Study Number:	C20302B-03
Study Sex:	Both
PWG Approval Date:	See web page for date of PWG Approval
Version:	v1.5.0
Stat Version:	2022.10.18S

Study Number: C20302B-03
Test Type: TOX
Route: Whole-Body Inhalation
Species/Strain: Rat/Harlan Sprague Dawley

R09: Uterine Content Summary
Test Compound: alpha-Pinene
CAS Number: 80-56-8

Date Report Requested: 04/18/2023
Time Report Requested: 12:29:02
Lab: Battelle

Females: Naive Females

	Treatment Groups (ppm)			
	0	**100**	**200**	**400**
Pregnancy Summary				
Paired Females	25	25	25	25
Mated Females	24	25	24	25
Pregnant Females	22	20	23	20
Pregnant Females Examined on GD 14	18	18	22	20
Pre-implantation Loss				
Corpora lutea per Female	17.94 ± 0.46 (18)	17.83 ± 0.73 (18)	17.32 ± 0.64 (22)	17.60 ± 1.07 (20)
Implantations per Female	15.50 ± 0.32 (18) *	14.72 ± 0.37 (18)	13.32 ± 0.94 (22)	13.15 ± 1.02 (20)
Percent Pre-Implantation Loss	12.98 ± 2.16 (18)	15.74 ± 3.00 (18)	21.57 ± 5.59 (22)	25.35 ± 5.56 (20)
Intra-uterine Deaths				
Number of Early Resorptions	15	14	18	16
Early Resorptions per Litter	0.83 ± 0.19 (18)	0.78 ± 0.22 (18)	0.82 ± 0.19 (22)	0.80 ± 0.20 (20)
Number of Late Resorptions	0	0	0	0
Late Resorptions per Litter	0.00 ± 0.00 (18)	0.00 ± 0.00 (18)	0.00 ± 0.00 (22)	0.00 ± 0.00 (20)
Total Resorptions per Litter	0.83 ± 0.19 (18)	0.78 ± 0.22 (18)	0.82 ± 0.19 (22)	0.80 ± 0.20 (20)
Whole Litter Resorptions	0	0	1	1
Percent Post-Implantation Loss	5.52 ± 1.22 (18)	5.35 ± 1.48 (18)	11.81 ± 4.83 (22)	10.41 ± 4.92 (20)
Number of Dead Embryos	0	0	0	0
Dead Embryos per Litter	0.00 ± 0.00 (18)	0.00 ± 0.00 (18)	0.00 ± 0.00 (22)	0.00 ± 0.00 (20)
Live Fetuses				
Number of Live Embryos	264	251	275	247
Live Embryos per Litter	14.67 ± 0.40 (18)	13.94 ± 0.43 (18)	13.10 ± 0.77 (21)	13.00 ± 0.83 (19)
Gravid Uterus Weight				
Terminal Body Weight (g)	286.1 ± 2.5 (18)	283.3 ± 7.2 (18)	285.0 ± 2.6 (22)	286.3 ± 7.4 (20)

LEGEND

Values are reported per litter as mean ± SEM (N)

Calculated values do not include non-pregnant animals, those that did not survive to terminal sacrifice, or those that delivered prior to c-section being performed.

Dams where the number of implants was greater than the number of corpora lutea were assigned a percent pre-implantation loss of 0.

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

Statistical analysis for the Mated and Pregnant Females endpoints was performed by Cochran-Armitage (trend) and Fisher Exact (pairwise) tests. No statistical analysis was performed on the Paired Females or Pregnant Females Examined on GD 14 endpoints.

Whole litter resorptions analyzed by Cochran-Armitage (trend) and Fisher Exact (pairwise) tests. All "per litter" and pre-implantation loss endpoints analyzed by Jonckheere (trend) and Shirley or Dunn (pairwise) tests.

Statistical analysis for Live Embryo endpoints was performed by Jonckheere (trend) and Shirley or Dunn (pairwise) tests

All Cochran-Armitage (trend) and Fisher Exact (pairwise) are reported as two-sided tests.

Data for Number of Live Embryos was collected on GD 14.

Statistical analysis for the Terminal Bodyweight endpoint was performed by Jonckheere (trend) and Williams or Dunnett (pairwise) tests

The Live Embryos per Litter endpoint excludes dams with whole litter resorptions.

Naïve females were paired with dosed males; no dams were dosed in this study.

Some dams were discovered to be pregnant, despite being originally classified as non-mated (not sperm-positive). These dams are included in the mated and pregnant counts, but were not examined on GD 14.

** END OF REPORT **