G04: In Vivo Micronucleus Summary Data
Test Compound: Methyl isocyanate
CAS Number: 624-83-9

Date Report Requested: 09/21/2018 Time Report Requested: 13:04:57

NTP Study Number:	A97304
Study Duration:	4 Days
Study Methodology:	Slide Scoring
Male Study Result:	Negative
Female Study Result:	Negative

Test Type: Genetic Toxicology - Micronucleus Route: Inhalation Species/Strain: Mouse/B6C3F1

		MN PCE/1000		MN NCE/1000			
Dose (ppm)	Ν	Mean ± SEM	p-Value	Ν	Mean ± SEM	p-Value	
Vehicle Control ¹	5	2.80 ± 0.86		5	1.60 ± 0.68		
1.0	5	4.20 ± 0.73	0.1180	5	3.20 ± 0.58	0.0510	
3.0	5	3.00 ± 0.32	0.4262	5	3.00 ± 0.55	0.0720	
nd p-Value		0.5300			0.1240		

Page 2

Test Type: Genetic Toxicology - Micronucleus Route: Inhalation Species/Strain: Mouse/B6C3F1

	MN PCE/1000			MN NCE/1000			
Dose (ppm)	Ν	Mean ± SEM	p-Value	N	Mean ± SEM	p-Value	
Vehicle Control ¹	10	2.10 ± 0.60		10	1.90 ± 0.48		
1.0	10	2.50 ± 0.50	0.2774	10	2.50 ± 0.52	0.1826	
3.0	10	1.40 ± 0.37	0.8818	10	2.30 ± 0.54	0.2683	
nd p-Value		0.9110			0.3240		

Test Type: Genetic Toxicology - Micronucleus Route: Inhalation Species/Strain: Mouse/B6C3F1

	MN PCE/1000			MN NCE/1000		
Dose (ppm)	N	Mean ± SEM	p-Value	N	Mean ± SEM	p-Value
Vehicle Control ¹	10	1.70 ± 0.60		10	1.50 ± 0.45	
1.0	10	2.30 ± 0.60	0.2344	10	1.50 ± 0.37	0.5000
3.0	10	2.20 ± 0.57	0.2705	10	2.00 ± 0.54	0.1988
nd p-Value		0.3110			0.1720	

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Date Report Requested: 09/21/2018 Time Report Requested: 13:04:57

Tissue: Blood; Sex: Male; Number of Treatments: 4; Time interval between final treatment and cell sampling: 24 h								
		MN PCE/1000						
Dose (ppm)	Ν	Mean ± SEM	p-Value	Ν	Mean ± SEM	p-Value		
Vehicle Control ¹	10	3.00 ± 0.65		10	2.80 ± 0.44			
1.0	10	3.10 ± 0.50	0.4589	10	2.10 ± 0.28	0.8416		
3.0	10	2.50 ± 0.78	0.7067	10	2.30 ± 0.47	0.7584		
6.0	9	5.11 ± 0.92	0.0319	9	2.33 ± 0.53	0.7367		
nd p-Value		0.0230 *			0.6470			

Test Type: Genetic Toxicology - Micronucleus Route: Inhalation Species/Strain: Mouse/B6C3F1

	MN PCE/1000			MN NCE/1000			
Dose (ppm)	Ν	Mean ± SEM	p-Value	Ν	Mean ± SEM	p-Value	
Vehicle Control ¹	5	2.20 ± 0.37		5	1.80 ± 0.58		
1.0	4	1.75 ± 0.48	0.6825	4	1.50 ± 0.65	0.6356	
3.0	5	1.60 ± 0.24	0.7546	5	1.80 ± 0.20	0.5000	
nd p-Value		0.7430			0.4730		

Test Type: Genetic Toxicology - Micronucleus Route: Inhalation Species/Strain: Mouse/B6C3F1

Tissue: Blood; Sex: Female; Number of Treatments: 4; Time interval between final treatment and cell sampling: 17 h								
	MN PCE/1000			MN NCE/1000				
Dose (ppm)	Ν	Mean ± SEM	p-Value	N	Mean ± SEM	p-Value		
Vehicle Control ¹	10	2.40 ± 0.69		10	2.30 ± 0.40			
1.0	10	1.10 ± 0.57	0.9270	10	1.80 ± 0.51	0.7828		
3.0	10	1.60 ± 0.56	0.7987	10	1.10 ± 0.31	0.9803		
Trend p-Value		0.7480			0.9790			

Test Type: Genetic Toxicology - Micronucleus Route: Inhalation Species/Strain: Mouse/B6C3F1

	MN PCE/1000			MN NCE/1000		
Dose (ppm)	Ν	Mean ± SEM	p-Value	Ν	Mean ± SEM	p-Value
Vehicle Control ¹	10	1.70 ± 0.50		10	1.70 ± 0.33	
1.0	10	1.10 ± 0.31	0.8717	10	0.90 ± 0.23	0.9418
3.0	10	0.80 ± 0.25	0.9642	10	1.60 ± 0.37	0.5692
nd p-Value		0.9590			0.4510	

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		MN PCE/1000			MN NCE/1000	
Dose (ppm)	N	Mean ± SEM	p-Value	N	Mean ± SEM	p-Value
Vehicle Control ¹	10	1.50 ± 0.56		10	1.60 ± 0.37	
1.0	10	2.00 ± 0.47	0.1988	10	2.10 ± 0.23	0.2053
3.0	9	1.67 ± 0.41	0.3863	9	2.00 ± 0.58	0.2574
6.0	10	2.10 ± 0.53	0.1584	10	1.20 ± 0.55	0.7753
nd p-Value		0.2300			0.8500	

Tissue: Bone marrow; Sex: Male; Number of Treatments: 1; Time interval between final treatment and cell sampling: 22 h								
		MN PCE/1000						
Dose (ppm)	Ν	Mean ± SEM	p-Value					
Vehicle Control ¹	5	3.40 ± 1.33						
3.0	5	2.40 ± 0.98	0.7465					
10.0	5	2.60 ± 0.68	0.6991					
30.0	5	2.20 ± 1.02	0.7911					
Trend p-Value		0.7320						
Trial Summary: Negative								

Tissue: Bone marrow; Sex: Female; Number of Treatments: 1; Time interval between final treatment and cell sampling: 22 h								
		MN PCE/1000						
Dose (ppm)	Ν	Mean ± SEM	p-Value					
Vehicle Control ¹	5	5.40 ± 1.81						
3.0	5	3.00 ± 0.84	0.9682					
10.0	5	3.40 ± 0.68	0.9346					
30.0	5	2.60 ± 0.81	0.9867					
Trend p-Value		0.9560						
Trial Summary: Negative								

Page 11

LEGEND

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: Air

** END OF REPORT **