

Experiment Number: 789471

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

G06: Ames Summary Data

Test Compound: **Boric acid**

CAS Number: **10043-35-3**

Date Report Requested: **09/18/2018**

Time Report Requested: **05:47:12**

NTP Study Number:

789471

Study Result:

Equivocal

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Test Compound: Boric acid

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Strain: TA100

Dose (ug/Plate)	Without S9	Without S9	Without S9	Without S9	With 10% Rat S9
Vehicle Control ¹	77 ± 2.9	67 ± 0.9	118 ± 11.3	86 ± 7.8	114 ± 7.4
10.0			106 ± 1.9	116 ± 11.9	
100.0	106 ± 5.5	73 ± 1.5			127 ± 5.7
333.0	112 ± 12.9	78 ± 1.2			129 ± 2.7
1000.0	110 ± 7.8	77 ± 7.1	132 ± 5.6	124 ± 4.3	149 ± 3.2
3333.0	114 ± 6.6	87 ± 4.8			151 ± 3.8
10000.0	125 ± 3.5	78 ± 3.2	129 ± 2.7	133 ± 1.0	143 ± 10.3
15000.0			140 ± 12.9	108 ± 4.1	
20000.0			132 ± 8.4	106 ± 8.9	
Trial Summary	Equivocal	Negative	Negative	Equivocal	Equivocal
Positive Control ²					
Positive Control ³					
Positive Control ⁴					
Positive Control ⁵					1201 ± 63.6
Positive Control ⁶	2116 ± 68.3	1977 ± 78.9	1235 ± 22.6		
Positive Control ⁷				901 ± 55.7	

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Strain: TA100

Dose (ug/Plate)	With 10% Rat S9	With 10% Rat S9	With 10% Rat S9	With 10% Hamster S9	With 10% Hamster S9
Vehicle Control ¹	74 ± 0.0	86 ± 0.6	114 ± 4.3	129 ± 7.5	70 ± 1.8
10.0		90 ± 6.6	119 ± 9.6		
100.0	73 ± 3.2			105 ± 2.1	67 ± 4.1
333.0	84 ± 3.8			118 ± 12.9	77 ± 1.5
1000.0	84 ± 4.3	122 ± 3.3	106 ± 9.5	136 ± 1.5	75 ± 5.0
3333.0	89 ± 8.6			145 ± 7.5	83 ± 4.7
10000.0	83 ± 4.4	117 ± 0.7	121 ± 7.2	148 ± 7.2	82 ± 5.0
15000.0		85 ± 4.0	113 ± 7.1		
20000.0		75 ± 4.2	101 ± 6.2		
Trial Summary	Negative	Equivocal	Negative	Negative	Negative
Positive Control ²				1393 ± 81.0	1391 ± 46.6
Positive Control ³					
Positive Control ⁴		605 ± 4.9			
Positive Control ⁵	1475 ± 77.6		595 ± 37.9		
Positive Control ⁶					
Positive Control ⁷					

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Strain: TA100

Dose (ug/Plate)	With 10% Hamster S9	With 10% Hamster S9
Vehicle Control ¹	109 ± 3.5	87 ± 10.5
10.0	113 ± 6.4	82 ± 5.0
100.0		
333.0		
1000.0	110 ± 4.4	116 ± 13.6
3333.0		
10000.0	130 ± 6.5	134 ± 10.1
15000.0	116 ± 6.5	119 ± 7.2
20000.0	113 ± 7.9	104 ± 2.1
Trial Summary	Negative	Equivocal
Positive Control ²	1004 ± 56.0	
Positive Control ³		2736 ± 119.6
Positive Control ⁴		
Positive Control ⁵		
Positive Control ⁶		
Positive Control ⁷		

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Date Report Requested: 09/18/2018

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Strain: TA1535

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 10% Rat S9	With 10% Hamster S9
Vehicle Control ¹	23 ± 1.5	15 ± 3.0	9 ± 1.9	13 ± 3.8	10 ± 1.2
100.0	19 ± 3.2	14 ± 1.5	11 ± 0.9	10 ± 0.7	9 ± 1.5
333.0	20 ± 3.0	20 ± 2.4	11 ± 2.0	9 ± 2.1	10 ± 0.9
1000.0	22 ± 2.1	20 ± 3.2	9 ± 1.0	10 ± 0.6	9 ± 1.3
3333.0	19 ± 3.3	18 ± 2.8	7 ± 1.2	10 ± 0.3	9 ± 0.7
10000.0	17 ± 0.6	15 ± 2.7	12 ± 1.7	7 ± 1.5	10 ± 2.5
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ²					123 ± 9.2
Positive Control ⁵			52 ± 3.3	58 ± 6.4	
Positive Control ⁶	1357 ± 21.9	1199 ± 47.6			

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Strain: TA1535

Dose (ug/Plate)	With 10% Hamster S9
Vehicle Control ¹	11 ± 2.6
100.0	12 ± 2.0
333.0	9 ± 2.5
1000.0	10 ± 0.9
3333.0	10 ± 2.1
10000.0	7 ± 4.4
Trial Summary	Negative
Positive Control ²	136 ± 3.8
Positive Control ⁵	
Positive Control ⁶	

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Strain: TA1537

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 10% Rat S9	With 10% Hamster S9
Vehicle Control ¹	4 ± 0.3	4 ± 2.3	8 ± 2.9	10 ± 1.2	7 ± 1.2
100.0	4 ± 1.5	4 ± 1.5	7 ± 2.6	8 ± 3.2	6 ± 1.5
333.0	6 ± 1.2	7 ± 1.5	9 ± 0.7	8 ± 1.7	7 ± 1.9
1000.0	8 ± 0.6	6 ± 0.9	6 ± 0.9	6 ± 0.7	6 ± 2.0
3333.0	6 ± 0.6	3 ± 0.7	5 ± 1.0	10 ± 3.2	8 ± 1.5
10000.0	4 ± 0.7	5 ± 0.0	6 ± 1.5	4 ± 1.0	4 ± 1.9
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ²					132 ± 3.5
Positive Control ⁵			68 ± 1.5	160 ± 5.2	
Positive Control ⁸	631 ± 137.3	753 ± 56.0			

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Strain: TA1537

Dose (ug/Plate)	With 10% Hamster S9
Vehicle Control ¹	9 ± 1.3
100.0	7 ± 1.7
333.0	9 ± 0.6
1000.0	8 ± 2.1
3333.0	9 ± 2.4
10000.0	7 ± 0.7
Trial Summary	Negative
Positive Control ²	187 ± 7.6
Positive Control ⁵	
Positive Control ⁸	

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Strain: TA98

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 10% Rat S9	With 10% Hamster S9
Vehicle Control ¹	16 ± 1.5	22 ± 3.1	24 ± 3.6	26 ± 0.3	25 ± 1.5
100.0	13 ± 0.6	14 ± 3.1	29 ± 2.2	24 ± 3.2	24 ± 1.5
333.0	16 ± 1.2	20 ± 3.5	32 ± 2.1	27 ± 3.8	19 ± 1.5
1000.0	17 ± 2.6	15 ± 2.1	24 ± 0.9	20 ± 1.5	28 ± 1.8
3333.0	14 ± 0.9	15 ± 1.2	26 ± 1.7	22 ± 2.3	23 ± 2.0
10000.0	17 ± 1.2	15 ± 3.2	24 ± 4.5	19 ± 0.7	20 ± 3.0
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ²					1203 ± 90.7
Positive Control ⁵			842 ± 64.1	1540 ± 19.6	
Positive Control ⁹	1273 ± 56.5	2090 ± 76.0			

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Strain: TA98

Dose (ug/Plate)	With 10% Hamster S9
Vehicle Control ¹	20 ± 0.9
100.0	20 ± 3.5
333.0	21 ± 2.2
1000.0	26 ± 1.9
3333.0	22 ± 3.5
10000.0	18 ± 1.9
Trial Summary	Negative
Positive Control ²	1674 ± 69.6
Positive Control ⁵	
Positive Control ⁹	

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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: 0.75 ug/Plate 2-Aminoanthracene

3: 1.0 ug/Plate 2-Aminoanthracene

4: 1.0 ug/Plate Sodium Azide

5: 1.5 ug/Plate 2-Aminoanthracene

6: 2.5 ug/Plate Sodium Azide

7: 56.6 ug/Plate Solvent

8: 80.0 ug/Plate 9-Aminoacridine

9: 12.0 ug/Plate 4-Nitro-O-Phenylenediamine

**** END OF REPORT ****