Experiment Number: **402945**

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

G06: Ames Summary Data

Test Compound: **N,N,N',N'-Tetramethyl-p-phenylenediamine**

CAS Number: **100-22-1**

Date Report Requested: **09/14/2018**

Time Report Requested: **16:49:30**

NTP Study Number: 402945

Study Result: Positive

Experiment Number: **402945**

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

G06: Ames Summary Data

Test Compound: **N,N,N',N'-Tetramethyl-p-phenylenediamine**

CAS Number: **100-22-1**

Date Report Requested: **09/14/2018**

Time Report Requested: **16:49:30**

Strain: TA100

Dose (ug/Plate)	Without S9	Without S9	With 30% Rat S9	With 30% Rat S9	With 30% Rat S9
Vehicle Control[1]	80 ± 0.6	95 ± 13.0	90 ± 9.9	88 ± 4.0	100 ± 8.3
3.3					
10.0	94 ± 6.4	110 ± 8.4			
33.0	118 ± 10.1	147 ± 12.5	119 ± 4.3	89 ± 2.3	
100.0	159 ± 5.2	179 ± 0.6	117 ± 11.3	101 ± 7.0	147 ± 18.0
333.0	251 ± 14.6	270 ± 10.7	189 ± 9.5	202 ± 11.4	201 ± 5.9
500.0		244 ± 14.6[s]			226 ± 5.1
666.0	163 ± 62.7[s]				
1000.0			241 ± 30.3	237 ± 16.7	253 ± 7.0
1500.0					257 ± 8.7
2000.0			259 ± 15.4	196 ± 9.0[p]	
Trial Summary	Positive	Positive	Positive	Positive	Positive
Positive Control[2]	501 ± 10.3	272 ± 14.4			
Positive Control[3]					
Positive Control[4]			77 ± 19.0[x]	367 ± 13.4	298 ± 77.2

Experiment Number: **402945**

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

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Date Report Requested: **09/14/2018**

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Strain: TA100

Dose (ug/Plate)	With 30% Rat S9	With 30% Hamster S9	With 30% Hamster S9	With 30% Hamster S9
Vehicle Control[1]	110 ± 6.8	108 ± 5.5	104 ± 11.6	106 ± 8.5
3.3				134 ± 2.0
10.0				194 ± 7.3
33.0	114 ± 3.0	336 ± 26.8		311 ± 7.5
100.0	137 ± 13.3	271 ± 20.3	453 ± 19.1	212 ± 17.5
333.0	252 ± 18.6	245 ± 17.1	232 ± 6.2	290 ± 6.9
500.0			248 ± 7.5	
666.0				
1000.0	276 ± 5.2	273 ± 9.3	252 ± 16.8	
1500.0			285 ± 14.3[s]	
2000.0	Toxic	224 ± 20.7		
Trial Summary	Positive	Positive	Positive	Positive
Positive Control[2]				
Positive Control[3]		381 ± 25.0	263 ± 84.8	465 ± 17.5
Positive Control[4]	368 ± 6.6			

Experiment Number: **402945**

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

G06: Ames Summary Data

Test Compound: **N,N,N',N'-Tetramethyl-p-phenylenediamine**

CAS Number: **100-22-1**

Date Report Requested: **09/14/2018**

Time Report Requested: **16:49:30**

Strain: TA1535

Dose (ug/Plate)	Without S9	With 30% Rat S9	With 30% Hamster S9
Vehicle Control[1]	31 ± 2.9	31 ± 3.8	33 ± 4.2
10.0	32 ± 6.0		
33.0	30 ± 2.4	38 ± 7.9	32 ± 0.9
100.0	35 ± 2.3	29 ± 3.0	37 ± 6.2
333.0	30 ± 0.7	27 ± 2.7	32 ± 2.6
666.0	1 ± 0.7[s]		
1000.0		21 ± 2.3	23 ± 3.2
2000.0		2 ± 1.2	5 ± 1.8
Trial Summary	Negative	Negative	Negative
Positive Control[2]	316 ± 15.1		
Positive Control[3]			192 ± 15.2
Positive Control[4]		77 ± 3.9	

Experiment Number: **402945**

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

G06: Ames Summary Data

Test Compound: **N,N,N',N'-Tetramethyl-p-phenylenediamine**

CAS Number: **100-22-1**

Date Report Requested: **09/14/2018**

Time Report Requested: **16:49:30**

Strain: TA97

Dose (ug/Plate)	Without S9	Without S9	With 30% Rat S9	With 30% Rat S9	With 30% Rat S9
Vehicle Control[1]	86 ± 9.3	108 ± 9.0	160 ± 7.2	132 ± 14.5	197 ± 2.6
3.3					
10.0	91 ± 3.1	110 ± 4.8			
33.0	111 ± 10.8	132 ± 4.7	143 ± 9.0	99 ± 3.0	175 ± 11.2
100.0	124 ± 5.4	190 ± 5.3	148 ± 7.2	143 ± 21.7	179 ± 8.7
333.0	157 ± 15.1	175 ± 14.4	207 ± 14.1	178 ± 1.2	265 ± 12.7
500.0		138 ± 12.4			
666.0	48 ± 44.8[s]				
1000.0			264 ± 4.8	184 ± 10.9	325 ± 9.3
1500.0					
2000.0			98 ± 18.5	9 ± 1.2[p]	Toxic
Trial Summary	Weakly Positive	Weakly Positive	Weakly Positive	Equivocal	Weakly Positive
Positive Control[5]			299 ± 33.5	315 ± 27.7	604 ± 26.5
Positive Control[6]	731 ± 24.4	277 ± 37.1			

Experiment Number: **402945**

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

G06: Ames Summary Data

Test Compound: **N,N,N',N'-Tetramethyl-p-phenylenediamine**

CAS Number: **100-22-1**

Date Report Requested: **09/14/2018**

Time Report Requested: **16:49:30**

Strain: TA97

Dose (ug/Plate)	With 30% Hamster S9	With 30% Hamster S9	With 30% Hamster S9
Vehicle Control[1]	161 ± 3.4	152 ± 12.8	131 ± 9.5
3.3			156 ± 6.8
10.0			170 ± 8.2
33.0	180 ± 15.0		205 ± 2.7
100.0	200 ± 11.7	230 ± 3.3	193 ± 1.0
333.0	206 ± 7.4	239 ± 11.3	260 ± 4.2
500.0		263 ± 10.5	
666.0			
1000.0	260 ± 10.3	278 ± 11.2	
1500.0		111 ± 6.4	
2000.0	116 ± 11.6		
Trial Summary	Weakly Positive	Weakly Positive	Positive
Positive Control[5]	843 ± 25.5	1499 ± 155.0	1015 ± 20.2
Positive Control[6]			

Experiment Number: **402945**

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

G06: Ames Summary Data

Test Compound: **N,N,N',N'-Tetramethyl-p-phenylenediamine**

CAS Number: **100-22-1**

Date Report Requested: **09/14/2018**

Time Report Requested: **16:49:30**

Strain: TA98

Dose (ug/Plate)	Without S9	With 30% Rat S9	With 30% Hamster S9	With 30% Hamster S9	With 30% Hamster S9
Vehicle Control[1]	14 ± 0.3	33 ± 2.6	27 ± 3.8	22 ± 0.9	32 ± 2.9
3.3					45 ± 4.8
10.0	15 ± 2.9				53 ± 4.7
33.0	15 ± 1.2	39 ± 1.5	49 ± 4.7		62 ± 3.5
100.0	14 ± 0.3	39 ± 2.0	29 ± 6.4	81 ± 6.6	94 ± 10.2
333.0	25 ± 1.7	28 ± 2.1	19 ± 2.2	18 ± 1.8	32 ± 3.5
500.0				24 ± 2.1	
666.0	2 ± 0.7[s]				
1000.0		31 ± 2.7	15 ± 2.4	16 ± 2.6	
1500.0				16 ± 0.9	
2000.0		12 ± 4.5	16 ± 2.7		
Trial Summary	Negative	Negative	Equivocal	Equivocal	Positive
Positive Control[7]			130 ± 10.7		70 ± 5.1
Positive Control[3]		83 ± 4.9		299 ± 38.0	
Positive Control[8]	270 ± 5.3				

LEGEND

Values given as Mean or Mean ± 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 Sodium Azide
3: 1.0 ug/Plate 2-Aminoanthracene
4: 2.0 ug/Plate 2-Aminoanthracene
5: 2.5 ug/Plate 2-Aminoanthracene
6: 8.0 ug/Plate 9-Aminoacridine
7: 0.4 ug/Plate 2-Aminoanthracene
8: 1.0 ug/Plate 4-Nitro-O-Phenylenediamine
p: Precipitate
s: Slight Toxicity
x: Slight Toxicity and Precipitate

** END OF REPORT **