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Via Federal Express

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Room 6428
Attention: 8(e) Coordinator
Office of Pollution Prevention and Toxics
U.S. Environmental Protection Agency, ICC Building
1201 Constitution Ave., NW
Washington, D.C. 20460

Dear 8(e) Coordinator:

8EHQ-06-16486
Hydrofluorocarbon

This letter is to inform you of the results of a recently conducted one-generation inhalation reproductive toxicity study in rats with the R&D test substance referenced above.

Groups of rats (25 per sex per exposure level) were exposed to 0, 500, 1,000, or 10,000 ppm of the test substance by whole-body inhalation exposure for six hours per day. Exposures were conducted five days per week during the premating period and then seven days per week during the cohousing period (and up to the day before sacrifice for females without evidence of copulation). Animals were exposed on days 0 to 19 of gestation and 5 to 20 of lactation.

During the in-life portion of the study, body weight, food consumption, and clinical observations were recorded for all animals at regularly scheduled intervals until scheduled euthanasia. After approximately 10 weeks on study, male and female rats were cohoused 1:1 until positive evidence of mating was observed or until a period of two weeks had elapsed. Females with positive evidence of mating were returned to single housing and moved to polycarbonate pans near the end of gestation. Females were closely monitored for signs of labor, delivery, and offspring. The day of delivery was defined as the onset of the lactation period. During the lactation period, data were collected for maternal body weight, food consumption, and clinical observations. Offspring were counted by sex, weighed, and examined for clinical observations.

The offspring were euthanized and examined at weaning and the parental animals were subsequently euthanized. Gross postmortem examinations were performed and selected organs were weighed and/or retained for possible further examination.

Following evaluation of the in-life and reproductive outcome data, the following test substance-related effects were observed. At 500 ppm and higher, there were test substance-related increases in gestation length indicative of dystocia, lower fertility, and lower maternal and offspring viability during the lactation period. At 1000 ppm, these effects were accompanied by transient and slight effects on maternal body weight and food consumption. At 10000 ppm,
additional evidence of test substance-related toxicity included effects on teeth (P1 males), reductions in body weight and food consumption parameters (P1 males and females), and reductions in offspring body weights.

Under these experimental conditions, the findings described above appear to be reportable, based upon EPA's TSCA Section 8(e) reporting criteria.

Sincerely,