

Experiment Number: 216486

Test Type: Genetic Toxicology - Bacterial
Mutagenicity

G06: Ames Summary Data

Test Compound: Nonylphenyl diphenyl phosphate (NPDPP mixed isomers)

CAS Number: 64532-97-4

Date Report Requested: 09/14/2018

Time Report Requested: 20:46:12

NTP Study Number:

216486

Study Result:

Equivocal

Experiment Number: 216486

G06: Ames Summary Data

Date Report Requested: 09/14/2018

Test Type: Genetic Toxicology - Bacterial
Mutagenicity

Test Compound: Nonylphenyl diphenyl phosphate (NPDPP mixed isomers)

Time Report Requested: 20:46:12

CAS Number: 64532-97-4

Strain: TA100

Dose (ug/Plate)	Without S9	Without S9	Without S9	With 10% Rat S9	With 30% Rat S9
Vehicle Control ¹	89 ± 5.0	100 ± 6.1	74 ± 9.4	106 ± 6.9	118 ± 9.0
100.0	110 ± 7.8	93 ± 10.1	86 ± 4.6	102 ± 15.7	116 ± 3.8
333.0	112 ± 1.5	77 ± 1.3	77 ± 5.5	101 ± 8.5	113 ± 6.0
1000.0	104 ± 4.7	91 ± 12.3 ^p	87 ± 6.7	93 ± 3.7	98 ± 3.5
3333.0	103 ± 3.5	92 ± 7.2 ^p	86 ± 11.8 ^p	105 ± 6.4	110 ± 10.8 ^p
10000.0	93 ± 8.8 ^p	77 ± 4.1 ^p	87 ± 3.0 ^p	101 ± 1.5 ^p	112 ± 6.6 ^p
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ²					
Positive Control ³	443 ± 20.8	360 ± 16.7	278 ± 15.8		
Positive Control ⁴				424 ± 23.8	
Positive Control ⁵					
Positive Control ⁶					453 ± 8.8

Experiment Number: 216486

G06: Ames Summary Data

Date Report Requested: 09/14/2018

Test Type: Genetic Toxicology - Bacterial
Mutagenicity

Test Compound: Nonylphenyl diphenyl phosphate (NPDPP mixed isomers)
CAS Number: 64532-97-4

Time Report Requested: 20:46:12

Strain: TA100

Dose (ug/Plate)	With 10% Hamster S9	With 30% Hamster S9
Vehicle Control ¹	105 ± 4.7	129 ± 6.4
100.0	98 ± 4.7	117 ± 7.6
333.0	94 ± 5.3	111 ± 6.1
1000.0	95 ± 6.1	109 ± 8.4
3333.0	103 ± 2.6	108 ± 5.3 ^p
10000.0	95 ± 5.5 ^p	114 ± 3.2 ^p
Trial Summary	Negative	Negative
Positive Control ²	427 ± 7.2	
Positive Control ³		
Positive Control ⁴		
Positive Control ⁵		347 ± 20.2
Positive Control ⁶		

Experiment Number: 216486

G06: Ames Summary Data

Date Report Requested: 09/14/2018

Test Type: Genetic Toxicology - Bacterial
Mutagenicity

Test Compound: Nonylphenyl diphenyl phosphate (NPDPP mixed isomers)

Time Report Requested: 20:46:12

CAS Number: 64532-97-4

Strain: TA1535

Dose (ug/Plate)	Without S9	Without S9	Without S9	With 10% Rat S9	With 30% Rat S9
Vehicle Control ¹	10 ± 0.9	11 ± 1.2	10 ± 2.4	8 ± 1.8	7 ± 0.3
100.0	15 ± 1.5	11 ± 1.5	14 ± 1.5	7 ± 0.9	10 ± 2.3
333.0	19 ± 1.7	14 ± 2.0	13 ± 1.2	8 ± 2.3	7 ± 0.3
1000.0	15 ± 2.0	17 ± 2.5 ^p	13 ± 1.2	9 ± 2.2	5 ± 0.9
3333.0	17 ± 2.6	12 ± 2.6 ^p	16 ± 2.3 ^p	4 ± 0.7	6 ± 0.3 ^p
10000.0	20 ± 0.7 ^p	9 ± 0.7 ^p	11 ± 0.9 ^p	9 ± 0.9 ^p	7 ± 1.5 ^p
Trial Summary	Equivocal	Negative	Negative	Negative	Negative
Positive Control ²					
Positive Control ³	202 ± 2.3	163 ± 4.0	158 ± 3.7		
Positive Control ⁵					
Positive Control ⁶				162 ± 10.7	84 ± 0.7

Experiment Number: 216486

G06: Ames Summary Data

Date Report Requested: 09/14/2018

Test Type: Genetic Toxicology - Bacterial
Mutagenicity

Test Compound: Nonylphenyl diphenyl phosphate (NPDPP mixed isomers)
CAS Number: 64532-97-4

Time Report Requested: 20:46:12

Strain: TA1535

Dose (ug/Plate)	With 10% Hamster S9	With 30% Hamster S9
Vehicle Control ¹	9 ± 2.1	9 ± 1.5
100.0	8 ± 0.3	7 ± 2.0
333.0	12 ± 1.2	8 ± 1.0
1000.0	10 ± 1.5	9 ± 1.7
3333.0	5 ± 1.0	5 ± 0.7 ^P
10000.0	8 ± 0.7 ^P	6 ± 0.3 ^P
Trial Summary	Negative	Negative
Positive Control ²	71 ± 3.4	
Positive Control ³		
Positive Control ⁵		67 ± 7.9
Positive Control ⁶		

Experiment Number: 216486

G06: Ames Summary Data

Date Report Requested: 09/14/2018

Test Type: Genetic Toxicology - Bacterial
Mutagenicity

Test Compound: Nonylphenyl diphenyl phosphate (NPDPP mixed isomers)

Time Report Requested: 20:46:12

CAS Number: 64532-97-4

Strain: TA1537

Dose (ug/Plate)	Without S9	Without S9	With 5% Rat S9	With 5% Rat S9	With 10% Rat S9
Vehicle Control ¹	14 ± 3.1	5 ± 1.2	13 ± 0.5	6 ± 2.3	16 ± 1.2
100.0	15 ± 2.0	7 ± 0.7	23 ± 1.5	11 ± 2.6	14 ± 3.2
333.0	10 ± 2.6	2 ± 0.9	16 ± 2.0	9 ± 3.2	9 ± 2.1
1000.0	10 ± 2.4	6 ± 1.3	10 ± 1.5	7 ± 0.9	9 ± 1.2
3333.0	8 ± 1.5	4 ± 0.6	11 ± 1.2	10 ± 0.3	5 ± 0.9
10000.0	6 ± 0.3 ^p	3 ± 0.3 ^p	7 ± 0.9	8 ± 0.9 ^p	9 ± 2.2 ^p
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ⁴					
Positive Control ⁶			213 ± 17.0	282 ± 16.3	95 ± 0.9
Positive Control ⁷	70 ± 6.7	754 ± 12.9			

Experiment Number: 216486

G06: Ames Summary Data

Date Report Requested: 09/14/2018

Test Type: Genetic Toxicology - Bacterial
Mutagenicity

Test Compound: Nonylphenyl diphenyl phosphate (NPDPP mixed isomers)

Time Report Requested: 20:46:12

CAS Number: 64532-97-4

Strain: TA1537

Dose (ug/Plate)	With 10% Rat S9	With 5% Hamster S9	With 5% Hamster S9	With 10% Hamster S9	With 10% Hamster S9
Vehicle Control ¹	8 ± 0.6	13 ± 1.2	6 ± 0.6	9 ± 2.2	8 ± 3.1
100.0	8 ± 1.5	8 ± 1.8	7 ± 2.1	11 ± 2.7	5 ± 1.2
333.0	6 ± 1.2	7 ± 1.2	6 ± 1.7	13 ± 2.8	6 ± 0.9
1000.0	6 ± 1.5	7 ± 1.0	8 ± 1.5	8 ± 0.3	7 ± 1.0
3333.0	6 ± 1.0	6 ± 2.6	5 ± 1.5	6 ± 1.8	7 ± 1.8
10000.0	8 ± 0.6 ^p	7 ± 0.9 ^p	6 ± 0.9 ^p	7 ± 2.0 ^p	4 ± 1.7 ^p
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ⁴		294 ± 59.8	150 ± 4.5	285 ± 13.9	56 ± 8.2
Positive Control ⁶	92 ± 6.2				
Positive Control ⁷					

Experiment Number: 216486

G06: Ames Summary Data

Date Report Requested: 09/14/2018

Test Type: Genetic Toxicology - Bacterial
Mutagenicity

Test Compound: Nonylphenyl diphenyl phosphate (NPDPP mixed isomers)

Time Report Requested: 20:46:12

CAS Number: 64532-97-4

Strain: TA97

Dose (ug/Plate)	Without S9	Without S9	Without S9	With 10% Rat S9	With 30% Rat S9
Vehicle Control ¹	82 ± 6.6	57 ± 4.0	76 ± 5.2	140 ± 7.0	175 ± 14.0
0.0			0 ± 0.0		
100.0	92 ± 5.7	64 ± 3.7	74 ± 6.3	139 ± 9.6	143 ± 3.0
333.0	104 ± 8.7	66 ± 4.3	84 ± 7.2	116 ± 8.1	157 ± 5.7
1000.0	93 ± 4.7 ^p	53 ± 6.2	84 ± 8.2	123 ± 4.7	154 ± 8.7
3333.0	87 ± 6.1 ^p	71 ± 3.3 ^p	76 ± 2.0 ^p	114 ± 5.9	150 ± 10.3 ^p
10000.0	94 ± 3.5 ^p	74 ± 2.3 ^p	78 ± 2.9 ^p	118 ± 4.0 ^p	162 ± 5.2 ^p
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ⁴					
Positive Control ⁶				581 ± 15.4	
Positive Control ⁸					409 ± 12.8
Positive Control ⁹	264 ± 7.0	276 ± 28.3	163 ± 6.9		

Experiment Number: 216486

G06: Ames Summary Data

Date Report Requested: 09/14/2018

Test Type: Genetic Toxicology - Bacterial
Mutagenicity

Test Compound: Nonylphenyl diphenyl phosphate (NPDPP mixed isomers)

Time Report Requested: 20:46:12

CAS Number: 64532-97-4

Strain: TA97

Dose (ug/Plate)	With 5% Hamster S9	With 5% Hamster S9	With 10% Hamster S9	With 10% Hamster S9	With 10% Hamster S9
Vehicle Control ¹ 0.0	93 ± 5.0	96 ± 9.4	107 ± 4.2	79 ± 6.6	90 ± 1.3
100.0	92 ± 4.4	114 ± 7.6	124 ± 6.8	105 ± 2.6	100 ± 5.2
333.0	89 ± 4.1	115 ± 4.9	157 ± 11.3	111 ± 5.5	110 ± 6.4
1000.0	98 ± 7.8	124 ± 14.2	148 ± 11.0	96 ± 1.2	143 ± 0.7
3333.0	101 ± 4.7 ^p	109 ± 11.7 ^p	184 ± 15.2	98 ± 7.8 ^p	126 ± 8.8 ^p
10000.0	96 ± 6.8 ^p	144 ± 10.7 ^p	174 ± 14.8 ^p	92 ± 5.3 ^p	165 ± 12.3 ^p
Trial Summary	Negative	Equivocal	Weakly Positive	Negative	Equivocal
Positive Control ⁴	912 ± 13.3	805 ± 85.5	438 ± 10.1	840 ± 27.4	380 ± 22.6
Positive Control ⁶					
Positive Control ⁸					
Positive Control ⁹					

Experiment Number: 216486

G06: Ames Summary Data

Date Report Requested: 09/14/2018

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

Test Compound: **Nonylphenyl diphenyl phosphate (NPDPP mixed isomers)**

Time Report Requested: 20:46:12

CAS Number: 64532-97-4

Strain: TA97

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	163 ± 2.2
0.0	
100.0	160 ± 3.0
333.0	203 ± 7.9
1000.0	164 ± 9.7
3333.0	187 ± 3.0 ^p
10000.0	186 ± 0.9 ^p
Trial Summary	Negative
Positive Control ⁴	
Positive Control ⁶	
Positive Control ⁸	736 ± 29.8
Positive Control ⁹	

Experiment Number: 216486

G06: Ames Summary Data

Date Report Requested: 09/14/2018

Test Type: Genetic Toxicology - Bacterial
Mutagenicity

Test Compound: Nonylphenyl diphenyl phosphate (NPDPP mixed isomers)

Time Report Requested: 20:46:12

CAS Number: 64532-97-4

Strain: TA98

Dose (ug/Plate)	Without S9	Without S9	Without S9	With 10% Rat S9	With 30% Rat S9
Vehicle Control ¹	16 ± 3.2	16 ± 3.3	15 ± 0.9	24 ± 2.3	20 ± 1.5
100.0	17 ± 1.2	14 ± 1.5	16 ± 2.1	27 ± 1.2	25 ± 2.4
333.0	19 ± 1.3	14 ± 1.9	14 ± 0.3	30 ± 2.9	24 ± 1.9
1000.0	20 ± 1.0	13 ± 3.8 ^p	12 ± 0.9	29 ± 1.8	28 ± 0.9
3333.0	13 ± 1.0	15 ± 1.3 ^p	12 ± 2.0 ^p	26 ± 6.3	23 ± 0.9 ^p
10000.0	12 ± 0.9 ^p	8 ± 1.2 ^p	13 ± 2.9 ^p	20 ± 4.3 ^p	25 ± 3.1 ^p
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ¹⁰					
Positive Control ²				163 ± 6.4	
Positive Control ¹¹	243 ± 9.8	139 ± 4.7	127 ± 3.7		
Positive Control ⁵					90 ± 8.8

Experiment Number: 216486

G06: Ames Summary Data

Date Report Requested: 09/14/2018

Test Type: Genetic Toxicology - Bacterial
Mutagenicity

Test Compound: Nonylphenyl diphenyl phosphate (NPDPP mixed isomers)
CAS Number: 64532-97-4

Time Report Requested: 20:46:12

Strain: TA98

Dose (ug/Plate)	With 10% Hamster S9	With 30% Hamster S9
Vehicle Control ¹	24 ± 2.3	21 ± 1.9
100.0	21 ± 3.3	21 ± 0.5
333.0	29 ± 3.3	19 ± 1.5
1000.0	25 ± 1.9	25 ± 2.0
3333.0	23 ± 1.7	20 ± 3.2 ^p
10000.0	25 ± 2.3 ^p	22 ± 1.7 ^p
Trial Summary	Negative	Negative
Positive Control ¹⁰	155 ± 6.2	
Positive Control ²		97 ± 8.5
Positive Control ¹¹		
Positive Control ⁵		

Experiment Number: 216486

G06: Ames Summary Data

Date Report Requested: 09/14/2018

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

Test Compound: **Nonylphenyl diphenyl phosphate (NPDPP mixed isomers)**

Time Report Requested: 20:46:12

CAS Number: 64532-97-4

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: 0.4 ug/Plate 2-Aminoanthracene

3: 0.5 ug/Plate Sodium Azide

4: 0.75 ug/Plate 2-Aminoanthracene

5: 1.0 ug/Plate 2-Aminoanthracene

6: 2.0 ug/Plate 2-Aminoanthracene

7: 4.0 ug/Plate 9-Aminoacridine

8: 2.5 ug/Plate 2-Aminoanthracene

9: 3.5 ug/Plate 9-Aminoacridine

10: 0.2 ug/Plate 2-Aminoanthracene

11: 1.0 ug/Plate 4-Nitro-O-Phenylenediamine

p: Precipitate

**** END OF REPORT ****