

CC: Plant Staff

March 24, 1988

TO: ALL EMPLOYEES IN THE FOLLOWING BTO'S:
"TEFLON"® POLYMERS, "TEFLON"® COPOLYMERS, RESEARCH,
PLANT SERVICES (CENTRAL LAB & CENTRAL ENGINEERING)

FROM: R. D. LANYON, PLANT OCCUPATIONAL HEALTH COORDINATOR

R. D. Lanyon

EMPLOYEE COMMUNICATION

AMMONIUM PERFLUOROOCTANOATE (C-8) CAS #3825-26-1
HAZARD DETERMINATION AND AEL REVIEW

Summary

The AEL Committee has recently received and subsequently reviewed the 3M Company's results of a two-year rat feeding study. The review indicates that the existing AEL of 0.01 mg/m³ for C-8 in air is to be maintained since it provides a 1000-fold safety factor below any health effect observed in this new study or in previous studies.

Discussion

The recent 3M studies indicate a slight (but statistically significant) increase in benign testicular tumors in male rats. The AEL Committee is, therefore, classifying C-8 as a "small c" (low carcinogenic potential) which means annual communication of this hazard is not required but the information must be available in the Material Safety Data Sheets. Again, there is no known developmental (embryo toxic) effect of C-8 based on four separate studies.

Health effects have only been observed in animals, and to date there is no evidence of health effects in humans in studies by either 3M or Du Pont. Washington Works' experience supports this conclusion. C-8 is eliminated from the human body at a very slow rate. This slow elimination is the reason why we have a very low AEL of 0.01 mg/m³.

Washington Works will continue to monitor both the work atmosphere and blood sampling to insure that employees are not exposed above the AEL. We will be auditing handling techniques to reaffirm that skin exposure to C-8 is minimized. Additionally, we are investigating the use of aqueous C-8 solutions to further reduce airborne C-8.

Our blood sampling program, which serves as an excellent measure of employee's exposure to C-8, will be continued.

RDL:mah
2836m

DDJ001726

EID510258

C-8 (FC-143) STANDBY PRESS RELEASE

(QUESTIONS AND ANSWERS)

- Q. How many people at Washington Works are potentially exposed to Fluorocarbon 143 (FC-143)?
- A. Approximately 25% of our employees work in the area where FC-143 is used.
- Q. What type of protective equipment do these employees wear?
- A. They wear rubber gloves to prevent skin contact and respirators when using FC-143.
- Q. Why is this protective equipment needed?
- A. It is important to keep the exposure to FC-143 below the TLV[®] level because it could be harmful if the level is exceeded.
- Q. How is it harmful?
- A. It is a liver toxin and has been recognized as such for a number of years. However, animal experiments and human experience show that holding C-8 exposure to the TLV[®] limit has prevented any known human adverse effects.
- Q. How do you receive and store FC-143?
- A. FC-143 is shipped in solid form to us in 50-pound drums from the 3M Company.
- Q. How much FC-143 do you use at Washington Works?
- A. This information is proprietary, but we can say it is used as a minor ingredient in all of our TEFLON[®] processes.

DDJ001727

EID510259

C-8 (FC-143) STANDBY PRESS RELEASE

(cont.)

Q. How is FC-143 used at Washington Works?

A. FC-143 is used in the manufacture of TEFLON®. The FC-143 is destroyed in manufacturing TEFLON® products.

Q. Do your employees know about the health hazard of FC-143?

A. Absolutely. It has always been Du Pont's policy to protect our employees against known hazards. We have been communicating with our employees since the 1970's.

Q. Do you have FC-143 emissions?

A. Emissions are approximately 2 lb./hr. and are at very low concentrations in air, significantly below the TLV® limit.

Q. How well does Du Pont control their work environment to the TLV® level?

A. Du Pont controls their environment level 90% below the TLV® level.

Q. Is FC-143 an embryo toxin?

A. Rat studies and employee data show no embryo toxic effects.

RDL:mah
3/24/88
2836m

DDJ001728

EID510260