 ± 7.5
Positive Control ⁵	
Positive Control ⁶	

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Strain: TA97

Dose (ug/Plate)	Without S9	Without S9	Without S9	With 10% Rat S9	With 10% Rat S9
Vehicle Control ¹	113 ± 2.4	139 ± 4.4	141 ± 11.5	154 ± 9.3	186 ± 19.6
3.0	158 ± 4.8	148 ± 15.2	154 ± 7.4	178 ± 9.5	200 ± 5.5
10.0	135 ± 11.5	178 ± 4.6	210 ± 14.5	177 ± 11.9	234 ± 13.9
33.0	135 ± 7.4	232 ± 10.2	224 ± 15.0	254 ± 16.5	261 ± 19.4
66.0			224 ± 24.8		296 ± 4.4
100.0	159 ± 2.5	294 ± 20.2	198 ± 2.4	311 ± 13.9	250 ± 19.1
166.0	171 ± 4.7	156 ± 14.7 ^s		176 ± 36.9 ^s	
Trial Summary	Equivocal	Positive	Weakly Positive	Positive	Weakly Positive
Positive Control ²					
Positive Control ³				390 ± 36.0	422 ± 21.9
Positive Control ⁵					
Positive Control ⁶	526 ± 29.2	321 ± 52.0	800 ± 75.3		

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Strain: TA97

Dose (ug/Plate)	With 30% Rat S9	With 10% Hamster S9	With 10% Hamster S9	With 30% Hamster S9
Vehicle Control ¹	182 ± 15.2	198 ± 11.9	151 ± 8.7	172 ± 7.4
3.0	183 ± 10.9	191 ± 6.1		182 ± 9.2
10.0	180 ± 7.6	168 ± 11.3	245 ± 11.7	205 ± 7.0
33.0	161 ± 6.5	241 ± 17.3	276 ± 5.8	221 ± 14.4
66.0			275 ± 22.9	
100.0	164 ± 12.2	277 ± 7.9	270 ± 8.6	185 ± 6.5
166.0	172 ± 12.7	342 ± 30.3	229 ± 22.5 ^s	150 ± 6.6
Trial Summary	Negative	Positive	Positive	Equivocal
Positive Control ²		414 ± 11.2	320 ± 29.2	
Positive Control ³				290 ± 18.8
Positive Control ⁵	343 ± 28.4			
Positive Control ⁶				

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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	45 ± 2.3	17 ± 0.3	29 ± 4.9	41 ± 4.2	21 ± 2.1
3.0	47 ± 4.2	19 ± 1.5	29 ± 0.3	40 ± 2.6	29 ± 2.5
10.0	52 ± 2.3	23 ± 2.2	29 ± 1.2	48 ± 3.2	24 ± 4.6
33.0	51 ± 0.7	18 ± 1.7	30 ± 1.5	51 ± 3.3	32 ± 1.7
100.0	43 ± 6.2	26 ± 2.0	41 ± 4.9	42 ± 1.5	28 ± 5.9
166.0		5 ± 3.0 ^s	25 ± 3.1 ^s		36 ± 2.0
333.0	11 ± 4.4 ^s			7 ± 1.2 ^s	
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ²					493 ± 28.5
Positive Control ³			397 ± 27.7	111 ± 6.4	
Positive Control ⁷	477 ± 29.7	452 ± 18.7			

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Strain: TA98

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	45 ± 3.5
3.0	46 ± 5.5
10.0	40 ± 1.2
33.0	41 ± 3.5
100.0	42 ± 5.8
166.0	
333.0	17 ± 1.5 ^s
Trial Summary	Negative
Positive Control ²	
Positive Control ³	211 ± 7.1
Positive Control ⁷	

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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: 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

s: Slight Toxicity

**** END OF REPORT ****