

Experiment Number: 477668

Test Type: Genetic Toxicology - Bacterial  
Mutagenicity

**G06: Ames Summary Data**

Test Compound: Zirconocene dichloride

CAS Number: 1291-32-3

Date Report Requested: 09/11/2018

Time Report Requested: 16:45:23

**NTP Study Number:**

477668

**Study Result:**

Positive

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Test Compound: Zirconocene dichloride

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## Strain: TA100

Dose (ug/Plate)	Without S9	Without S9	Without S9	With 10% Rat S9	With 10% Rat S9
Vehicle Control <sup>1</sup>	88 ± 5.4	97 ± 9.2	84 ± 2.6	95 ± 7.4	91 ± 4.0
100.0	107 ± 3.6	104 ± 11.7	101 ± 10.9	114 ± 9.5	
333.0	132 ± 7.6	126 ± 15.9	151 ± 6.4	119 ± 10.0	
666.0			209 ± 6.5		
1000.0	245 ± 5.6	178 ± 6.4	260 ± 17.6	130 ± 9.5	113 ± 12.3
1666.0			259 ± 6.9		87 ± 5.5
3333.0	209 ± 6.4	151 ± 13.2		126 ± 6.1	111 ± 6.8
6666.0		118 ± 7.5			121 ± 4.2
10000.0	210 ± 12.1			196 ± 8.5	129 ± 3.7
Trial Summary	Positive	Equivocal	Positive	Equivocal	Equivocal
Positive Control <sup>2</sup>					
Positive Control <sup>3</sup>				546 ± 19.7	421 ± 27.9
Positive Control <sup>4</sup>	577 ± 7.0	326 ± 11.1	329 ± 4.1		

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## Strain: TA100

Dose (ug/Plate)	With 10% Rat S9	With 10% Hamster S9	With 10% Hamster S9	With 10% Hamster S9
Vehicle Control <sup>1</sup>	100 ± 2.1	82 ± 5.2	98 ± 10.4	93 ± 2.9
100.0		110 ± 14.5		
333.0		111 ± 3.8		
666.0	100 ± 8.6			107 ± 9.4
1000.0	89 ± 3.8	115 ± 10.8	126 ± 6.8	91 ± 0.7
1666.0			118 ± 9.4	
3333.0	92 ± 0.9	133 ± 9.5	105 ± 4.2	86 ± 5.2
6666.0	107 ± 5.9		122 ± 6.8	100 ± 8.5
10000.0	117 ± 7.4	172 ± 25.4 <sup>s</sup>	135 ± 13.1	91 ± 2.5
Trial Summary	Negative	Weakly Positive	Equivocal	Negative
Positive Control <sup>2</sup>		976 ± 32.9	674 ± 45.2	738 ± 34.7
Positive Control <sup>3</sup>	477 ± 13.3			
Positive Control <sup>4</sup>				

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**Strain: TA1535**

<b>Dose (ug/Plate)</b>	<b>Without S9</b>	<b>With 10% Rat S9</b>	<b>With 10% Hamster S9</b>
Vehicle Control <sup>1</sup>	19 ± 1.5	11 ± 2.2	13 ± 0.3
100.0	21 ± 0.9	9 ± 1.2	14 ± 1.5
333.0	19 ± 1.2	12 ± 2.1	12 ± 2.0
1000.0	17 ± 0.9	9 ± 1.8	13 ± 0.9
3333.0	11 ± 2.9	8 ± 0.6	12 ± 1.8
10000.0	3 ± 0.3	8 ± 1.2	6 ± 1.3
Trial Summary	Negative	Negative	Negative
Positive Control <sup>3</sup>			257 ± 4.0
Positive Control <sup>4</sup>	565 ± 31.2		
Positive Control <sup>5</sup>		176 ± 7.5	

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## Strain: TA97

Dose (ug/Plate)	Without S9	With 10% Rat S9	With 10% Hamster S9	With 10% Hamster S9	With 10% Hamster S9
Vehicle Control <sup>1</sup>	154 ± 3.8	180 ± 3.6	164 ± 1.2	142 ± 2.3	157 ± 1.2
100.0	132 ± 11.3	157 ± 10.0	155 ± 4.4		152 ± 4.9
333.0	168 ± 14.1	157 ± 16.3	158 ± 8.5		166 ± 4.3
1000.0	189 ± 9.6	125 ± 15.0	178 ± 12.1	156 ± 11.6	197 ± 4.9
1666.0				173 ± 6.4	
3333.0	163 ± 1.2	154 ± 5.9	229 ± 7.7	181 ± 16.2	244 ± 18.0
6666.0				195 ± 18.2	
10000.0	137 ± 25.0 <sup>s</sup>	170 ± 10.4	398 ± 6.2	213 ± 12.2	245 ± 8.4
Trial Summary	Negative	Negative	Weakly Positive	Equivocal	Weakly Positive
Positive Control <sup>2</sup>			566 ± 2.0	352 ± 3.0	469 ± 13.3
Positive Control <sup>3</sup>		372 ± 10.2			
Positive Control <sup>6</sup>	1331 ± 63.0				

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## Strain: TA98

Dose (ug/Plate)	Without S9	Without S9	Without S9	With 10% Rat S9	With 10% Rat S9
Vehicle Control <sup>1</sup>	19 ± 2.9	18 ± 1.2	15 ± 1.5	32 ± 1.9	23 ± 5.8
100.0	27 ± 3.5	18 ± 2.8		28 ± 0.3	
333.0	48 ± 9.0	28 ± 2.2		28 ± 1.0	
666.0			55 ± 3.8		
1000.0	136 ± 25.0	62 ± 8.4	102 ± 13.4	40 ± 5.8	34 ± 2.4
1666.0					35 ± 9.0
3333.0	208 ± 11.5	70 ± 3.9	131 ± 21.0	39 ± 1.8	21 ± 2.7
6666.0		43 ± 5.6	120 ± 5.4		26 ± 1.5
10000.0	224 ± 22.5		77 ± 3.4	50 ± 6.7	16 ± 1.5
Trial Summary	Positive	Positive	Positive	Equivocal	Negative
Positive Control <sup>2</sup>					
Positive Control <sup>3</sup>				423 ± 24.0	292 ± 16.2
Positive Control <sup>7</sup>	543 ± 15.5	580 ± 11.7	547 ± 17.3		

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## Strain: TA98

Dose (ug/Plate)	With 10% Rat S9	With 10% Hamster S9	With 10% Hamster S9	With 10% Hamster S9
Vehicle Control <sup>1</sup>	29 ± 0.6	31 ± 2.6	27 ± 0.9	17 ± 2.7
100.0		34 ± 4.3		
333.0		29 ± 0.9		
666.0	25 ± 4.4			24 ± 5.2
1000.0	22 ± 2.2	38 ± 3.3	26 ± 1.3	26 ± 0.9
1666.0			23 ± 4.2	
3333.0	26 ± 2.3	51 ± 1.7	29 ± 5.6	17 ± 1.3
6666.0	24 ± 1.5		21 ± 2.3	19 ± 2.8
10000.0	20 ± 0.6	73 ± 10.5	18 ± 0.9	16 ± 2.9 <sup>s</sup>
Trial Summary	Negative	Positive	Negative	Negative
Positive Control <sup>2</sup>		830 ± 53.3	567 ± 19.9	542 ± 20.2
Positive Control <sup>3</sup>	291 ± 18.7			
Positive Control <sup>7</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: 0.5 ug/Plate 2-Aminoanthracene

3: 1.0 ug/Plate 2-Aminoanthracene

4: 1.0 ug/Plate Sodium Azide

5: 2.5 ug/Plate 2-Aminoanthracene

6: 50.0 ug/Plate 9-Aminoacridine

7: 2.5 ug/Plate 4-Nitro-O-Phenylenediamine

s: Slight Toxicity

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