

Experiment Number: A83234

Test Type: Genetic Toxicology - Bacterial
Mutagenicity

G06: Ames Summary Data

Test Compound: Chlorpyrifos (Dursban)

CAS Number: 2921-88-2

Date Report Requested: 09/18/2018

Time Report Requested: 00:21:02

NTP Study Number:

A83234

Study Result:

Negative

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G06: Ames Summary Data
 Test Compound: Chlorpyrifos (Dursban)
 CAS Number: 2921-88-2

Date Report Requested: 09/18/2018
 Time Report Requested: 00:21:02

Strain: TA100

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 30% Rat S9	With 10% Hamster S9
Vehicle Control ¹	123 ± 4.2	144 ± 15.4	147 ± 7.8	147 ± 2.1	140 ± 5.0
100.0	121 ± 6.6	158 ± 4.7	135 ± 3.6	158 ± 3.8	148 ± 3.5
333.0	130 ± 5.8	155 ± 3.7	136 ± 5.0	161 ± 18.2	145 ± 8.4
1000.0	119 ± 5.8	141 ± 4.0	146 ± 9.8	163 ± 1.2	150 ± 5.4
3333.0	119 ± 4.7 ^P	154 ± 4.7 ^P	137 ± 6.7 ^P	151 ± 3.0 ^P	145 ± 2.1 ^P
10000.0	116 ± 6.7 ^P	156 ± 8.2 ^P	132 ± 3.5 ^P	146 ± 8.8 ^P	146 ± 10.7 ^P
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ²					784 ± 13.2
Positive Control ³			948 ± 20.6		
Positive Control ⁴	988 ± 32.4	1187 ± 54.0			
Positive Control ⁵				716 ± 43.4	

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Strain: TA100

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	134 ± 3.7
100.0	142 ± 3.7
333.0	159 ± 6.3
1000.0	155 ± 4.7
3333.0	146 ± 4.9 ^p
10000.0	162 ± 6.3 ^p
Trial Summary	Negative
Positive Control ²	
Positive Control ³	905 ± 32.3
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 ± 2.1	16 ± 0.7	12 ± 0.3	10 ± 2.6	10 ± 1.8
100.0	9 ± 2.4	12 ± 3.1	16 ± 1.5	11 ± 0.9	18 ± 5.4
333.0	7 ± 1.3	16 ± 1.3	12 ± 2.5	9 ± 0.7	19 ± 2.6
1000.0	8 ± 0.9	14 ± 0.9	18 ± 0.3	12 ± 0.0	20 ± 2.6
3333.0	11 ± 1.3 ^P	15 ± 0.7 ^P	17 ± 0.6 ^P	13 ± 0.3 ^P	17 ± 0.7 ^P
10000.0	9 ± 1.0 ^P	10 ± 1.2 ^P	10 ± 2.6 ^P	8 ± 0.9 ^P	17 ± 2.3 ^P
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ³					284 ± 8.1
Positive Control ⁴	1055 ± 80.3	802 ± 22.6			
Positive Control ⁵			230 ± 10.5		
Positive Control ⁶				208 ± 18.7	

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CAS Number: 2921-88-2

Date Report Requested: 09/18/2018
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Strain: TA1535

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	9 ± 1.0
100.0	10 ± 1.2
333.0	10 ± 2.3
1000.0	10 ± 1.5
3333.0	10 ± 2.1 ^P
10000.0	10 ± 1.2 ^P
Trial Summary	Negative
Positive Control ³	
Positive Control ⁴	
Positive Control ⁵	254 ± 24.6
Positive Control ⁶	

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CAS Number: 2921-88-2

Date Report Requested: 09/18/2018
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Strain: TA1537

Dose (ug/Plate)	With 30% Rat S9	With 30% Hamster S9
Vehicle Control ¹	12 ± 3.5	11 ± 2.5
100.0	14 ± 3.1	11 ± 1.3
333.0	13 ± 2.0	10 ± 0.6
1000.0	16 ± 1.9	12 ± 1.2
3333.0	13 ± 3.5 ^p	11 ± 2.3 ^p
10000.0	12 ± 2.3 ^p	9 ± 1.0 ^p
Trial Summary	Negative	Negative
Positive Control ⁵		280 ± 7.2
Positive Control ⁶	244 ± 17.9	

Experiment Number: A83234

Test Type: Genetic Toxicology - Bacterial
Mutagenicity

G06: Ames Summary Data

Test Compound: Chlorpyrifos (Dursban)

CAS Number: 2921-88-2

Date Report Requested: 09/18/2018

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Strain: TA97

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 30% Rat S9	With 30% Rat S9
Vehicle Control ¹	148 ± 14.5	158 ± 7.2	189 ± 5.3	170 ± 7.9	199 ± 12.7
33.0					189 ± 5.8
100.0	172 ± 2.6	169 ± 10.3	194 ± 11.3	187 ± 10.0	197 ± 11.9
333.0	154 ± 7.0	175 ± 5.0	198 ± 1.7	205 ± 10.1	219 ± 2.9
1000.0	147 ± 5.7	157 ± 7.0	194 ± 8.8	244 ± 6.5	207 ± 15.4
3333.0	147 ± 19.8 ^p	177 ± 3.8 ^p	201 ± 5.2 ^p	218 ± 8.0 ^p	198 ± 15.6 ^p
10000.0	159 ± 15.5 ^p	153 ± 3.8 ^p	207 ± 3.8 ^p	210 ± 6.1 ^p	
Trial Summary	Negative	Negative	Negative	Equivocal	Negative
Positive Control ²					
Positive Control ³			779 ± 68.3	701 ± 53.8	
Positive Control ⁵					550 ± 22.1
Positive Control ⁷	570 ± 27.6	550 ± 13.1			

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Date Report Requested: 09/18/2018
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Strain: TA97

Dose (ug/Plate)	With 10% Hamster S9	With 30% Hamster S9	With 30% Hamster S9
Vehicle Control ¹	179 ± 8.4	170 ± 7.9	166 ± 6.1
33.0			180 ± 5.0
100.0	186 ± 4.0	187 ± 10.0	190 ± 14.6
333.0	186 ± 14.8	205 ± 10.1	189 ± 15.8
1000.0	177 ± 13.0	244 ± 6.5	197 ± 9.4
3333.0	186 ± 4.6 ^P	218 ± 8.0 ^P	182 ± 17.4 ^P
10000.0	161 ± 9.7 ^P	210 ± 6.1 ^P	
Trial Summary	Negative	Equivocal	Negative
Positive Control ²	1139 ± 15.6		
Positive Control ³		701 ± 53.8	614 ± 14.9
Positive Control ⁵			
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 ± 2.2	24 ± 4.5	28 ± 0.7	22 ± 3.1	27 ± 1.2
100.0	16 ± 1.8	22 ± 3.3	21 ± 1.9	24 ± 5.8	27 ± 2.1
333.0	17 ± 2.0	20 ± 2.9	27 ± 1.9	20 ± 2.6	21 ± 1.8
1000.0	20 ± 1.9	18 ± 2.9	21 ± 3.2	23 ± 1.7	20 ± 4.0
3333.0	18 ± 1.7 ^P	23 ± 5.1 ^P	23 ± 2.6 ^P	24 ± 1.5 ^P	28 ± 1.7 ^P
10000.0	15 ± 0.7 ^P	29 ± 1.8 ^P	26 ± 4.4 ^P	19 ± 0.3 ^P	22 ± 3.8 ^P
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ²					1285 ± 38.9
Positive Control ³			811 ± 23.9		
Positive Control ⁸	449 ± 15.0	443 ± 17.9			
Positive Control ⁵				649 ± 23.0	

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Strain: TA98

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	23 ± 3.9
100.0	23 ± 2.6
333.0	20 ± 4.5
1000.0	16 ± 0.9
3333.0	18 ± 1.7 ^P
10000.0	24 ± 2.9 ^P
Trial Summary	Negative
Positive Control ²	
Positive Control ³	746 ± 45.5
Positive Control ⁸	
Positive Control ⁵	

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Date Report Requested: 09/18/2018

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Strain: TA102

Dose (ug/Plate)	Without S9	With 10% Rat S9	With 30% Rat S9	With 10% Hamster S9	With 30% Hamster S9
Vehicle Control ¹	220 ± 20.9	280 ± 19.1	282 ± 14.8	296 ± 42.8	295 ± 16.5
100.0	259 ± 4.8	277 ± 10.8	314 ± 34.4	277 ± 29.1	237 ± 28.9
333.0	247 ± 9.6	274 ± 6.6	295 ± 29.3	269 ± 12.4	273 ± 20.8
1000.0	248 ± 23.4	290 ± 18.2	276 ± 33.8	258 ± 20.7	283 ± 7.5
3333.0	270 ± 18.9 ^P	245 ± 39.1 ^P	295 ± 23.3 ^P	279 ± 9.5 ^P	265 ± 21.5 ^P
10000.0	279 ± 12.4 ^P	267 ± 15.5 ^P	280 ± 23.1 ^P	246 ± 17.3 ^P	296 ± 21.8 ^P
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ⁹	684 ± 19.1				
Positive Control ⁶		877 ± 30.2	781 ± 12.3	917 ± 37.0	790 ± 13.7

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Strain: TA104

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 30% Rat S9	With 10% Hamster S9
Vehicle Control ¹	357 ± 30.7	231 ± 9.0	353 ± 10.6	435 ± 13.3	332 ± 18.0
100.0	386 ± 20.7	252 ± 2.0	344 ± 9.9	444 ± 15.8	335 ± 22.9
333.0	429 ± 23.7	250 ± 18.3	301 ± 2.9	469 ± 16.3	348 ± 14.3
1000.0	429 ± 16.5	253 ± 9.1	340 ± 36.6	467 ± 26.7	346 ± 23.6
3333.0	418 ± 13.4 ^P	242 ± 1.7 ^P	348 ± 10.6 ^P	458 ± 31.7 ^P	307 ± 2.5 ^P
10000.0	413 ± 24.6 ^P	243 ± 21.9 ^P	351 ± 18.8 ^P	434 ± 24.2 ^P	346 ± 26.4 ^P
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ⁶			886 ± 19.9	1043 ± 34.8	906 ± 41.0
Positive Control ¹⁰	946 ± 27.5	873 ± 15.9			

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Strain: TA104

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	450 ± 25.7
100.0	434 ± 28.7
333.0	447 ± 20.3
1000.0	420 ± 3.9
3333.0	448 ± 17.8 ^P
10000.0	423 ± 9.7 ^P
Trial Summary	Negative
Positive Control ⁶	1190 ± 73.2
Positive Control ¹⁰	

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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: 1.0 ug/Plate 2-Aminoanthracene
- 3: 2.0 ug/Plate 2-Aminoanthracene
- 4: 5.0 ug/Plate Sodium Azide
- 5: 5.0 ug/Plate 2-Aminoanthracene
- 6: 10.0 ug/Plate 2-Aminoanthracene
- 7: 50.0 ug/Plate 9-Aminoacridine
- 8: 2.5 ug/Plate 4-Nitro-O-Phenylenediamine
- 9: 0.5 ug/Plate Mitomycin-C
- 10: 250.0 ug/Plate Methyl Methane Sulfonate
- p: Precipitate

**** END OF REPORT ****