

**Study Number:** MOG002B  
**Test Type:** MOG  
**Route:** Dosing in Feed  
**Species/Strain:** Rat/Sprague-Dawley

**R14: Developmental Markers Summary**  
**Test Compound:** 2-Hydroxy-4-methoxybenzophenone  
**CAS Number:** 131-57-7

**Date Report Requested:** 03/20/2019  
**Time Report Requested:** 13:55:46  
**Lab:** RTI

**C Number:**

MOG002B

**Study Gender:**

Both

**PWG Approval Date**

See web page for date of PWG Approval

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		F1 Male					
		Treatment Groups (ppm)					
Generation	Litter	Cohort	0	3000	10000	30000	0.05 ppm EE
F1	A	<b>PND 13</b>					
		No. Examined (litters)	85 (22)	80 (20)	82 (21)	82 (20)	57 (15)
		No. of areolae/nipples per litter <sup>a</sup>	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00
		No. pups with areolae/nipples (%) <sup>b</sup>	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
		No. litters with areolae/nipples (%) <sup>b</sup>	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
		<b>Testicular Descent</b>					
		No. Examined (litters)	85 (22)	80 (20)	82 (21)	80 (20)	57 (15)
		No. Removed (litters) <sup>c</sup>	0 (0)	0 (0)	0 (0)	1 (1)	0 (0)
		No. Not Attaining Testes Descent (litters) <sup>d</sup>	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
		Day of Testes Descent					
		Mean Analysis <sup>e</sup>					
		Litter Mean ± SE <sup>f</sup>	19.1 ± 0.3 **	19.2 ± 0.3	19.0 ± 0.3	18.0 ± 0.2 *	19.4 ± 0.2
		Proportional Hazards Analysis <sup>g</sup>					
		Litter-based Model <sup>h</sup>	p<0.001	p=0.778	p=0.929	p=0.026	p=0.058

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		<b>F2 Male</b>					
Generation	Litter	Cohort	<b>Treatment Groups (ppm)</b>				
			<b>0</b>	<b>3000</b>	<b>10000</b>	<b>30000</b>	<b>0.05 ppm EE</b>
<b>F2</b>	<b>A</b>	<b>PND 13</b>					
		No. Examined (litters)	91 (30)	112 (34)	103 (32)	92 (30)	89 (27)
		No. of areolae/nipples per litter <sup>a</sup>	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00
		No. pups with areolae/nipples (%) <sup>b</sup>	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
		No. litters with areolae/nipples (%) <sup>b</sup>	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
		<b>Testicular Descent</b>					
		No. Examined (litters)	91 (30)	110 (34)	101 (32)	88 (30)	88 (27)
		No. Removed (litters) <sup>c</sup>	0 (0)	2 (2)	0 (0)	2 (1)	1 (1)
		No. Not Attaining Testes Descent (litters) <sup>d</sup>	0 (0)	0 (0)	2 (2)	0 (0)	0 (0)
		Day of Testes Descent					
		Mean Analysis <sup>e</sup>					
		Litter Mean ± SE <sup>f</sup>	17.1 ± 0.4	17.6 ± 0.3	17.0 ± 0.3	17.5 ± 0.3	17.3 ± 0.5
		Proportional Hazards Analysis <sup>g</sup>					
		Litter-based Model <sup>h</sup>	p=0.065	p=0.264	p=0.570	p=0.352	p=0.164

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## LEGEND

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In multiple breeding/littering studies Litter A is the default designation for the first litter; subsequent litters would be B, C etc.

No. Examined (litters) = the number of animals or pups examined (number of litters represented)

The number of areolae/nipples per litter are shown as mean  $\pm$  SEM

No. of pups with areolae/ nipples reported as number of affected pups (%)

No. of litters with areolae/ nipples reported as number of affected litters (%)

If measured, the No. of areolae/nipples at terminal sacrifice are shown as mean  $\pm$  SEM

<sup>a</sup>Statistical analysis for the F1 generation performed by Jonckheere (trend) and Shirley or Dunn (pairwise) tests. Statistical analysis for the F2 generation performed using a bootstrapped Jonckheere trend test; pairwise comparisons were done using the Datta-Satten modified Wilcoxon tests with Hommel adjustment for multiple comparisons.

<sup>b</sup>Statistical analysis for the F1 generation was performed using Cochran-Armitage (trend) and Fisher Exact (pairwise) tests. Statistical analysis for the F2 generation was performed using a Rao-Scott Cochran-Armitage test for both trend and pairwise tests.

<sup>c</sup>Animals that died or were removed prior to the end of the observation period and did not attain. These animals were excluded from all analyses.

<sup>d</sup>Animals that survived to the end of the observation period without attaining.

<sup>e</sup>Summary statistics and mixed model results are presented for animals that attained during the observation period.

<sup>f</sup>Means of litter means presented. 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.

<sup>g</sup>Animals that did not attain by the end of the observation period were included in the proportional hazards analysis.

<sup>h</sup>P-values for trend and pairwise comparisons were calculated from a Cox proportional hazards model with random effect for litter and a Hommel adjustment for multiple comparisons.

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  $P \leq 0.05$

\*\* Statistically significant at  $P \leq 0.01$

The EE group was not included in any trend analysis, it was included in the pairwise analysis to the control group.

EE = Ethinyl estradiol

**\*\* END OF REPORT \*\***