UNITED STATES ENVIRONMENTAL PROTECTION AGENCY 000759

DATE: August 3, 1979

SUBJECT: EPA Reg.#400-136; Vitavax HBM-25 for Soybeans; CASWELL#165A; Acc.#238226

FROM: William Dykstra, Ph.D
Toxicology Branch (TS-769)

WMP 8/3/79 WSW

TO: R. Panebrano
Product Manager#21

RECOMMENDATIONS:

1. Captan is under review as an RPAR Chemical.

2. The toxicity data submitted are acceptable as Core-Minimum Data and support the conditional registration request. No additional toxicity data are required for this action.

HUMAN HAZARD SIGNAL WORD: DANGER

Name: Vitavax HBM-25

Ingredient	Percent Weight
carboxin	12.5
captan	12.5
Inerts	75.0
	100.0

Proposed Uses

1. Vitavax HBM-25 is a ready-to-use seed treatment which combines the systemic action of carboxin with the surface action of captan to control various seed and seedling diseases. In addition, the essential soybean micronutrient molybolenum is present.

Vitavax HBM-25, as a planter box application, should be applied at the rate of 2 - 4 ounces per bushel of seed.

Do not use treated seed for food, feed or oil purposes. Do not graze or feed livestock on hay grown from treated seed.

Review

1. Tolerances established for carboxin on soybeans and other racs under 40 CFR 180.301. Tolerances established for captan on soybeans and other racs under 40 CFR 180.103.

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EPA FORM 1320-6 (REV. 3-76)

2. Rabbit Eye Irritation Study (FDRL, Lab. No. 5186e, Aug. 16, 1976)

Test Material: Vitavax HBM-25

0.1 ml of test material was instilled into one eye of each of6NZW rabbits. The ocular reactions were observed and scored at 24, 48, and 72 hours and 7 days after instillation of the test material.

Results: Corneal opacity in 5/6 rabbits at day 7. Iridial and conjunctival effects were observed in all rabbits. Iridial effects cleared in 2 rabbits by day 7. Conjunctival effects persisted throughout this period.

Classification: Core-Minimum Data; TOX Category I: DANGER

3. Primary Skin Irritation Study with Rabbits (FDRL, Lab. No. 5483, May 18, 1977)

Test Material: Vitavax HBM-25

0.5 gm of test material was applied to intact and abraded skin sites on the fur clipped trunk of 6 NZW rabbits under an impervious cuff for 24 hours. Observation and scoring was at 24 and 72 hours after exposure.

Results: P.I. = 0.46; erythema was observed in the intact skin of one animal, and abraded skin of animals at the 24 hour reading. At the 72 hour reading, erythema was observed in the intact skin of two animals and the abraded skin of five animals. No edema formation was observed at any time.

Classification: Core-Minimum Data; TOX Category IV: CAUTION

4. Approximate Acute Oral Toxicity in Rats (FDRL, Lab. No. 5483, 6/28/77)

Test Material: Vitavax HBM-25

Five groups of 5 male and 5 female Adult hooded rats BLU: (LE) BR Long-Evans were intubated with 2.0, 3.5, 6.5, 8.5 and 12.5 gm/kg of test material. Observation for 14 days.

Results: LD50 = 5.4 $\pm$ 0.8 gm/kg (both sexes)

Toxic Signs: slight decreased activity, ataxia, diarrhea, urinary, uncontinence

Body Weight: Not reported

Necropsy: dark liver, mottled kidneys, lungs mottled

Classification: Core-Minimum Data; TOX Category IV: CAUTION

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5. Acute Dermal Toxicity Study in Rabbits (FDRL, Lab. No. 5483, 6/28/77)

Test Material: Vitavax HBM-25

Four groups of 6 (3M & 3F) NZW rabbits received dermally doses of 0.2, 2.0, 5.0, and 10.0 gm/kg of test material on the fur clipped trunk under an impervious cuff for 24 hours. Observations for 14 days.

Results: No deaths, LD50 > 10 gm/kg

Toxic Signs: decreased activity (occasionally severe)

Body Weight: Not reported

Necropsy: Not reported

Classification: Core-Minimum Data; TOX Category III: CAUTION

6. Acute Inhalation Study in Rats (FDRL, LB. No. 5483, 10/18/77)

One group (5M & 5F) of Adult hooded rats BLU: (LE) BR Long-Evans were exposed to inhalation of 20 mg/L of test material for one hour. Observation for 14 days.

Results: No deaths, LC50 > 20 mg/L

Toxic Signs: None

Body Weight: Not reported

Necropsy: Not reported

Classification: Core-Minimum Data; TOX Category IV: CAUTION

TOX/HED:th:RD Initial WWOODROW:8-2-79

5/8/79

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