

Experiment Number: **G10481**

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

G06: Ames Summary Data

Test Compound: **Benzyl chloride**

CAS Number: **100-44-7**

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

Time Report Requested: **11:32:20**

NTP Study Number:

G10481

Study Result:

Weakly Positive

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Strain: TA100

Dose (ug/Plate)	Without S9	Without S9	Without S9	Without S9	With 10% Rat S9
Vehicle Control ¹	89 ± 4.6	117 ± 5.8	111 ± 4.2	104 ± 3.7	95 ± 8.0
5.0			116 ± 1.0		
10.0	109 ± 6.7	104 ± 5.2		118 ± 4.7	102 ± 9.0
20.0			129 ± 6.0		
25.0	107 ± 3.7	101 ± 3.8		124 ± 8.5	96 ± 7.9
50.0	93 ± 10.0	97 ± 6.9	153 ± 7.4		101 ± 6.8
100.0	94 ± 1.2	123 ± 14.8		158 ± 12.2	101 ± 9.5
200.0			196 ± 3.2		
250.0	211 ± 95.0	138 ± 1.5		128 ± 3.8	106 ± 5.5
500.0	Toxic	156 ± 4.4	Toxic		95 ± 14.4
1000.0				Toxic	
2000.0			Toxic	Toxic	
Trial Summary	Weakly Positive	Negative	Weakly Positive	Equivocal	Negative
Positive Control ²	624 ± 17.3	1001 ± 27.6	735 ± 10.5	561 ± 28.2	
Positive Control ³					
Positive Control ⁴					
Positive Control ⁵					618 ± 18.8

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Strain: TA100

Dose (ug/Plate)	With 10% Rat S9	With 10% Rat S9	With 10% Rat S9
Vehicle Control ¹	94 ± 6.1	94 ± 8.7	112 ± 7.3
5.0		99 ± 7.8	
10.0	112 ± 7.5		114 ± 7.1
20.0		109 ± 1.5	
25.0	116 ± 4.1		105 ± 2.0
50.0	103 ± 4.7	101 ± 3.8	
100.0	100 ± 7.8		126 ± 7.8
200.0		129 ± 6.8	
250.0	120 ± 5.7		142 ± 11.7
500.0	106 ± 1.9	108 ± 13.5	
1000.0			Toxic
2000.0		Toxic	Toxic
Trial Summary	Negative	Negative	Negative
Positive Control ²			
Positive Control ³		1201 ± 41.9	
Positive Control ⁴			2142 ± 111.5
Positive Control ⁵	3392 ± 187.5		

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Strain: TA98

Dose (ug/Plate)	Without S9	Without S9	Without S9	Without S9	With 10% Rat S9
Vehicle Control ¹	21 ± 7.1	15 ± 1.5	21 ± 0.7	27 ± 3.5	23 ± 2.6
0.05	15 ± 0.9	21 ± 1.8			
0.1	20 ± 2.8	18 ± 0.3			
0.25	15 ± 1.7	20 ± 2.0			
0.5			19 ± 3.4		
1.0	16 ± 4.8	18 ± 2.0			
2.0			21 ± 2.6		
2.5	17 ± 4.1	20 ± 2.6			
5.0			30 ± 2.8		
10.0	13 ± 1.7	19 ± 1.0		25 ± 2.2	30 ± 1.9
20.0			23 ± 6.0		
25.0				22 ± 1.5	21 ± 0.3
50.0			28 ± 4.0		27 ± 6.1
100.0				27 ± 1.5	33 ± 3.5
200.0			28 ± 0.7		
250.0				20 ± 4.0	31 ± 5.0
500.0					24 ± 0.3
1000.0				Toxic	
2000.0				Toxic	
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ⁶					353 ± 62.1
Positive Control ⁷	380 ± 26.0	728 ± 26.9	552 ± 19.1	661 ± 138.5	

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Strain: TA98

Dose (ug/Plate)	With 10% Rat S9	With 10% Rat S9	With 10% Rat S9
Vehicle Control ¹	25 ± 4.4	21 ± 2.1	35 ± 2.6
0.05			
0.1			
0.25			
0.5			
1.0			
2.0			
2.5			
5.0		29 ± 4.3	
10.0	34 ± 4.3		29 ± 4.3
20.0		36 ± 4.7	
25.0	28 ± 5.8		33 ± 2.2
50.0	31 ± 4.4	28 ± 5.4	
100.0	22 ± 2.3		32 ± 3.0
200.0		29 ± 3.8	
250.0	31 ± 1.7		35 ± 7.6
500.0	25 ± 3.0	20 ± 2.8	
1000.0			Toxic
2000.0		Toxic	Toxic
Trial Summary	Negative	Negative	Negative
Positive Control ⁶	1361 ± 244.8	1058 ± 43.9	1618 ± 50.0
Positive Control ⁷			

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Strain: E. coli WP2 uvrA pKM101

Dose (ug/Plate)	Without S9	Without S9	Without S9	Without S9	With 10% Rat S9
Vehicle Control ¹	103 ± 3.8	151 ± 15.3	130 ± 5.0	158 ± 10.5	125 ± 12.8
0.25					129 ± 6.9
1.0					126 ± 7.9
2.5					126 ± 11.1
5.0			138 ± 6.6		
10.0	126 ± 20.2	132 ± 4.1		160 ± 7.8	125 ± 5.3
20.0			151 ± 2.5		
25.0	103 ± 3.2	142 ± 2.9		178 ± 3.9	134 ± 7.1
50.0	122 ± 2.3	143 ± 5.8	152 ± 4.7		144 ± 6.0
100.0	119 ± 5.9	142 ± 11.3		225 ± 6.4	
200.0			235 ± 13.1		
250.0	138 ± 4.0	157 ± 3.9		285 ± 4.5	
500.0	63 ± 8.4	177 ± 2.8	122 ± 5.2		
1000.0				Toxic	
2000.0			Toxic	Toxic	
Trial Summary	Negative	Negative	Weakly Positive	Weakly Positive	Negative
Positive Control ⁸					383 ± 4.9
Positive Control ⁹	1600 ± 84.3	1066 ± 42.8	1055 ± 34.0	1140 ± 28.4	

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Strain: E. coli WP2 uvrA pKM101

Dose (ug/Plate)	With 10% Rat S9	With 10% Rat S9	With 10% Rat S9
Vehicle Control ¹	141 ± 4.4	172 ± 5.4	192 ± 3.4
0.25	157 ± 22.0		
1.0	233 ± 61.9		
2.5	161 ± 1.9		
5.0		175 ± 6.7	
10.0	158 ± 4.3		189 ± 5.0
20.0		177 ± 9.5	
25.0	171 ± 6.5		225 ± 5.2
50.0	173 ± 5.5	198 ± 11.5	
100.0			312 ± 22.5
200.0		353 ± 26.0	
250.0			385 ± 27.4
500.0		218 ± 7.7	
1000.0			Toxic
2000.0		Toxic	Toxic
Trial Summary	Negative	Positive	Weakly Positive
Positive Control ⁸	1061 ± 36.0	321 ± 15.7	1048 ± 11.0
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: 1.0 ug/Plate Sodium Azide
- 3: 2.5 ug/Plate 2-Aminoanthracene
- 4: 2.5 mL/Chamber 2-Aminoanthracene
- 5: 5.0 ug/Plate 2-Aminoanthracene
- 6: 2.0 ug/Plate 2-Aminoanthracene
- 7: 3.0 ug/Plate 2-Nitrofluorene
- 8: 20.0 ug/Plate 2-Aminoanthracene
- 9: 100.0 ug/Plate Methyl Methane Sulfonate

**** END OF REPORT ****