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Contains NO CBI

8EHQ-0293-8735  
cc: Dr. E.J. Moran, CMA

NES DOCUMENT

93 MAR -1 AM 10:10

DUPONT CENTRAL RESEARCH AND DEVELOPMENT

February 25, 1993

**EXPRESS MAIL - RETURN RECEIPT REQUESTED**

Document Processing Center (TS-790)  
Attention: 8(e) Coordinator  
Office of Pollution Prevention and Toxics  
U.S. Environmental Protection Agency  
401 M Street, SW  
Washington, DC 20460



8EHQ-93-8735  
INIT 03/01/93

~~93 FEB 25 AM 10:10~~

Dear Coordinator:

**8EHQ-0392-2480**

On March 3, 1992 we reported the results of an inhalation micronucleus assay in rats and mice with 4-vinylcyclohexene (4-VCH) in which transient narcosis was observed in rats at concentrations of 500 ppm and higher. Narcosis ceased shortly after the termination of exposure.

This letter is to inform you of the preliminary results of an ongoing 90-day inhalation study in rats and mice with 4-VCH under a TSCA Section 4 Testing Consent Order. Five groups of 10 male and 10 female mice are being exposed to concentrations of 4-VCH targeted at 0, 50, 250, or 1,000 ppm or to a concentration of 1,3-butadiene targeted at 1,000 ppm. Five groups of 10 male and 10 female rats are being exposed to concentrations of 4-VCH targeted at 0, 250, 1,000 or 1,500 ppm or to a concentration of 1,3-butadiene targeted at 1,000 ppm. Exposures by inhalation are for 6 hours per day, 5 days per week. The animals are observed before and after each exposure for clinical signs of toxicity.



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Diminished arousal/narcosis is observed during the exposure period in rats and mice exposed to 250 and 1,000 ppm 4-VCH and in rats exposed to 1,500 ppm 4-VCH. This is a transient response because the rats and mice return to a normal arousal state following their removal from the chamber. While we are aware that the Agency's guidance shows narcosis as an 8(e)-triggering event, we do not consider this observation of transient narcosis as evidence of neurotoxicity nor do we consider this observation to reasonably support a conclusion of substantial health risk.

Sincerely,

*Charles F. Reinhardt*

Charles F. Reinhardt, M.D.  
Director

CFR/ASP:dij

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