Degussa

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Corporation

CONTAINS NO CBI

February 26, 1992

8EHQ-0292-2421 Init

Document Processing Center, (TS-790)
Office of Toxic Substances
Environmental Protection Agency
401 M Street, SW
Washington, DC 20460
Attn: Section 8(e) Coordinator (CAP Agreement)

88920001062

Re: 8ECAP-0081

COVER LETTER #6

Dear Sir:

Pursuant to the TSCA Section 8(e) Compliance Audit Program (CAP) and the CAP Agreement, the document listed below has already been submitted with a Premanufacture Notice (PMN) as indicated. Therefore, the study is subject to a penalty of $5,000 as described in Unit II.B.3.b. of the CAP Agreement.

#	PMN #	CAS #	CHEMICAL NAME (TRADE NAME)	DATE SUBMITTED
6	P-91-709	3069-40-7	Trimethoxyoctylsilane (Si 108)	3/26/91

Title: "Acute (4-hour) Inhalation Toxicity Study with 'Degussa Silane Si 108' in Rats (Octyltrimethoxysilane)" (By TNO-CIVO Institutes, Report # V 90.142)

A summary of the reportable adverse effects is attached.

Sincerely,

John Lewinson

John Lewinson, Ph.D.
Manager, Product Regulatory Compliance

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JL-92-72

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Degussa Silane Si 108

Acute inhalative toxicity study in rats

Dosage/route/duration: Four groups of rats were exposed to test atmospheres containing the test material at concentrations between 0.90 and 6.20 g/m^3 for a period of 4 hours. The post exposure observation period was 14 days.

Results: Generating the test atmosphere by bubbling a small flow of air through the test material (vapour with small part of an aerosol) the rats could be exposed (whole-body exposure) to a level of 0.9 g/m^3. To produce higher concentration in the air a nebulizing technique was necessary and therefore the rats were treated at the higher levels with a nose-only exposure equipment.

During the whole body exposure (0.9 g/m^3) hunched apperance piloerection and closed eyes were observed. Superficial and irregular breathing was seen only during the first hour; none of the rats died.
Nose-only exposure to higher levels first revealed slow, either deep or superficial, irregular breathing, followed by more or less stable breathing patterns. Rats showing laboured breathing made a lethargic impression and when they were in bad condition (coma, dyspnoea) they were killed in extremis. Piloerection, wet noses, drowsiness and tightly closed eyes were seen in several survivors during the observation period.

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Degussa Silane 108

Acute inhalative toxicity study in rats

The animals recovered within 7 days. One male rat still showed dyspnoea, blue coloured limbs, piloerection and signs of ataxia 14 days after exposure.
Decreases in body weight or body weight gain showed only rats in the lowest and highest dose group.
At necropsy findings were observed only in the lungs of deceased animals.

The LC_{50} value for both sexes together was 3.9 g/m^3(4h).

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