Study Number: MOG11042 Test Type: MOG - Range Finding Route: Dosing in Feed Species/Strain: Rat/Harlan Sprague Dawley

Study Number:

Study Gender:

PWG Approval Date:

Version:

R16: Pubertal Markers Summary Test Compound: Triphenyl Phosphate CAS Number: 115-86-6 Date Report Requested: 02/18/2021 Time Report Requested: 10:02:52 Lab: Battelle

MOG11042

Both See web page for date of PWG Approval v1.1.7 Study Number: MOG11042 Test Type: MOG - Range Finding Route: Dosing in Feed Species/Strain: Rat/Harlan Sprague Dawley Date Report Requested: 02/18/2021 Time Report Requested: 10:02:52 Lab: Battelle

Male								
Generation	Cohort		Treatment Groups (ppm)					
			0	1000	3000	10000		
F1	All Males	No. Examined (litters)	31 (10)	52 (10)	59 (12)	32 (9)		
		No. Removed (litters)	0 (0)	0 (0)	0 (0)	1 (1)		
		No. Not Attaining BPS (litters)	0 (0)	0 (0)	0 (0)	0 (0)		
		Day of BPS						
		Mean Analysis						
		Litter Mean ± SE	37.6 ± 0.6 **	39.7 ± 0.6 *	40.0 ± 0.3 *	50.6 ± 0.5 **		
		Litter Mean of Adjusted ± SE	38.3 ± 0.5 **	40.3 ± 0.5 *	40.4 ± 0.4 *	49.0 ± 0.5 **		
		Proportional Hazards Analysis						
		Litter-based Model	p<0.001	p=0.043	p=0.043	p<0.001		
		BW at Attainment (g)	134.9 ± 3.7	140.3 ± 2.7	139.5 ± 2.8	129.9 ± 5.8		
		BW at Weaning (g)	74.5 ± 3.2 **	72.3 ± 2.3	70.2 ± 3.0	45.2 ± 3.3 **		

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		Fem	ale			
Generation	Cohort			Treatment Groups (ppm)		
			0	1000	3000	
F1	All Females	No. Examined (litters)	55 (11)	45 (10)	62 (12)	
		No. Removed (litters)	25 (8)	22 (9)	16 (8)	
		No. Not Attaining VO (litters)	0 (0)	0 (0)	3 (3)	
		Day of VO				
		Mean Analysis				
		Litter Mean ± SE	36.6 ± 0.4 **	37.2 ± 0.3	39.2 ± 0.5 **	
		Litter Mean of Adjusted ± SE	36.9 ± 0.3 **	37.3 ± 0.3	39.0 ± 0.4 **	
		Proportional Hazards Analysis				
		Litter-based Model	p<0.001	p=0.212	p<0.001	
		BW at Attainment (g)	108.8 ± 2.7	108.2 ± 2.7	110.2 ± 2.0	
		BW at Weaning (g)	68.2 ± 3.1 *	65.9 ± 2.2	61.7 ± 2.0	

LEGEND

- BPS = Balanopreputial separation; BW = Body weight; VO = Vaginal opening
- No. Examined (litters) = the number of animals or pups examined (number of litters)
- No. Removed (litters) is the number of animals (number of litters contributing) that died or were removed prior to the end of the observation period and did not attain. These animals were excluded from all analyses.
- No. Not Attaining BPS (litters) and No. Not Attaining VO (litters) is the number of animals (number of litters contributing) that survived to the end of the observation period without attaining.

Summary statistics and mixed model results are presented for animals that attained during the observation period for Day of BPS and Day of VO Mean Analysis endpoint.

- Means of litter means presented for Day of BPS and Day of VO Litter Mean ± SE. Trend and pairwise tests were based on mixed models for day of attainment with dose as a covariate and a random effect for litter. The Dunnett-Hsu adjustment was used for multiple comparisons.
- Mean adjusted day of attainment was calculated from the mean of the litter means of the weaning weight-adjusted attainment days for individual pups. Trend and pairwise tests were based on mixed models for day of attainment with dose and weaning weight as covariates and a random effect for litter. The Dunnett-Hsu adjustment was used for multiple comparisons.

Animals that did not attain by the end of the observation period were included in the proportional hazards analysis.

- P-values for trend and pairwise comparisons for the Litter-based Model of the Proportional Hazards Analysis were calculated from a Cox proportional hazards model with dose and weaning weight as covariates and a random effect for litter, and a Hommel adjustment for multiple comparisons.
- Analysis of body weight at attainment and body weight at weaning were performed using mixed effects models with dose as covariate and a random effect for litter. The Dunnett-Hsu adjustment was used for multiple comparisons. Animals that attained during the observation period were used for analysis.

Statistical significance for the control group indicates a significant trend test

Statistical significance for a treatment group indicates a significant pairwise test compared to the vehicle control group

* Statistically significant at P <= 0.05

- ** Statistically significant at P <= 0.01
- The 30,000 ppm group was terminated due to excessive toxicity on GD12.

10000 ppm VO data, and 15000 ppm VO and PPS data were excluded from analysis.

** END OF REPORT **