

Memorandum

Date: 21 May 1982

Subject: EPA Reg. No. 476-1713 ASPON 6-E
Caswell #845A

From: B. T. Backus
IRB/TSS

To: Mr. William Miller
Product Manager 16

Registrant: Stauffer Chemical Co.
1200 S. 47th St.
Richmond, CA 94804

Active Ingredient:

0,0,0,0-tetrapropyl dithiopyrophosphate.....67.64%
Inert Ingredients:.....32.36%

Background:

The registrant has submitted an Inhalation LC50 study on this formulation as part of the registration standard data requirements. Lack of this inhalation LC50 study was previously noted (Backus, 27 April 1982).

Comments and Recommendations:

1. The inhalation study received May 3, 1982 for this product is acceptable.
2. This product is in toxicity category IV by this exposure route (Inhalation LC50 above 5 mg/L for a 4-hr exposure). No precautionary or practical treatment statements are necessary to address the hazards of inhalation exposure, although we can accept toxicity category III statements.

Review:

The following study was conducted at the Environmental Health Center Inhalation Facility of Stauffer Chemical Co., 400 Farmington Ave., Farmington, CT 06032. Study was received May 3, 1982, and is in Acc. 247534.

1. Acute Inhalation LC50 - Rat. Study T-10801; dated March 22, 1982.

Procedure: Groups of 10M, 10F SD-derived rats received 4-hr whole body exposure to either 0 (controls) or 5.50 mg/L (measured) concentration of formulation (10.49 mg/L nominal concentration). Mass median aerodynamic diameter was 3.0 um, with geometric standard deviation 2.6. After exposure there was a 14-day observation period, with necropsies performed on subjects which died during this period and on all sacrificed survivors at 14 days.

Results: 2/10M, 3/10F in the exposed group died within 3 days of exposure. Symptoms included salivation, lacrimation, rapid and labored breathing during the exposure; following exposure 6/10M, 10/10F had conjunctivitis; other symptoms included rough coats, chromodacryorrhea, chromorhinorrhea, rales, depression, dehydration. Weight losses were evident for all exposed subjects at 2 days. All animals which died showed some autolysis; lungs were reddish, with black patchy areas or dark red mottling. Males had reddened scrotal sacs.

Study Classification: Core Minimum Data (question as to whether or not death could occur below 5 mg/L; autolysis of mortalities).

Product Classification: Tox. Cat. IV

Byron T. Backus 05/20/52

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