

005456

Date: April 11, 1983

Subject: EPA Registration Number : 960-342
LACCO Copper Key, Chloride Sulfate 50% Sprayable FungicideFrom: Patricia F. Graham
PHB/SLB E 4/11/83To: Henry Jacoby
Product Manager (2)Applicant: Los Angeles Chemical Company
4545 Ardore Street
South Gate, California 90280

Active Ingredients:

Copper expressed as metallic 50.0%
Inert Ingredients 50.0%Background: Submitted acute oral, acute dermal
eye irritation and skin irritation studies.
Studies conducted by Northwest Pacific Toxicology
Inc. Data under accession number 249211.
Method of support indicated as not submittedRecommendations:(1) PHB/SLB finds all the studies ~~except~~ the acute oral
study acceptable to support the conditional registration
of this product. However, for future submission
please note;(a) In the acute dermal study, individual necropsy
reports for each animal must be submitted.

(b) In the eye irritation study, Gammatil (units

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treated unwaded eggs and 3 with treated waded eggs must be used.

Oral Acute Oral Study is Core Supplementary Data and thereby acceptable to support this registration because LD50's and 95% confidence limits for males and females were not submitted. Once this data is submitted this study can be upgraded to an acceptable level.

(3) An Acute Inhalation Study was not submitted and one must be submitted and justified or justified as to why this is unnecessary.

Label:

(1) Labeling comments received until Acute Oral Study requested and acceptable Acute Inhalation Study is submitted.

Review:

(1) Acute Oral Toxicity Study: Methuen Pacific Lab., Inc.'s Report # X25016, December 7, 1982.

Procedure: 5 groups consisting of 5M and 5F Sprague-Dawley rats weighing a minimum of 180 grams were received one of the following doses orally: 1.2, 1.7, 2.0, 2.2 or 2.5g/kg. Observations made for 4 days after treatment. Necropsy was performed on all animals that died during the test and ~~one~~ on one animal of each sex surviving to the end of the test.

Results: At 1.2g/kg, 1/5M died; at 2.0g/kg, 4/5M + 4/5F died; at 2.2g/kg, 4/5M + 4/5F died; at 2.5g/kg, 5/5M and 5/5F died. All animals showed lethargy during the test period. Necropsy revealed pulmonary edema, abnormal liver, kidney and gastro-intestinal tract.

Study Classification: Core Supplementary Data LD50 and 95% confidence limits for males and females not given.

2) Acute Dermal Toxicity Study; Northwood Pacific Lab, Inc.; Report # X25016; December 7, 1982.

Procedure: 5M and 5F New Zealand rabbits weighing between 2.0 and 3.0 Kg received 5g/Kg of the test material at intact skin sites under occlusive wrap for 24 hour exposure. Observations made daily for 14 days after treatment. Necropsy performed on all animals that died during the study and on one animal per sex that survived the test period.

Results: No mortalities. No toxic signs noted. At necropsy of the one male possible slight pulmonary edema noted. LD50 greater than 5g/Kg.

Study Classification: Core Minimum Data. Individual necropsy reports for each animal must be submitted.

Toxicity Category: III - CAUTION

3) Primary Skin Irritation Study; Northwood Pacific Lab, Inc.; Report # X25016; December 7, 1982.

Procedure: Six New Zealand rabbits received 0.5g of the test material at intact skin sites under occlusive wrap for 4 hour exposure period. Observations made at 1, 24, 48 and 72 hours after treatment, then daily thereafter through 14 days.

Results: at 24 hours, 6/6 had erythema (score of 1 to 3) and 4/6 edema (score of 1). At 72 hours, 6/6 had erythema (score of 1 + 2) and 5/6 edema (score of 1). At 7 days, 4/6 erythema (score of 1) and 4/6 edema (score of 1). At day 14 all irritation had cleared.

Study Classification: Core Benchmark Data

Toxicity Category: IV - CAUTION

(4) Eye Irritation Studies: Northern Pacific Lab, Inc.; Report # X25016; December 7, 1982.

Procedure: Six New Zealand rabbits received 0.1 ml of the test material in one eye each. Observations were made at 1, 24, 48 and 72 hours ~~after~~ after treatment. If irritation present at 72 hours, observations were made at 7, 14 and 21 days after treatment or until irritation has subsided.

Results: At 24 hours, 4/6 had corneal opacity (4/6=20, 3/6=45, 2/6=60); iris irritation (4/6=5), redness (4/6=3), chemosis (4/6=1, 4/6=2, 3/6=3, 4/6=4) and discharge (4/6=1, 2/6=2).

At 72 hours, 4/6 corneal opacity (3/6=5, 2/6=15, 4/6=20), 5/6 iris irritation (3/6=5, 2/6=10), 4/6 redness (2/6=1, 3/6=2, 4/6=4); 3/6 chemosis (3/6=1, 4/6=2, 4/6=3) and 3/6 discharge (2/6=1, 4/6=2).

At day 7, 2/6 corneal opacity (2/6=5), iris irritation (4/6=5, 4/6=10), redness (4/6=1, 4/6=2), chemosis (4/6=1, 4/6=2) and 4/6 discharge (4/6=1).

At day 14, 4/6 corneal opacity (4/6=5); 2/6 iris irritation (4/6=5, 4/6=10). All irritation had cleared by day 21.

Study Classification: Core Minimum Data. Parameters: 6 w/6 treated unexposed eyes and 3 w/6 treated exposed must be used.

Toxicity Category: II - WARNING.

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