

Experiment Number: 187641

Test Type: Genetic Toxicology - Bacterial
Mutagenicity

G06: Ames Summary Data

Test Compound: Methacrylic acid

CAS Number: 79-41-4

Date Report Requested: 09/14/2018

Time Report Requested: 00:58:16

NTP Study Number:

187641

Study Result:

Equivocal

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Mutagenicity

G06: Ames Summary Data

Test Compound: Methacrylic acid

CAS Number: 79-41-4

Date Report Requested: 09/14/2018

Time Report Requested: 00:58:16

Strain: TA100

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 30% Rat S9	With 10% Hamster S9
Vehicle Control ¹	159 ± 7.3	140 ± 4.3	151 ± 10.2	186 ± 7.8	146 ± 8.5
33.0		125 ± 1.5	149 ± 0.3	170 ± 29.2	140 ± 10.8
100.0	166 ± 8.3	114 ± 8.1	154 ± 6.7	193 ± 4.9	132 ± 10.5
333.0	165 ± 4.4	114 ± 3.9	168 ± 8.7	207 ± 9.3	157 ± 4.8
1000.0	128 ± 10.8	130 ± 11.9	147 ± 8.5	151 ± 36.6	142 ± 0.6
3333.0	142 ± 10.1	111 ± 4.0	146 ± 8.3	144 ± 16.0	127 ± 10.0
6666.0	14 ± 13.7 ^s				
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ²					655 ± 10.5
Positive Control ³			594 ± 50.8		
Positive Control ⁴				381 ± 23.1	
Positive Control ⁵	312 ± 8.7	680 ± 33.5			

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Strain: TA100

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	171 ± 6.2
33.0	158 ± 8.4
100.0	174 ± 3.5
333.0	182 ± 9.2
1000.0	172 ± 19.9
3333.0	111 ± 19.7
6666.0	
Trial Summary	Negative
Positive Control ²	
Positive Control ³	510 ± 18.2
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	12 ± 2.6	9 ± 0.6	11 ± 2.2	16 ± 0.3	11 ± 1.9
33.0	10 ± 1.2	10 ± 1.2	12 ± 1.2	12 ± 2.5	13 ± 0.0
100.0	7 ± 0.9	10 ± 3.0	19 ± 1.2	11 ± 2.6	14 ± 1.2
333.0	9 ± 1.9	9 ± 2.3	14 ± 1.9	16 ± 4.7	7 ± 2.0
1000.0	9 ± 1.7	8 ± 1.0	13 ± 3.7	15 ± 1.7	11 ± 0.3
3333.0	9 ± 1.2	6 ± 1.9	9 ± 2.8	12 ± 0.3	8 ± 2.2
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ³					103 ± 12.5
Positive Control ⁴			83 ± 4.3		
Positive Control ⁶				54 ± 1.5	
Positive Control ⁵	399 ± 4.9	596 ± 14.5			

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G06: Ames Summary Data

Test Compound: Methacrylic acid

CAS Number: 79-41-4

Date Report Requested: 09/14/2018

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Strain: TA1535

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	14 ± 3.2
33.0	18 ± 2.1
100.0	15 ± 1.2
333.0	18 ± 0.7
1000.0	14 ± 3.7
3333.0	15 ± 1.2
Trial Summary	Negative
Positive Control ³	
Positive Control ⁴	106 ± 11.8
Positive Control ⁶	
Positive Control ⁵	

Experiment Number: 187641

Test Type: Genetic Toxicology - Bacterial
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G06: Ames Summary Data

Test Compound: Methacrylic acid

CAS Number: 79-41-4

Date Report Requested: 09/14/2018

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Strain: TA1537

Dose (ug/Plate)	Without S9	With 5% Rat S9	With 10% Rat S9	With 30% Rat S9
Vehicle Control ¹	6 ± 0.9	4 ± 0.9	10 ± 2.7	9 ± 1.5
100.0	6 ± 0.7	6 ± 1.5	8 ± 0.3	9 ± 1.0
333.0	6 ± 0.9	8 ± 2.1	10 ± 2.9	8 ± 2.3
1000.0	4 ± 1.3	10 ± 0.9	5 ± 0.3	6 ± 1.3
1666.0	6 ± 0.3	5 ± 0.3	7 ± 0.3	11 ± 1.5
3333.0	5 ± 0.7	7 ± 1.5	7 ± 0.9	7 ± 1.9
Trial Summary	Negative	Negative	Negative	Negative
Positive Control ⁶		166 ± 6.4	134 ± 4.9	67 ± 2.6
Positive Control ⁷	110 ± 1.5			

Experiment Number: 187641

Test Type: Genetic Toxicology - Bacterial
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Test Compound: Methacrylic acid
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Date Report Requested: 09/14/2018

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Strain: TA97

Dose (ug/Plate)	Without S9	Without S9	Without S9	With 5% Rat S9	With 5% Rat S9
Vehicle Control ¹	201 ± 9.1	221 ± 1.0	209 ± 9.8	190 ± 8.7	231 ± 4.3
33.0	208 ± 12.1	206 ± 8.4		208 ± 4.5	
100.0	229 ± 5.4	213 ± 9.5	212 ± 7.9	208 ± 12.2	244 ± 2.5
333.0	236 ± 1.2	226 ± 1.9	222 ± 0.6	222 ± 5.2	238 ± 13.6
1000.0	242 ± 1.2	228 ± 4.4	227 ± 11.1	221 ± 9.4	226 ± 9.1
1666.0			250 ± 7.9	254 ± 4.7	269 ± 7.5
3333.0	287 ± 17.9	281 ± 5.1	216 ± 17.1		298 ± 0.9
6666.0					
10000.0					
Trial Summary	Equivocal	Equivocal	Equivocal	Equivocal	Equivocal
Positive Control ²					
Positive Control ³				551 ± 32.1	370 ± 7.8
Positive Control ⁴					
Positive Control ⁷	534 ± 59.4	450 ± 27.0	437 ± 22.6		

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Test Compound: Methacrylic acid
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Date Report Requested: 09/14/2018

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Strain: TA97

Dose (ug/Plate)	With 5% Rat S9	With 5% Rat S9	With 10% Rat S9	With 10% Rat S9	With 30% Rat S9
Vehicle Control ¹	205 ± 9.7	161 ± 1.8	218 ± 4.4	176 ± 5.9	220 ± 9.1
33.0			212 ± 2.0		214 ± 4.3
100.0		182 ± 5.2	235 ± 8.0	200 ± 10.8	223 ± 5.1
333.0	223 ± 15.2	203 ± 13.5	251 ± 7.3	223 ± 5.2	255 ± 7.5
1000.0	255 ± 11.9	192 ± 11.6	237 ± 13.7	244 ± 6.4	265 ± 12.0
1666.0	263 ± 4.7	224 ± 16.0	247 ± 0.7	209 ± 8.6	
3333.0	378 ± 12.9	235 ± 18.6		236 ± 12.8	207 ± 12.0
6666.0	0 ± 0.0 ^s				
10000.0	Toxic				
Trial Summary	Weakly Positive	Equivocal	Negative	Equivocal	Negative
Positive Control ²					
Positive Control ³	347 ± 14.5	366 ± 10.4	353 ± 11.4	300 ± 12.3	
Positive Control ⁴					322 ± 9.1
Positive Control ⁷					

Experiment Number: 187641

Test Type: Genetic Toxicology - Bacterial
Mutagenicity

G06: Ames Summary Data

Test Compound: Methacrylic acid

CAS Number: 79-41-4

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Strain: TA97

Dose (ug/Plate)	With 30% Rat S9	With 30% Rat S9	With 5% Hamster S9	With 10% Hamster S9	With 10% Hamster S9
Vehicle Control ¹	233 ± 10.7	222 ± 7.5	171 ± 9.8	193 ± 4.7	177 ± 0.6
33.0	251 ± 16.4		201 ± 6.3	220 ± 9.6	229 ± 14.9
100.0	232 ± 16.5	248 ± 5.9	211 ± 17.1	243 ± 11.5	218 ± 11.6
333.0	233 ± 7.5	256 ± 16.1	198 ± 22.8	254 ± 4.9	229 ± 4.3
1000.0	244 ± 9.1	251 ± 6.5	227 ± 9.0	228 ± 10.2	238 ± 6.7
1666.0	293 ± 14.2	246 ± 4.9			
3333.0		204 ± 19.9	282 ± 11.3	251 ± 22.2	246 ± 24.0
6666.0					
10000.0					
Trial Summary	Equivocal	Negative	Equivocal	Equivocal	Equivocal
Positive Control ²			551 ± 53.1	375 ± 8.2	554 ± 26.5
Positive Control ³					
Positive Control ⁴	330 ± 10.4	346 ± 10.4			
Positive Control ⁷					

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Test Compound: Methacrylic acid
CAS Number: 79-41-4

Date Report Requested: 09/14/2018
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Strain: TA97

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	210 ± 15.0
33.0	200 ± 25.7
100.0	223 ± 1.8
333.0	226 ± 4.5
1000.0	219 ± 7.0
1666.0	
3333.0	229 ± 15.1
6666.0	
10000.0	
Trial Summary	Negative
Positive Control ²	
Positive Control ³	322 ± 8.2
Positive Control ⁴	
Positive Control ⁷	

Experiment Number: 187641

Test Type: Genetic Toxicology - Bacterial
Mutagenicity

G06: Ames Summary Data

Test Compound: Methacrylic acid

CAS Number: 79-41-4

Date Report Requested: 09/14/2018

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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	31 ± 1.7	21 ± 2.1	21 ± 2.6	29 ± 1.5	30 ± 4.5
33.0		29 ± 4.0	24 ± 2.4	21 ± 2.7	22 ± 1.5
100.0	21 ± 4.0	25 ± 0.7	27 ± 1.5	28 ± 2.3	26 ± 2.4
333.0	28 ± 2.2	23 ± 2.3	24 ± 2.6	28 ± 5.2	28 ± 2.2
1000.0	26 ± 1.2	19 ± 2.0	20 ± 1.9	25 ± 2.1	23 ± 2.7
3333.0	27 ± 1.5	20 ± 1.2	24 ± 2.9	22 ± 2.5	24 ± 1.9
6666.0	Toxic				
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ²					665 ± 25.6
Positive Control ³			337 ± 14.8	73 ± 0.7	
Positive Control ⁸	387 ± 24.9	419 ± 25.7			

Experiment Number: 187641
Test Type: Genetic Toxicology - Bacterial
Mutagenicity

G06: Ames Summary Data
Test Compound: Methacrylic acid
CAS Number: 79-41-4

Date Report Requested: 09/14/2018
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Strain: TA98

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	27 ± 1.2
33.0	32 ± 0.9
100.0	22 ± 2.0
333.0	20 ± 2.3
1000.0	23 ± 3.7
3333.0	20 ± 2.2
6666.0	
Trial Summary	Negative
Positive Control ²	
Positive Control ³	290 ± 20.6
Positive Control ⁸	

Experiment Number: 187641

Test Type: Genetic Toxicology - Bacterial
Mutagenicity

G06: Ames Summary Data

Test Compound: Methacrylic acid

CAS Number: 79-41-4

Date Report Requested: 09/14/2018

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Strain: TA102

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 30% Rat S9	With 10% Hamster S9
Vehicle Control ¹	224 ± 1.9	283 ± 11.6	267 ± 11.1	356 ± 7.4	299 ± 14.6
3.0	239 ± 13.0	269 ± 9.2	272 ± 17.0	395 ± 7.1	292 ± 11.0
10.0	237 ± 14.0	273 ± 18.9	235 ± 14.7	390 ± 17.6	246 ± 11.0
33.0	167 ± 9.6	297 ± 15.0	270 ± 14.2	380 ± 4.2	239 ± 9.5
100.0	177 ± 13.0	270 ± 22.8	241 ± 7.4	383 ± 6.7	212 ± 12.9
333.0	208 ± 4.8	226 ± 49.5	253 ± 10.4	388 ± 3.6	270 ± 35.0
1000.0					
3333.0					
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ⁹	600 ± 16.3	783 ± 36.8			
Positive Control ⁶					437 ± 26.9
Positive Control ¹⁰			492 ± 13.0	632 ± 2.1	

Experiment Number: 187641

Test Type: Genetic Toxicology - Bacterial
Mutagenicity

G06: Ames Summary Data

Test Compound: Methacrylic acid

CAS Number: 79-41-4

Date Report Requested: 09/14/2018

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Strain: TA102

Dose (ug/Plate)	With 30% Hamster S9	With 30% Hamster S9
Vehicle Control ¹	231 ± 21.0	353 ± 3.5
3.0		348 ± 8.2
10.0		354 ± 6.8
33.0	268 ± 2.9	375 ± 7.4
100.0	245 ± 3.8	378 ± 9.6
333.0	213 ± 5.7	311 ± 32.1
1000.0	163 ± 6.4	
3333.0	154 ± 20.3	
Trial Summary	Negative	Negative
Positive Control ⁹		
Positive Control ⁶	315 ± 14.8	1114 ± 66.5
Positive Control ¹⁰		

Experiment Number: 187641

Test Type: Genetic Toxicology - Bacterial
Mutagenicity

G06: Ames Summary Data

Test Compound: Methacrylic acid

CAS Number: 79-41-4

Date Report Requested: 09/14/2018

Time Report Requested: 00:58:16

Strain: TA104

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 30% Rat S9	With 10% Hamster S9
Vehicle Control ¹	428 ± 3.8	364 ± 15.3	417 ± 10.4	538 ± 13.0	396 ± 8.2
3.0		319 ± 7.5	410 ± 14.2		397 ± 3.1
10.0		315 ± 5.2	390 ± 13.1		346 ± 14.7
33.0	435 ± 17.3	324 ± 10.1	365 ± 16.4	555 ± 11.2	322 ± 11.0
100.0	385 ± 13.2	332 ± 14.7	391 ± 25.1	523 ± 16.3	301 ± 14.1
333.0	373 ± 28.4	335 ± 5.1	367 ± 18.3	503 ± 10.9	364 ± 21.3
1000.0	315 ± 3.8			482 ± 9.7	
3333.0	201 ± 18.4			360 ± 13.7	
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ⁴					811 ± 9.6
Positive Control ⁶			1057 ± 57.2	707 ± 4.1	
Positive Control ¹¹	939 ± 27.3	753 ± 11.3			

Experiment Number: 187641

Test Type: Genetic Toxicology - Bacterial
Mutagenicity

G06: Ames Summary Data

Test Compound: Methacrylic acid

CAS Number: 79-41-4

Date Report Requested: 09/14/2018

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Strain: TA104

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	505 ± 4.0
3.0	
10.0	
33.0	485 ± 19.2
100.0	446 ± 17.9
333.0	462 ± 10.9
1000.0	408 ± 8.1
3333.0	363 ± 17.7
Trial Summary	Negative
Positive Control ⁴	944 ± 45.6
Positive Control ⁶	
Positive Control ¹¹	

Experiment Number: 187641

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

G06: Ames Summary Data

Test Compound: **Methacrylic acid**

CAS Number: **79-41-4**

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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: 2.5 ug/Plate 2-Aminoanthracene

5: 5.0 ug/Plate Sodium Azide

6: 5.0 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: 10.0 ug/Plate 2-Aminoanthracene

11: 250.0 ug/Plate Methyl Methane Sulfonate

s: Slight Toxicity

**** END OF REPORT ****