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January 19, 2004

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

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RE: TSCA 8(E) SUBSTANTIAL RISK NOTICE ON:
[fluorochemical ether]

Dear Sirs:

3M has received draft data for a five-day inhalation study in rats conducted with a research and development chemical [*fluorochemical ether*] indicating neurological effects.

The study was conducted by 3M. Four rats were exposed to the fluorochemical ether at 1000 ppm for four hours for five days. On days 2 through 5, tremors and seizures were observed throughout the exposure. Normal behavior returned within 20 minutes of cessation of the exposure. No effects were indicated in a companion acute inhalation study in which four rats were exposed to this same fluorochemical ether at 1000 ppm for four hours.

3M is currently investigating this chemical for use in closed heat transfer systems. This chemical is one of many chemicals under consideration as part of a research program to replace our existing perfluorinated inert heat transfer liquids with compounds that have lower global warming potential. Criteria used to assess candidate materials include, but are not limited to, human health and environmental impact, performance properties, and cost.

Should 3M choose to commercialize this chemical, additional testing will be conducted to establish a threshold for the observed effect and, as is routine, investigate other endpoints of both acute and repeat dose toxicity. Because the chemical would be used in a closed system and because it has a high boiling point and low vapor pressure, it is likely that inhalation exposure would be manageable in its intended end use applications. Again, more data would be generated to assess exposure to any candidate material throughout its life cycle.

A final report will be forwarded to EPA when received.



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Once a docket number has been assigned for this submittal, please send the docket number postal card to Cheri Kedrowski, 3M Center Bldg. 220-2E-02, St. Paul, MN 55144.

Please contact James Zappia (651-733-5180) if you have any questions or if we can provide additional information.

Confidentiality claim:

The specific chemical identity of the test substance is held to be confidential business information until a patent application is filed.

Sincerely,

A handwritten signature in cursive script that reads "Katherine E. Reed". The signature is written in black ink and is positioned above the typed name and title.

Katherine E. Reed
Staff Vice President
Environmental, Health and Safety Operations