NTP Study Number: 648470

Study Result: Negative

Experiment Number: **648470**

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

G06: Ames Summary Data

Test Compound: **1,2,3,4-Tetrachloronaphthalene**

CAS Number: **20020-02-4**

Date Report Requested: **09/11/2018**

Time Report Requested: **05:24:15**

Strain: TA100

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 10% Rat S9	With 10% Hamster S9
Vehicle Control[1]	94 ± 4.5	128 ± 11.5	107 ± 19.4	114 ± 13.0	92 ± 7.1
100.0	99 ± 1.3	99 ± 0.6	100 ± 9.0	127 ± 3.6	99 ± 13.6
333.3	80 ± 6.0	100 ± 2.3[p]	103 ± 5.8	109 ± 11.5[p]	111 ± 6.2
1000.0	78 ± 3.5[p]	100 ± 16.5[p]	94 ± 7.2[p]	125 ± 12.3[p]	107 ± 1.8[p]
3333.3	91 ± 6.1[p]	101 ± 5.8[p]	85 ± 6.8[p]	114 ± 9.5[p]	98 ± 3.6[p]
10000.0	97 ± 17.0[p]	103 ± 2.6[p]	119 ± 10.8[p]	119 ± 7.0[p]	104 ± 5.4[p]
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control[2]	268 ± 16.6	237 ± 6.4			
Positive Control[3]			1492 ± 61.4	731 ± 45.2	2368 ± 57.7

Experiment Number: **648470**

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

G06: Ames Summary Data

Test Compound: **1,2,3,4-Tetrachloronaphthalene**

CAS Number: **20020-02-4**

Date Report Requested: **09/11/2018**

Time Report Requested: **05:24:15**

Strain: TA100

Dose (ug/Plate)	With 10% Hamster S9
Vehicle Control[1]	131 ± 10.3
100.0	117 ± 3.2
333.3	109 ± 10.8[p]
1000.0	96 ± 9.3[p]
3333.3	102 ± 7.9[p]
10000.0	109 ± 3.8[p]
Trial Summary	Negative
Positive Control[2]	
Positive Control[3]	2327 ± 23.1

Experiment Number: **648470**

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

G06: Ames Summary Data

Test Compound: **1,2,3,4-Tetrachloronaphthalene**

CAS Number: **20020-02-4**

Date Report Requested: **09/11/2018**

Time Report Requested: **05:24:15**

Strain: TA1535

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 10% Rat S9	With 10% Hamster S9
Vehicle Control[1]	12 ± 1.5	13 ± 2.1	14 ± 2.1	14 ± 3.8	19 ± 2.5
100.0	6 ± 1.0	12 ± 1.5	16 ± 1.3	17 ± 1.0	13 ± 2.9
333.3	7 ± 0.7	9 ± 1.2[p]	14 ± 0.3	15 ± 1.8[p]	15 ± 2.7
1000.0	9 ± 1.7[p]	10 ± 1.8[p]	18 ± 2.8[p]	9 ± 2.1[p]	14 ± 0.9[p]
3333.3	9 ± 1.3[p]	10 ± 1.2[p]	18 ± 5.0[p]	12 ± 2.9[p]	12 ± 2.5[p]
10000.0	9 ± 1.5[p]	11 ± 0.0[p]	16 ± 1.7[p]	11 ± 1.7[p]	11 ± 1.7[p]
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control[2]	300 ± 12.9	143 ± 14.5			
Positive Control[4]			325 ± 27.3	238 ± 31.8	501 ± 23.6

Experiment Number: **648470**

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

G06: Ames Summary Data

Test Compound: **1,2,3,4-Tetrachloronaphthalene**

CAS Number: **20020-02-4**

Date Report Requested: **09/11/2018**

Time Report Requested: **05:24:15**

Strain: TA1535

Dose (ug/Plate)	With 10% Hamster S9
Vehicle Control[1]	15 ± 0.7
100.0	16 ± 0.9
333.3	17 ± 3.9[p]
1000.0	16 ± 1.2[p]
3333.3	11 ± 1.5[p]
10000.0	12 ± 3.5[p]
Trial Summary	Negative
Positive Control[2]	
Positive Control[4]	447 ± 14.0

Experiment Number: **648470**

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

G06: Ames Summary Data

Test Compound: **1,2,3,4-Tetrachloronaphthalene**

CAS Number: **20020-02-4**

Date Report Requested: **09/11/2018**

Time Report Requested: **05:24:15**

Strain: TA1537

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 10% Rat S9	With 10% Hamster S9
Vehicle Control[1]	5 ± 1.7	5 ± 1.2	8 ± 0.7	6 ± 0.3	6 ± 0.3
100.0	4 ± 1.7	4 ± 0.0	5 ± 0.3	7 ± 0.7	4 ± 0.9
333.3	3 ± 0.7	6 ± 1.5[p]	4 ± 0.3	6 ± 0.7[p]	5 ± 1.7
1000.0	4 ± 0.9[p]	3 ± 0.9[p]	5 ± 0.7[p]	8 ± 1.7[p]	5 ± 0.6[p]
3333.3	4 ± 0.0[p]	6 ± 1.5[p]	5 ± 1.0[p]	4 ± 1.5[p]	4 ± 1.2[p]
10000.0	5 ± 1.2[p]	6 ± 1.5[p]	6 ± 2.4[p]	6 ± 0.9[p]	5 ± 0.9[p]
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control[4]			494 ± 38.2	190 ± 9.6	522 ± 52.2
Positive Control[5]	274 ± 85.5	228 ± 17.0			

Experiment Number: **648470**

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

G06: Ames Summary Data

Test Compound: **1,2,3,4-Tetrachloronaphthalene**

CAS Number: **20020-02-4**

Date Report Requested: **09/11/2018**

Time Report Requested: **05:24:15**

Strain: TA1537

Dose (ug/Plate)	With 10% Hamster S9
Vehicle Control[1]	4 ± 0.7
100.0	3 ± 0.9
333.3	5 ± 1.2[p]
1000.0	4 ± 0.6[p]
3333.3	7 ± 2.2[p]
10000.0	6 ± 2.0[p]
Trial Summary	Negative
Positive Control[4]	459 ± 3.0
Positive Control[5]	

Experiment Number: **648470**

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

G06: Ames Summary Data

Test Compound: **1,2,3,4-Tetrachloronaphthalene**

CAS Number: **20020-02-4**

Date Report Requested: **09/11/2018**

Time Report Requested: **05:24:15**

Strain: TA98

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 10% Rat S9	With 10% Hamster S9
Vehicle Control[1]	36 ± 2.1	27 ± 4.9	30 ± 1.5	36 ± 7.5	28 ± 4.9
100.0	28 ± 7.1	34 ± 6.7	28 ± 4.3	38 ± 3.2	42 ± 5.5
333.3	24 ± 2.7	25 ± 4.5[p]	32 ± 6.0	36 ± 4.6[p]	34 ± 4.2
1000.0	23 ± 3.7[p]	32 ± 2.1[p]	25 ± 2.1[p]	35 ± 2.3[p]	38 ± 3.1[p]
3333.3	28 ± 2.0[p]	31 ± 4.8[p]	28 ± 4.3[p]	36 ± 1.7[p]	51 ± 3.5[p]
10000.0	42 ± 3.8[p]	31 ± 5.6[p]	38 ± 0.6[p]	36 ± 1.5[p]	43 ± 0.0[p]
Trial Summary	Negative	Negative	Negative	Negative	Equivocal
Positive Control[3]			1033 ± 57.8	578 ± 18.6	1889 ± 123.0
Positive Control[6]	550 ± 97.1	445 ± 29.2			

Experiment Number: **648470**

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

G06: Ames Summary Data

Test Compound: **1,2,3,4-Tetrachloronaphthalene**

CAS Number: **20020-02-4**

Date Report Requested: **09/11/2018**

Time Report Requested: **05:24:15**

Strain: TA98

Dose (ug/Plate)	With 10% Hamster S9
Vehicle Control[1]	41 ± 3.4
100.0	38 ± 3.5
333.3	35 ± 3.3[p]
1000.0	31 ± 1.2[p]
3333.3	30 ± 3.2[p]
10000.0	31 ± 2.7[p]
Trial Summary	Negative
Positive Control[3]	1725 ± 58.0
Positive Control[6]	

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: 95% Ethanol
2: 1.0 ug/Plate Sodium Azide
3: 1.0 ug/Plate 2-Aminoanthracene
4: 2.5 ug/Plate 2-Aminoanthracene
5: 50.0 ug/Plate 9-Aminoacridine
6: 5.0 ug/Plate 4-Nitro-O-Phenylenediamine
p: Precipitate

** END OF REPORT **