

Experiment Number: **A90714**

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

**G06: Ames Summary Data**

Test Compound: **Malachite green**

CAS Number: **569-64-2**

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

Time Report Requested: **11:53:00**

**NTP Study Number:**

A90714

**Study Result:**

Negative

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Test Compound: Malachite green

CAS Number: 569-64-2

Date Report Requested: 09/15/2018

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**Strain: TA100**

<b>Dose (ug/Plate)</b>	<b>Without S9</b>	<b>Without S9</b>	<b>With 10% Rat S9</b>	<b>With 30% Rat S9</b>	<b>With 10% Hamster S9</b>
Vehicle Control <sup>1</sup>	127 ± 0.9	129 ± 1.2	112 ± 2.0	137 ± 1.5	126 ± 0.3
0.1	127 ± 1.2	132 ± 1.2	115 ± 3.2	149 ± 1.7	133 ± 2.3
0.3	127 ± 0.9	131 ± 2.7	108 ± 3.2	154 ± 1.8	134 ± 2.7
1.0	127 ± 1.7	140 ± 1.9	113 ± 1.8	144 ± 0.9	142 ± 1.5
3.3	128 ± 1.3	138 ± 1.5	113 ± 1.8	145 ± 2.3	135 ± 3.0
10.0	129 ± 0.9	132 ± 1.8	114 ± 2.1	136 ± 1.0	125 ± 1.5
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control <sup>2</sup>			885 ± 3.8	882 ± 4.6	734 ± 5.4
Positive Control <sup>3</sup>	531 ± 5.2	467 ± 15.2			

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Strain: TA100

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Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control <sup>1</sup>	151 ± 1.5
0.1	150 ± 1.5
0.3	147 ± 1.5
1.0	152 ± 2.7
3.3	156 ± 1.2
10.0	153 ± 1.8
Trial Summary	Negative
Positive Control <sup>2</sup>	729 ± 3.5
Positive Control <sup>3</sup>	

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Test Compound: Malachite green

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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>	17 ± 1.3	17 ± 0.9	17 ± 0.9	20 ± 1.5	17 ± 0.7
0.1	17 ± 0.9	17 ± 0.7	18 ± 0.9	21 ± 2.1	15 ± 0.9
0.3	17 ± 1.0	19 ± 0.6	15 ± 1.5	20 ± 1.2	17 ± 1.2
1.0	17 ± 1.8	18 ± 1.9	15 ± 1.0	18 ± 1.2	16 ± 0.3
3.3	17 ± 1.7	17 ± 1.5	17 ± 1.2	21 ± 1.7	16 ± 1.2
10.0	17 ± 0.9	17 ± 0.9	16 ± 0.7	18 ± 2.6	17 ± 1.3
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control <sup>2</sup>			274 ± 4.8	238 ± 9.0	221 ± 4.9
Positive Control <sup>3</sup>	563 ± 3.5	230 ± 4.0			

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Strain: TA1535

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Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control <sup>1</sup>	14 ± 0.3
0.1	16 ± 1.2
0.3	16 ± 0.9
1.0	17 ± 1.0
3.3	17 ± 1.5
10.0	16 ± 1.7
Trial Summary	Negative
Positive Control <sup>2</sup>	180 ± 2.6
Positive Control <sup>3</sup>	

Experiment Number: A90714

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## G06: Ames Summary Data

Test Compound: Malachite green

CAS Number: 569-64-2

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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>	118 ± 1.5	123 ± 1.5	153 ± 4.1	128 ± 2.1	127 ± 2.1
0.1	128 ± 0.7	121 ± 2.1	158 ± 3.5	125 ± 1.3	122 ± 1.2
0.3	126 ± 1.2	125 ± 0.9	146 ± 3.2	124 ± 1.5	124 ± 2.0
1.0	126 ± 1.0	127 ± 1.7	157 ± 2.0	134 ± 2.3	127 ± 1.2
3.3	124 ± 0.7	120 ± 2.4	137 ± 4.4	134 ± 0.6	125 ± 2.7
10.0	118 ± 1.3	126 ± 1.2	134 ± 3.8	127 ± 1.2	128 ± 1.9
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control <sup>2</sup>			533 ± 22.3	462 ± 7.2	472 ± 6.7
Positive Control <sup>4</sup>	387 ± 3.5	251 ± 5.9			

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Strain: TA97

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Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control <sup>1</sup>	130 ± 1.7
0.1	125 ± 1.9
0.3	128 ± 1.2
1.0	123 ± 0.6
3.3	125 ± 2.6
10.0	128 ± 0.9
Trial Summary	Negative
Positive Control <sup>2</sup>	781 ± 4.6
Positive Control <sup>4</sup>	

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## G06: Ames Summary Data

Test Compound: Malachite green

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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>	46 ± 0.3	21 ± 0.6	37 ± 1.0	35 ± 2.0	34 ± 1.8
0.1	45 ± 2.1	25 ± 0.7	37 ± 3.3	32 ± 0.6	34 ± 1.2
0.3	44 ± 1.5	25 ± 2.0	39 ± 3.2	34 ± 1.5	36 ± 1.8
1.0	45 ± 1.0	28 ± 1.2	39 ± 1.2	36 ± 1.5	38 ± 1.2
3.3	47 ± 0.9	24 ± 2.1	41 ± 1.5	36 ± 1.8	38 ± 0.3
10.0	45 ± 1.3	20 ± 0.9	46 ± 0.7	36 ± 0.9	34 ± 1.5
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control <sup>2</sup>			360 ± 3.5	442 ± 3.8	983 ± 6.7
Positive Control <sup>5</sup>	285 ± 3.8	344 ± 9.6			



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Strain: TA98

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Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control <sup>1</sup>	29 ± 0.6
0.1	27 ± 0.9
0.3	29 ± 0.3
1.0	31 ± 0.6
3.3	34 ± 1.5
10.0	33 ± 1.8
Trial Summary	Negative
Positive Control <sup>2</sup>	829 ± 2.6
Positive Control <sup>5</sup>	

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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 <sup>1</sup>	272 ± 2.1	284 ± 1.8	259 ± 2.0	337 ± 4.6	256 ± 2.6
0.1	282 ± 2.3	280 ± 1.8	257 ± 1.8	342 ± 4.5	250 ± 2.9
0.3	288 ± 1.8	290 ± 2.3	264 ± 2.2	336 ± 5.5	258 ± 2.7
1.0	267 ± 2.1	295 ± 2.3	274 ± 2.3	349 ± 4.7	259 ± 1.8
3.3	277 ± 3.1	300 ± 2.6	280 ± 1.7	357 ± 4.6	249 ± 2.0
10.0	271 ± 2.3	285 ± 2.4	259 ± 3.2	325 ± 3.4	260 ± 1.5
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control <sup>6</sup>	1416 ± 14.2	961 ± 2.3			
Positive Control <sup>7</sup>			892 ± 3.6	1027 ± 12.5	831 ± 4.3

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Strain: TA102

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Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control <sup>1</sup>	266 ± 2.1
0.1	255 ± 2.6
0.3	274 ± 2.7
1.0	271 ± 2.4
3.3	282 ± 3.1
10.0	258 ± 1.9
Trial Summary	Negative
Positive Control <sup>6</sup>	
Positive Control <sup>7</sup>	759 ± 4.2

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Test Compound: Malachite green

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## Strain: TA104

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 30% Rat S9	With 10% Hamster S9
Vehicle Control <sup>1</sup>	279 ± 9.0	343 ± 2.3	276 ± 1.9	284 ± 2.6	280 ± 1.3
0.1	272 ± 2.0	349 ± 1.5	283 ± 2.1	288 ± 1.5	288 ± 2.8
0.3	289 ± 0.6	358 ± 2.0	281 ± 4.6	290 ± 1.8	277 ± 2.0
1.0	292 ± 1.2	364 ± 2.4	278 ± 4.1	286 ± 2.1	286 ± 1.3
3.3	289 ± 1.5	358 ± 2.6	282 ± 3.2	290 ± 2.6	273 ± 1.8
10.0	273 ± 1.8	348 ± 2.4	280 ± 1.7	289 ± 1.8	277 ± 2.2
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control <sup>8</sup>			1463 ± 13.7	989 ± 8.0	1343 ± 17.5
Positive Control <sup>7</sup>	818 ± 6.5	1116 ± 4.9			

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Strain: TA104

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Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control <sup>1</sup>	284 ± 2.3
0.1	277 ± 4.1
0.3	286 ± 1.8
1.0	289 ± 1.3
3.3	299 ± 1.8
10.0	293 ± 1.8
Trial Summary	Negative
Positive Control <sup>8</sup>	1396 ± 3.8
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: Water
- 2: 1.0 ug/Plate 2-Aminoanthracene
- 3: 1.0 ug/Plate Sodium Azide
- 4: 50.0 ug/Plate 9-Aminoacridine
- 5: 1.0 ug/Plate 4-Nitro-O-Phenylenediamine
- 6: 5.0 ug/Plate Mitomycin-C
- 7: 100.0 ug/Plate Other Positive Control
- 8: 2.0 ug/Plate 2-Aminoanthracene

\*\* END OF REPORT \*\*