

DOW CORNING

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TSCA Document Processing Center (TS-790)
Room L-100
Office of Toxic Substances
U.S. Environmental Protection Agency
Attn: TSCA Section 8(e) Coordinator
401 M Street S.W.
Washington, D.C. 20460



Re: TSCA Section 8(e) Notification of Substantial Risk
1,1,1,3,5,5,5-Heptamethyl-3-hexyltrisiloxane

Dear Sir:

In accordance with the provisions of Section 8(e) of the Toxic Substances Control Act (TSCA), as interpreted in the Statement of Interpretation and Enforcement Policy (40 FR 11110, March 16, 1978), Dow Corning Corporation is submitting the following Notification of Substantial Risk for an ongoing study.

Chemical Substance:

1873-90-1 1,1,1,3,5,5,5-Heptamethyl-3-hexyltrisiloxane

Manufacturer:

Dow Corning Corporation
2200 West Salzburg Road
Midland, Michigan 48686-0994

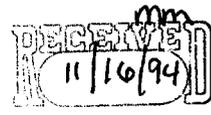


Ongoing Study:

AN ACUTE INHALATION TOXICITY STUDY OF DOW CORNING X2-1731.
VOLATILE FLUID IN ALBINO RATS

Executive Summary:

An acute inhalation toxicity study was performed to determine the median lethal concentration (LC₅₀) in male and female rats via an aerosol inhalation exposure route to a research and development material identified as DOW CORNING® X2-1731 Volatile Fluid, chemically described as 1,1,1,3,5,5,5-heptamethyl-3-hexyltrisiloxane (CASRN 1873-90-1). While the LC₅₀ value for the combined sexes was determined to be slightly greater than 2.0 mg/l, there were marked differences in lethality between the sexes. As is indicated in the table



below, at the 2.0 mg/l dose level, 4 of 5 male rats died while no females died at this concentration, and at the 1.0 mg/l dose level, 2 of 5 male rats died whereas no female rats died at this concentration.

Table 1. MORTALITY (NUMBER DEAD/NUMBER EXPOSED)

Target Conc. (mg/l)	Test Animal Sex		
	Males	Females	Males and Females
5	5/5	5/5	10/10
2	4/5	0/5	4/10
1	2/5	0/5	2/10

The lungs from survivors from the 2.0 and 1.0 mg/l dose groups were found on necropsy to appear normal. Rats from the 5.0 mg/l dose group and rats from the 2.0 and 1.0 mg/l dose groups who died during the course of the study were found to have dark red or mottled and/or fluid filled lungs.

While the LC₅₀ value of slightly greater than 2.0 mg/l for the combined sexes would not appear to merit notification under TSCA Section 8(e), we nevertheless are providing EPA with this notification of substantial risk due to the unexpected observation of a marked difference in lethality between the sexes.

Actions:

Naturally, Dow Corning will provide EPA with a copy of the study on completion of the final report and will inform the Agency of any pertinent information that may be developed concerning this chemical substance.

If you require further information concerning this notification of substantial risk, please contact Dr. Rhys G. Daniels, Regulatory Compliance Specialist, Dow Corning Product Safety and Regulatory Compliance Department, at the address provided below or by telephone at 517-496-4222.

Environmental Protection Agency
August 10, 1994
Page 3

If you require further information concerning the toxicology of the test material, please contact Dr. Robert G. Meeks, Toxicology Manager, Dow Corning Toxicology Department, at the address provided below or by telephone at 517-496-8629.

Sincerely,

Alvin E. Bey

Alvin E. Bey
U.S. Area Vice-President
Corporate Director of HES