

Katherine E. Reed, Ph.D.
Staff Vice President

3M Environmental, Health and
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8EHQ-0904-15659



Certified Mail

August 27, 2004

Document Processing Center
EPA East – Room 6428 Attn: Section 8(e)
Office of Pollution Prevention and Toxics
US EPA
1200 Pennsylvania Avenue NW
Washington DC 20460-0001



RE: TSCA 8(E) SUBSTANTIAL RISK NOTICE ON:
Methyl perfluoroisobutyrate (CF₃)₂-CF-CO₂CH₃

RECEIVED
OFFICE OF
POLLUTION
PREVENTION
AND TOXICS
2004 SEP 21 PM 12:49
Contain NO
BI

Dear Sirs:

3M has received preliminary data for an acute inhalation range finder toxicity study in rats conducted on methyl perfluoroisobutyrate. At an exposure dose level of 3000 ppm the rats showed clear signs of neurotoxicity. Methyl perfluoroisobutyrate is a low concentration impurity in a 3M product. The concentration of this impurity in the product is controlled to assure product safety.

The study was conducted by 3M. Three test groups, each consisting of three male Sprague Dawley rats were included in the study.

- 1) Whole body exposure to an atmosphere of approximately 3000 ppm (v/v) of the test material (Methyl perfluoroisobutyrate) for 4 hours.
- 2) Whole body exposure to an atmosphere of approximately 300 ppm (v/v) of the test material (Methyl perfluoroisobutyrate) for 4 hours.
- 3) Whole body exposure to an atmosphere of approximately 3000 ppm (v/v) of the control material.

Rats treated with Methyl perfluoroisobutyrate at 3000 ppm showed clear signs of neurotoxicity (tremors and seizures). At the end of exposure, animals appeared very weak, though they seemed to recover after approximately 30 minutes. All animals appeared normal the next day. No lethality was observed at this exposure level.

Rats treated with Methyl perfluoroisobutyrate at 300 ppm showed no signs of adverse effects as compared to the control group.

Gross necropsy was conducted 14 days post exposure on all rats. No abnormalities or other significant findings were noted.

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The study is not complete at this time. Analytical work is being conducted on urinary samples collected from the exposed rats. A final report will be forwarded to EPA when received.

Please contact Paul Lieder (651-737-2678) if you have any questions or if we can provide additional information.

Sincerely,

A handwritten signature in black ink that reads "Katherine E. Reed". The script is fluid and cursive, with the first letters of the first and last names being capitalized and prominent.

Katherine E. Reed

Staff Vice President, Environmental Health and Safety Operations