8-27-73

8/16/73 - Written
8/17/73 - Typed

Environmental Chemistry review for captan (N-[(trichloromethyl) thio] -4- cyclohexene -1,2- dicarboximide Reg. No. 239-533
Chevron Chemical Co.

I. Introduction

1. Proposed use on Taro. Tolerance announced 1/29/73 and submitted by IR - 4.

2. The name of the product is Orthocide 50 Wettable.

II. Direction For Use

1. Taro (Hawaii Only) Apply 100 lbs/A in 500 gal. H_2O to soil surface prior to planting. Till to a depth of 6 inches or apply 100 lbs. with fertilizer as a dry mix and broadcast on the soil before taro is planted and the field is flooded. Apply only 1 preplant application. Do not use if leaves are to be used as food or feed. For use on wetland taro in Hawaii only.

III. Discussion of data and conclusion

1. Captan has been registered

2. No environmental data submitted

3. The use of captan in taro field is an aquatic use.

4. [redacted] Cray fish are grown in taro fields

5. Water from field drains into streams and then into the ocean.

IV. Recommendation

A. Object to registration for the following reasons:

The use of captan in taro fields is considered to be an aquatic use. The following environmental chemistry data are needed to support the proposed used.

1. An anaerobic soil degradation study is needed to determine what happens to captan under water. The type study needed is as follows: Place labeled captan in a soil representative to' area of use. The treated soil is to be under water. Sampling for captan and its degradation products should begin at zero

time, 1 week, 2 and 4 weeks and monthly until only 10% remains. These samples should be compared with aerobic degradation and persistence samples. A material balance is needed.

2. Hydrolysis rate at pH 5, 7 and 9 are needed. See enclosure Note: Enclose pages V-33 of draft guidelines.

3. A photodegradation study is needed for captan in water and on soil. See enclosure
Note: Enclose pages V-40, 41, 42 and 43 of draft guidelines.

4. A fish accumulation study is needed. See enclosure
Note: Enclose pages V-37 and 38 of draft guidelines.

5. It has been brought to our attention that crayfish are grown as a food crop in Taro fields. There should be a restriction on the label such as "do not use in areas were crayfish farming is practiced." A crafish accumulation study will be needed to determine if this caution can be deleted.

6. We wish to point out, that submission of the above data does not mean that it will be accepted for registration by the Environmental Chemistry Section of the Ecological Effect Branch. Adequacy of the data and environmental effects can only be determined after review of the data is made.

Ronald E. Ney, Jr
Environmental Chemistry Review
Ecological Effects Branch

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8/27/73 - Written
8/28/73 - Typed

Addendum To Environmental Chemistry Review For Captan Dated August 16, 1973, Reg. No. 239-533, Chevron Chemical Company.

I. Introduction

1. See evaluation dated August 16, 1973.

2. Henry Craven, has ask the Environmental Chemistry Review Section to request crab accumulation data because crabs are found in adjacent marsh areas and are commercial.

II. Recommendation

A. In addition of the requirements requested in evaluation dated August 16, 1973 the following is needed. This is also an objection.

1. It has been brought to our attention that water from treated Taro fields may be drained into adjacent marsh areas containing crabs which are harvested for commerical use. There should be a caution on the label such as "do not use in areas were water is drained and/or discharged into adjacent marsh areas containing crabs." A crab accumulation study will be needed to determine is this caution can be deleted.

Ronald E. Ney, Jr. 8/27/73
Environmenatl Chemistry Review Section
Ecological Effects Branch

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