

Experiment Number: A34160

Test Type: Genetic Toxicology - Bacterial  
Mutagenicity

**G06: Ames Summary Data**

Test Compound: 4-Pentenitrile

CAS Number: 592-51-8

Date Report Requested: 09/16/2018

Time Report Requested: 17:50:10

**NTP Study Number:**

A34160

**Study Result:**

Negative

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Date Report Requested: 09/16/2018  
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Strain: TA100

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 30% Rat S9	With 10% Hamster S9
Vehicle Control <sup>1</sup>	114 ± 2.4	118 ± 3.5	106 ± 7.3	112 ± 3.4	107 ± 0.3
100.0	109 ± 7.8	105 ± 6.7	101 ± 5.8	125 ± 8.5	105 ± 11.5
333.0	112 ± 3.5	105 ± 1.8	93 ± 6.4	118 ± 5.5	106 ± 4.2
1000.0	109 ± 4.9	98 ± 4.3	95 ± 7.6	110 ± 8.8	108 ± 5.3
3333.0	103 ± 3.8	108 ± 9.0	121 ± 4.0	108 ± 5.6	101 ± 2.0
6666.0	105 ± 2.9				
10000.0		Toxic	46 ± 16.0 <sup>s</sup>	76 ± 33.8	58 ± 17.6 <sup>s</sup>
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control <sup>2</sup>					1659 ± 59.5
Positive Control <sup>3</sup>			1292 ± 55.6		
Positive Control <sup>4</sup>	854 ± 21.4	1191 ± 21.1			
Positive Control <sup>5</sup>				540 ± 7.8	

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Strain: TA100

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Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control <sup>1</sup>	109 ± 6.3
100.0	99 ± 0.9
333.0	109 ± 0.3
1000.0	109 ± 5.8
3333.0	104 ± 3.3
6666.0	
10000.0	99 ± 9.8
Trial Summary	Negative
Positive Control <sup>2</sup>	
Positive Control <sup>3</sup>	647 ± 23.4
Positive Control <sup>4</sup>	
Positive Control <sup>5</sup>	

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Strain: TA1535

Dose (ug/Plate)	Without S9	Without S9	Without S9	With 10% Rat S9	With 30% Rat S9
Vehicle Control <sup>1</sup>	9 ± 1.8	13 ± 1.7	16 ± 1.0	13 ± 1.0	14 ± 2.4
100.0	15 ± 0.7		13 ± 0.3	11 ± 2.0	15 ± 3.4
333.0	13 ± 3.5		13 ± 3.2	15 ± 1.2	9 ± 1.3
1000.0	14 ± 3.1	13 ± 2.3	17 ± 3.5	16 ± 2.6	16 ± 0.9
1666.0		11 ± 2.6			
3333.0	14 ± 1.5	11 ± 1.5	15 ± 4.0	13 ± 3.2	19 ± 1.3
6666.0	22 ± 1.7	8 ± 0.3			
10000.0		9 ± 0.9	Toxic	7 ± 1.2 <sup>s</sup>	10 ± 3.0
Trial Summary	Equivocal	Negative	Negative	Negative	Negative
Positive Control <sup>3</sup>					
Positive Control <sup>5</sup>				204 ± 7.5	
Positive Control <sup>4</sup>	1010 ± 12.9	988 ± 20.6	1148 ± 17.5		
Positive Control <sup>6</sup>					123 ± 12.5

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G06: Ames Summary Data  
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Strain: TA1535

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Dose (ug/Plate)	With 10% Hamster S9	With 30% Hamster S9
Vehicle Control <sup>1</sup>	12 ± 1.5	9 ± 1.5
100.0	9 ± 2.3	12 ± 2.1
333.0	10 ± 0.7	11 ± 0.7
1000.0	11 ± 1.5	10 ± 2.0
1666.0		
3333.0	17 ± 0.9	12 ± 2.3
6666.0		
10000.0	6 ± 1.2 <sup>s</sup>	11 ± 2.2
Trial Summary	Negative	Negative
Positive Control <sup>3</sup>	354 ± 13.2	
Positive Control <sup>5</sup>		224 ± 6.1
Positive Control <sup>4</sup>		
Positive Control <sup>6</sup>		

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## G06: Ames Summary Data

Test Compound: 4-Pentenitrile

CAS Number: 592-51-8

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## Strain: TA97

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 30% Rat S9	With 10% Hamster S9
Vehicle Control <sup>1</sup>	140 ± 3.8	100 ± 7.1	149 ± 2.2	192 ± 2.7	126 ± 5.5
100.0	142 ± 4.3	110 ± 3.2	154 ± 9.9	185 ± 14.2	122 ± 13.9
333.0	137 ± 12.4	109 ± 8.0	163 ± 8.7	171 ± 6.4	120 ± 2.2
1000.0	135 ± 3.0	118 ± 8.0	153 ± 8.7	138 ± 16.8	116 ± 10.0
3333.0	161 ± 4.0	122 ± 5.5	148 ± 8.8	204 ± 9.6	128 ± 1.2
6666.0	156 ± 8.7				
10000.0		Toxic	56 ± 1.2 <sup>s</sup>	182 ± 16.8	79 ± 13.6 <sup>s</sup>
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control <sup>2</sup>					835 ± 98.3
Positive Control <sup>3</sup>			594 ± 4.2		
Positive Control <sup>5</sup>				571 ± 9.8	
Positive Control <sup>7</sup>	558 ± 25.1	523 ± 28.1			

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Strain: TA97

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Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control <sup>1</sup>	130 ± 9.5
100.0	123 ± 7.9
333.0	139 ± 19.8
1000.0	145 ± 14.3
3333.0	109 ± 0.0
6666.0	
10000.0	122 ± 7.6
Trial Summary	Negative
Positive Control <sup>2</sup>	
Positive Control <sup>3</sup>	938 ± 62.0
Positive Control <sup>5</sup>	
Positive Control <sup>7</sup>	

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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 <sup>1</sup>	18 ± 0.0	29 ± 2.1	42 ± 3.8	22 ± 2.6	35 ± 2.4
100.0	9 ± 0.3	39 ± 1.3	43 ± 5.2	18 ± 4.5	43 ± 3.5
333.0	20 ± 5.7	33 ± 2.3	37 ± 1.0	22 ± 2.1	35 ± 3.5
1000.0	19 ± 1.5	35 ± 2.7	34 ± 3.7	19 ± 2.0	39 ± 2.7
3333.0	17 ± 1.3	29 ± 2.6	30 ± 3.1	22 ± 4.3	41 ± 4.0
6666.0	18 ± 1.5				
10000.0		Toxic	13 ± 1.8 <sup>s</sup>	16 ± 2.8	14 ± 2.0 <sup>s</sup>
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control <sup>2</sup>					1747 ± 53.3
Positive Control <sup>3</sup>			1325 ± 43.3		
Positive Control <sup>8</sup>	409 ± 3.6	943 ± 36.7			
Positive Control <sup>5</sup>				251 ± 23.0	



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Strain: TA98

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Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control <sup>1</sup>	20 ± 2.4
100.0	19 ± 0.6
333.0	21 ± 1.2
1000.0	19 ± 4.5
3333.0	20 ± 3.2
6666.0	
10000.0	14 ± 1.2
Trial Summary	Negative
Positive Control <sup>2</sup>	
Positive Control <sup>3</sup>	352 ± 18.7
Positive Control <sup>8</sup>	
Positive Control <sup>5</sup>	

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#### LEGEND

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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
- s: Slight Toxicity

\*\* END OF REPORT \*\*