Test Type: Genetic Toxicology - Micronucleus

Route: Intraperitoneal Injection Species/Strain: Mouse/B6C3F1

G04: In Vivo Micronucleus Summary Data

Test Compound: 7,12-Dimethylbenzanthracene

CAS Number: 57-97-6

Date Report Requested: 09/21/2018
Time Report Requested: 09:01:36

NTP Study Number: A88898

Study Duration: 96 Hours

Study Methodology: Slide Scoring

Male Study Result: Positive

Test Type: Genetic Toxicology - Micronucleus

G04: In Vivo Micronucleus Summary Data

Test Compound: 7,12-Dimethylbenzanthracene

CAS Number: 57-97-6

Date Report Requested: 09/21/2018
Time Report Requested: 09:01:36

Route: Intraperitoneal Injection Species/Strain: Mouse/B6C3F1

Tissue: Blood; Sex: Male; Number of Treatments: 1; Time interval between final treatment and cell sampling: 24 h

		MN PCE/1000	
Dose (mg/kg)	N	Mean ± SEM	p-Value
Vehicle Control ¹	8	2.75 ± 0.53	
2.0	8	3.25 ± 0.53	0.3413
4.0	8	2.50 ± 0.50	0.5865
8.0	8	3.50 ± 0.73	0.2739
16.0	8	3.25 ± 0.92	0.3413
Trend p-Value		0.3250	
Trial Summary: Positive			

Test Type: Genetic Toxicology - Micronucleus

G04: In Vivo Micronucleus Summary Data

Test Compound: 7,12-Dimethylbenzanthracene

CAS Number: 57-97-6

Date Report Requested: 09/21/2018
Time Report Requested: 09:01:36

Route: Intraperitoneal Injection Species/Strain: Mouse/B6C3F1

Tissue: Blood; Sex: Male; Number of	Treatments: 2; Time interval between	final treatment and cell sampling: 24 h

		MN PCE/1000	
Dose (mg/kg)	N	Mean ± SEM	p-Value
Vehicle Control ¹	8	2.50 ± 0.33	
2.0	8	3.50 ± 0.33	0.1696
4.0	8	4.63 ± 0.46	0.0311
8.0	8	7.88 ± 1.65	< 0.001 *
16.0	8	8.00 ± 1.88	< 0.001 *
Trend p-Value		< 0.001 *	
Trial Summary: Positive			

Test Type: Genetic Toxicology - Micronucleus

G04: In Vivo Micronucleus Summary Data

Test Compound: 7,12-Dimethylbenzanthracene

CAS Number: 57-97-6

Date Report Requested: 09/21/2018
Time Report Requested: 09:01:36

Route: Intraperitoneal Injection Species/Strain: Mouse/B6C3F1

Tissue: Blood; Sex: Male; Number of Treatments: 3; Time interval between final treatment and cell sampling: 24 h

		MN PCE/1000	
Dose (mg/kg)	N	Mean ± SEM	p-Value
Vehicle Control ¹	8	2.50 ± 0.63	
2.0	8	6.00 ± 1.56	0.0237
4.0	8	8.00 ± 1.51	0.0025 *
8.0	8	16.00 ± 3.21	< 0.001 *
16.0	7	22.57 ± 2.89	< 0.001 *
Trend p-Value		< 0.001 *	
Trial Summary: Positive			

Test Type: Genetic Toxicology - Micronucleus

G04: In Vivo Micronucleus Summary Data

Test Compound: 7,12-Dimethylbenzanthracene

CAS Number: 57-97-6

Date Report Requested: 09/21/2018
Time Report Requested: 09:01:36

Route: Intraperitoneal Injection Species/Strain: Mouse/B6C3F1

Tissue: Blood; Sex: Male; Number of Treatments: 4; Time interval between final treatment and cell sampling: 24 h

		MN PCE/1000	
Dose (mg/kg)	N	Mean ± SEM	p-Value
Vehicle Control ¹	8	2.25 ± 0.25	
2.0	8	3.50 ± 0.57	0.0699
4.0	8	7.75 ± 1.31	< 0.001 *
8.0	5	12.80 ± 1.02	< 0.001 *
rend p-Value		< 0.001 *	

Test Type: Genetic Toxicology - Micronucleus

G04: In Vivo Micronucleus Summary Data

Test Compound: 7,12-Dimethylbenzanthracene

CAS Number: 57-97-6

Date Report Requested: 09/21/2018
Time Report Requested: 09:01:36

Route: Intraperitoneal Injection Species/Strain: Mouse/B6C3F1

Tissue: Blood; Sex: Male; Number of Treatments: 10; Time interval between final treatment and cell sampling: 24 h

	MN PCE/1000	
N	Mean ± SEM	p-Value
8	2.13 ± 0.40	
8	4.63 ± 0.75	0.0032 *
3	10.33 ± 0.67	< 0.001 *
	< 0.001 *	
	8	N Mean ± SEM 8 2.13 ± 0.40 8 4.63 ± 0.75 3 10.33 ± 0.67

Route: Intraperitoneal Injection Species/Strain: Mouse/B6C3F1

Test Type: Genetic Toxicology - Micronucleus

G04: In Vivo Micronucleus Summary Data

Test Compound: 7,12-Dimethylbenzanthracene

CAS Number: 57-97-6

Date Report Requested: 09/21/2018 Time Report Requested: 09:01:36

Tissue: Blood; Sex: Male; Number of Treatments: 1; Time interval between final treatment and cell sampling: 24 h

		MN PCE/1000		
Dose (mg/kg)	N	Mean ± SEM	p-Value	
Vehicle Control ¹	8	2.25 ± 0.45		
2.0	8	3.75 ± 0.59	0.1100	
4.0	8	3.75 ± 0.59	0.1100	
8.0	8	4.00 ± 0.65	0.0804	
16.0	8	5.00 ± 1.46	0.0204	
Trend p-Value		0.0360		
Trial Summary: Positive				

Test Type: Genetic Toxicology - Micronucleus

G04: In Vivo Micronucleus Summary Data

Test Compound: 7,12-Dimethylbenzanthracene

CAS Number: 57-97-6

Date Report Requested: 09/21/2018
Time Report Requested: 09:01:36

Route: Intraperitoneal Injection

Species/Strain: Mouse/B6C3F1

Tissue: Blood; Sex: Male; Number of Treatments: 1; Time interval between final treatment and cell sampling: 48 h

		MN PCE/1000	
Dose (mg/kg)	N	Mean ± SEM	p-Value
Vehicle Control ¹	8	2.00 ± 0.53	
2.0	8	3.75 ± 0.70	0.1130
4.0	8	9.25 ± 1.41	< 0.001 *
8.0	8	11.50 ± 2.44	< 0.001 *
16.0	8	12.75 ± 3.18	< 0.001 *
Trend p-Value		< 0.001 *	
Trial Summary: Positive			

Test Type: Genetic Toxicology - Micronucleus

G04: In Vivo Micronucleus Summary Data

Test Compound: 7,12-Dimethylbenzanthracene

CAS Number: 57-97-6

Date Report Requested: 09/21/2018
Time Report Requested: 09:01:36

Route: Intraperitoneal Injection Species/Strain: Mouse/B6C3F1

Tissue: Blood: Sex: Male: Number of	Treatments: 1: Time interval between	final treatment and cell sampling: 72 h

		MN PCE/1000	
Dose (mg/kg)	N	Mean ± SEM	p-Value
Vehicle Control ¹	8	1.75 ± 0.25	
2.0	8	2.75 ± 0.56	0.0910
4.0	8	4.75 ± 0.80	< 0.001 *
8.0	8	5.75 ± 0.88	< 0.001 *
16.0	5	9.20 ± 3.18	< 0.001 *
Trend p-Value		< 0.001 *	
Trial Summary: Positive			

Test Type: Genetic Toxicology - Micronucleus

G04: In Vivo Micronucleus Summary Data

Test Compound: 7,12-Dimethylbenzanthracene

CAS Number: 57-97-6

Date Report Requested: 09/21/2018
Time Report Requested: 09:01:36

Route: Intraperitoneal Injection Species/Strain: Mouse/B6C3F1

Tissue: Bone marrow; Sex: Male; Number of Treatments: 10; Time interval between final treatment and cell sampling: 24 h

		MN PCE/1000	
Dose (mg/kg)	N	Mean ± SEM	p-Value
Vehicle Control ¹	8	2.00 ± 0.38	
2.0	8	4.25 ± 0.59	0.0357
4.0	5	10.80 ± 2.33	< 0.001 *
Trend p-Value		< 0.001 *	
Trial Summary: Positive			

Test Type: Genetic Toxicology - Micronucleus

G04: In Vivo Micronucleus Summary Data

Test Compound: 7,12-Dimethylbenzanthracene

CAS Number: 57-97-6

Date Report Requested: 09/21/2018
Time Report Requested: 09:01:36

Route: Intraperitoneal Injection Species/Strain: Mouse/B6C3F1

Tissue: Bone marrow; Sex: Male; Number of Treatments: 1; Time interval between final treatment and cell sampling: 24 h

		MN PCE/1000		
Dose (mg/kg)	N	Mean ± SEM	p-Value	
Vehicle Control ¹	8	1.75 ± 0.25		
2.0	8	5.00 ± 1.07	0.0061 *	
4.0	8	5.75 ± 1.16	0.0017 *	
8.0	8	6.00 ± 0.93	0.0011 *	
16.0	8	16.75 ± 3.36	< 0.001 *	
Trend p-Value		< 0.001 *		
Trial Summary: Positive				

Test Type: Genetic Toxicology - Micronucleus

G04: In Vivo Micronucleus Summary Data

Test Compound: 7,12-Dimethylbenzanthracene

CAS Number: 57-97-6

Date Report Requested: 09/21/2018
Time Report Requested: 09:01:36

Route: Intraperitoneal Injection Species/Strain: Mouse/B6C3F1

Tissue: Bone marrow; Sex: Male; Number of Treatments: 1; Time interval between final treatment and cell sampling: 48 h

Dose (mg/kg)	MN PCE/1000		
	N	Mean ± SEM	p-Value
Vehicle Control ¹	8	1.75 ± 0.25	
2.0	8	4.00 ± 0.76	0.0301
4.0	8	5.25 ± 0.92	0.0040 *
8.0	8	10.00 ± 2.14	< 0.001 *
16.0	8	12.50 ± 1.92	< 0.001 *
Trend p-Value		< 0.001 *	
Trial Summary: Positive			

Test Type: Genetic Toxicology - Micronucleus

G04: In Vivo Micronucleus Summary Data

Test Compound: 7,12-Dimethylbenzanthracene

CAS Number: 57-97-6

Date Report Requested: 09/21/2018
Time Report Requested: 09:01:36

Route: Intraperitoneal Injection Species/Strain: Mouse/B6C3F1

Tissue: Bone marrow; Sex: Male; Number of Treatments: 1; Time interval between final treatment and cell sampling: 72 h

Dose (mg/kg)	MN PCE/1000		
	N	Mean ± SEM	p-Value
Vehicle Control ¹	8	1.50 ± 0.33	
2.0	8	3.25 ± 0.75	0.0539
4.0	8	3.00 ± 0.53	0.0784
8.0	8	4.00 ± 0.65	0.0164
16.0	8	4.75 ± 1.06	0.0046 *
Trend p-Value		0.0080 *	
Trial Summary: Positive			

G04: In Vivo Micronucleus Summary Data

Test Compound: 7,12-Dimethylbenzanthracene

CAS Number: 57-97-6

Date Report Requested: 09/21/2018 Time Report Requested: 09:01:36

Route: Intraperitoneal Injection Species/Strain: Mouse/B6C3F1

LEGEND

Test Type: Genetic Toxicology - Micronucleus

MN = micronucleated, PCE = polychromatic erythrocyte, NCE = normochromatic erythrocyte

CAS Number = Chemical Abstracts Service registry number

N = Number of subjects

Values given as Mean or Mean ± Standard Error Mean

Results were tabulated as the mean of the pooled results from all animals within a treatment group, plus or minus the standard error of the mean

Pairwise comparison to the concurrent control, dosed groups significant at p = 0.025/number of treatment groups; positive control value is significant at p = 0.05

Cochran-Armitage trend test, significant at p = 0.025

* Statistically significant pairwise or trend test

1: Vehicle Control: Dimethyl Sulfoxide

** END OF REPORT **