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6-18-91

MEMORANDUM:

Subject: EPA File Symbol/EPA Reg. No.:7673-RN and 7673-RR

From: Lucy D. Markarian, Biologist 6/12/91
Precautionary Review Section
Registration Support Branch
Registration Division (H7505C)

To: ~~William H. Miller~~/ ROB FOREST Rame Cromwell, PM 16
Insecticide-Rodenticide Branch
Registration Division (H7505C)

Thru: Thomas C. Ellwanger, Section Head E 6/18/91
Precautionary Review Section
Registration Support Branch
Registration Division (H7505C)

Applicant: The Murphy - Phoenix Corporation
Corporate Place
25800 Science Park Drive Suite 200
Beachwood, Ohio 44122

FORMULATION FROM LABEL:

Active Ingredient(s):	7673-RR	% by wt. 7673-RN
Potassium Salts of Fatty acids.....	1.75	35.0 %
Inert Ingredient(s):	98.25	65.0 %
Total:		100.0 %

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BACKGROUND

The review of the submitted acute inhalation test in support of Secta Spray under EPA 7673-RN and EPA 7673-RR on 8/13/90 found the study to be supplementary for the following reasons:

1-The product was not tested as formulated, but as a 5% dilution.
2-The chamber concentrations were not determined analytically.
3-MMAD was greater than 1 micrometer and particle size distribution was not supplied; therefore, it could not be determined if enough particles were inhalable by the test model.
4-Some of the exposure chamber parameters were not reported.

The performing laboratory has submitted additional data in an effort to improve the supplementary rating.

RECOMMENDATION

Reevaluation of the submitted test reviewed 8/13/90 and considering the newly presented data the following conclusions are reached:

1- The applicability of a test, performed using a dilution , to the concentrate from which the dilution is made is at question. The guidelines and 40CFR state that inhalation toxicity must be tested using the end use product. Both EPA 7673-RN and EPA 7673-RR are end use products. The first (EPA7673-RN) has 35% active ungredient and is diluted and sprayed at the rate of 3 oz to the gallon (87 ml to 3785 ml) approximately at 2.3 %. The second (EPA7673-RR) is already diluted to 5% and is ready for use, primarily for spraying. Due to use pattern, the test carried out with 5% dilution could be applicable to both products as long as the chamber concentrations of the test material reaches the recommended level of 5mg/L or the highest attainable concentration for a limit test. This has been demonstrated. The dilution facilitates the generation of the test material.

2-The determination of chamber concentrations gravimetrically from the breathing zone is acceptable. These determinations were made by sampling at 4 LPM for five minutes at half hour intervals and were consistent.

3-Product Safety Labs has furnished data for chamber temperature: 68-73 degrees F. The laboratory states that humidity in the chamber was not measured , because the test material was sprayed in a water base and humidity under these circumstances approaches 100%. NTIS-PE 89-10366 section C-5 is quoted from the guidelines: " High humidity approaching 100% is inevitable when the test substance is suspended in water". This line of reasoning is found acceptable for the omission of the humidity measurements.

4-Product Safety Labs has also furnished particle distribution data. It is shown that 34.4 % of the particles were 2.1 micrometers or under. Of these 7.9 % were 1.1 micrometers and 2.3 % less than

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that.While this is not an ideal distribution it is acceptable. It is concluded that with the receipt of the newly presented data the inhalation toxicity test can now be upgrade to core minimum classification and considered acceptable support for both products. Toxicity catagory of the inhalation test is III.

LABELING

The toxicity profile of the products is as follows:

Acute oral toxicity .....Catagory IV
Acute dermal toxicity.....Catagory III
Acute inhalation toxicity.....Catagory III
Eye irritation.....Catagory III
Dermal Irritation.....Catagory III
Dermal sensitization.....Sensitizer

Based on this profile the signal word is "Caution" as stated before.

The Precautionary statemant must include:

Harmful if absorbed through skin or inhaled. Causes moderate eye irritation. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Avoid contact with skin, eyes or clothing or breathing spray mist. Wash thoroughly with soap and water after handling.

The statement of practical treatment must include:

If in eyes : Flush eyes with plenty of water. Call physician if irritation persists.

If on skin : Wash with plenty of soap and water. Get medical attention.

If inhaled : Remove victim to fresh air. If not breathing give artificial respiration, preferably mouth to mouth. Get medical attention.

Recommendation about environmental hazards and discarding containers are unchanged.