

Experiment Number: **A09638**

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

**G06: Ames Summary Data**

Test Compound: **Polystyrene med mol. wt.**

CAS Number: **EMTDP-90**

Date Report Requested: **09/15/2018**

Time Report Requested: **20:09:12**

**NTP Study Number:**

A09638

**Study Result:**

Negative

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## G06: Ames Summary Data

Test Compound: Polystyrene med mol. wt.

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Date Report Requested: 09/15/2018

Time Report Requested: 20:09:12

## 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>	117 ± 2.0	123 ± 5.2	127 ± 2.6	161 ± 4.9	142 ± 3.5
100.0	112 ± 5.2	139 ± 6.7	136 ± 4.5	158 ± 6.7	137 ± 6.7
333.0	127 ± 7.4	118 ± 7.1	135 ± 8.9	171 ± 8.1	136 ± 2.9
1000.0	124 ± 3.7	124 ± 5.0	125 ± 5.0	162 ± 6.5	138 ± 3.4
3333.0	120 ± 2.6	129 ± 10.8	130 ± 10.9	166 ± 4.6	136 ± 9.1
10000.0	115 ± 6.0 <sup>p</sup>	121 ± 7.0 <sup>p</sup>	127 ± 5.2 <sup>p</sup>	138 ± 4.4 <sup>p</sup>	129 ± 5.8 <sup>p</sup>
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control <sup>2</sup>					465 ± 16.7
Positive Control <sup>3</sup>			403 ± 10.5		
Positive Control <sup>4</sup>	1055 ± 35.1	900 ± 23.7			
Positive Control <sup>5</sup>				855 ± 16.1	

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**Strain: TA100**

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<b>Dose (ug/Plate)</b>	<b>With 30% Hamster S9</b>
Vehicle Control <sup>1</sup>	167 ± 2.4
100.0	157 ± 5.2
333.0	160 ± 6.4
1000.0	166 ± 9.7
3333.0	143 ± 9.1
10000.0	145 ± 4.4 <sup>P</sup>
Trial Summary	Negative
Positive Control <sup>2</sup>	
Positive Control <sup>3</sup>	613 ± 9.4
Positive Control <sup>4</sup>	
Positive Control <sup>5</sup>	

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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 <sup>1</sup>	15 ± 1.2	14 ± 1.8	14 ± 0.9	15 ± 1.5	13 ± 3.2
100.0	12 ± 0.9	13 ± 0.7	16 ± 1.5	15 ± 1.3	15 ± 0.3
333.0	12 ± 1.8	12 ± 1.0	16 ± 2.0	13 ± 1.2	18 ± 2.7
1000.0	9 ± 0.3	13 ± 0.7	15 ± 0.9	16 ± 2.5	16 ± 1.5
3333.0	10 ± 0.6	15 ± 1.8	16 ± 1.5	18 ± 1.3	17 ± 2.0
5000.0	11 ± 2.0 <sup>p</sup>			5 ± 5.0 <sup>x</sup>	
10000.0		9 ± 0.9 <sup>p</sup>	14 ± 3.2 <sup>p</sup>		16 ± 4.5 <sup>p</sup>
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control <sup>3</sup>					378 ± 13.9
Positive Control <sup>5</sup>			208 ± 6.8		
Positive Control <sup>4</sup>	887 ± 34.4	808 ± 20.8			
Positive Control <sup>6</sup>				141 ± 3.8	

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Strain: TA1535

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Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control <sup>1</sup>	17 ± 0.9
100.0	14 ± 1.9
333.0	14 ± 2.7
1000.0	16 ± 3.3
3333.0	18 ± 0.7
5000.0	6 ± 5.7 <sup>x</sup>
10000.0	
Trial Summary	Negative
Positive Control <sup>3</sup>	
Positive Control <sup>5</sup>	290 ± 10.3
Positive Control <sup>4</sup>	
Positive Control <sup>6</sup>	

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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>	159 ± 5.2	172 ± 7.1	174 ± 4.4	169 ± 5.6	162 ± 3.5
100.0	166 ± 3.7	162 ± 5.0	161 ± 3.8	176 ± 2.7	165 ± 3.7
333.0	168 ± 10.8	155 ± 3.5	167 ± 8.6	179 ± 2.1	168 ± 1.5
1000.0	162 ± 3.8	176 ± 5.5	159 ± 6.1	178 ± 9.2	169 ± 9.0
3333.0	153 ± 4.4	158 ± 2.0	178 ± 4.0	172 ± 3.5	163 ± 2.3
5000.0	171 ± 2.9 <sup>p</sup>			54 ± 53.7 <sup>x</sup>	
10000.0		153 ± 4.3 <sup>p</sup>	159 ± 6.6 <sup>p</sup>		127 ± 9.0 <sup>p</sup>
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control <sup>2</sup>					461 ± 19.3
Positive Control <sup>3</sup>			406 ± 10.1		
Positive Control <sup>5</sup>				657 ± 18.3	
Positive Control <sup>7</sup>	685 ± 19.0	416 ± 17.6			

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Strain: TA97

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Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control <sup>1</sup>	183 ± 3.1
100.0	177 ± 2.8
333.0	181 ± 6.3
1000.0	179 ± 5.5
3333.0	168 ± 9.8
5000.0	50 ± 50.0 <sup>x</sup>
10000.0	
Trial Summary	Negative
Positive Control <sup>2</sup>	
Positive Control <sup>3</sup>	740 ± 19.9
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>	21 ± 1.5	23 ± 1.5	24 ± 0.9	16 ± 1.8	26 ± 1.2
100.0	17 ± 0.6	23 ± 2.3	23 ± 3.7	16 ± 0.9	21 ± 2.0
333.0	15 ± 1.8	24 ± 1.2	20 ± 1.0	19 ± 0.3	26 ± 2.9
1000.0	17 ± 2.2	23 ± 0.7	23 ± 0.9	20 ± 1.0	27 ± 2.9
3333.0	17 ± 0.9	23 ± 1.5	26 ± 1.5	17 ± 1.2	25 ± 2.5
10000.0	21 ± 1.7 <sup>p</sup>	19 ± 4.0 <sup>p</sup>	18 ± 3.2 <sup>p</sup>	16 ± 1.5 <sup>p</sup>	26 ± 2.0 <sup>p</sup>
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control <sup>2</sup>					424 ± 15.3
Positive Control <sup>3</sup>			377 ± 15.7		
Positive Control <sup>8</sup>	303 ± 5.0	355 ± 15.2			
Positive Control <sup>5</sup>				474 ± 0.6	



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Strain: TA98

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Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control <sup>1</sup>	18 ± 1.5
100.0	18 ± 0.9
333.0	18 ± 2.1
1000.0	21 ± 1.7
3333.0	18 ± 1.9
10000.0	17 ± 1.5 <sup>p</sup>
Trial Summary	Negative
Positive Control <sup>2</sup>	
Positive Control <sup>3</sup>	565 ± 20.2
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: Methyl Ethyl Ketone

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

p: Precipitate

x: Slight Toxicity and Precipitate

**\*\* END OF REPORT \*\***