109901
SHAUGHNESSEY NO.

22
REVIEW NO.

EEB BRANCH REVIEW

DATE: IN 2/11/82 OUT 4/23/82

FILE OR REG. NO.

PETITION OR EXP. PERMIT NO. 3125-EUP-RTT

DATE OF SUBMISSION 1/29/82

DATE RECEIVED BY HED 2/8/82

RD REQUESTED COMPLETION DATE 5/8/82

EEB ESTIMATED COMPLETION DATE

RD ACTION CODE/TYPE OF REVIEW 750/EUP-old Chemical

TYPE PRODUCT(S): I, D, H, F, N, R, S Fungicide

DATA ACCESSION NO(S).

PRODUCT MANAGER NO. H. Jacoby (21)

PRODUCT NAME(S) BAYLETON 50% WP

COMPANY NAME MoBay Chemical Corporation

SUBMISSION PURPOSE Proposed EUP For Use On Stone Fruits

SHAUGHNESSEY NO.	CHEMICAL, & FORMULATION	% A.I.
109901	1-(4-chlorophenoxy)-3,3-dimethyl-1-(1H-1,2,4 triazol-1-yl)	
	-2-butanone	50%

ENVIRONMENTAL SAFETY REVIEW

100 Pesticide Name

Bayleton® (Triadimefon)

100.1 Pesticide Use

Bayleton 50% WP will be used as a systemic fungicide for control of certain diseases on apricots, nectarines, peaches, and almonds.

100.2 Formulation Information

ACTIVE INGREDIENT:
1-(4-Chlorophenoxy)-3,3-dimethyl-1-(1H-1,2,4-triazol-1-yl)-2-butanone 50%

100.3 Application Methods, Directors, Rates

RECOMMENDED APPLICATIONS

Crop	Disease	Rate of BAYLETON 50% Wettable Powder oz/100 gals. oz/A	Remarks
Apricots Nectarines Peaches	Brown rot Blossom blight	6 to 8 24 to 32[1]/	Make applications at pink bud and full bloom in aerial or ground equipment. Concentrate sprays may be applied provided the amount of BAYLETON 50% WP applied per acre is the same as that which would be applied per acre in a full coverage spray. Additional applications can be made as needed up to day of harvest. Do not apply more than 120 ozs. (7 1/2 lbs) of BAYLETON 50% WP per acre per crop season.
Almonds	Blossom blight		Make applications at pink bud and full bloom in aerial or ground equipment. Concentrate sprays may be applied provided the amount of BAYLETON 50% WP applied per acre is the same as that which would be applied per acre in a full coverage spray. Do not apply more than 64 oz (4 lbs) BAYLETON 50% WP per acre per crop season. The last application can be made up to 111 days before harvest.

1/ Rates of BAYLETON 50% Wettable Powder are based on a standard of 400 gallons of dilute spray per acre, or the equivalent amount of product per acre in a concentrate spray.

101 Physical and Chemical Properties

See previous review by R. Balcomb dated 1/27/82

102 Behavior in Environment

(A summary from previous review by R. Balcomb dated 1/27/82) Triadimefon is stable to hydrolysis but susceptable to photodegradation in water with a half-life of 10-12 hrs.

It is non-persistant in soil with the half-life of 6 days (in aerobic soil in lab study) or 5 days (in field study) and relative low leaching ability. It is also rapidly metabolized and excreted by test animals with little or no tendency of accumulation in tissues.

103 Toxicological Properties

Triadimefon (Bayleton) is practically non-toxic or slightly toxic to most mammal species tested. It is also practically non-toxic to avian species and slightly toxic to fish. It is moderately toxic to aquatic invertebrates under acute exposure conditions, very highly toxic to them during chronic exposures. See earlier EEB review by Balcomb (1/27/82).

104 Hazard Assessment

Bayleton is no more than slightly toxic to mammals and birds. The highest application rate requested under the proposed EUP is 1.0 lbs a.i./A. At this rate, the highest residues that could be expected on typical avian or small mammal foods (insects, small fruits, and seeds) would be 12-58 ppm. Therefore, acute poisoning of terrestrial wildlife seems unlikely.

Bayleton is only slighly toxic to fish. Direct application to 6 inches of water at the maximum proposed rate would result in an initial concentration of only 0.734 ppm, less than 1/10 the LC_{50} for the most sensitive fish. Aquatic invertebrates are somewhat more sensitive (Daphnia magna 48-hr EC_{50}= 1.6 ppm), but because Bayleton is not meant for direct application to water, the concentrations reached in exposed waterways should not cause cases of acute poisoning.

104.3 Endangered Species Considerations

No potential hazard is expected

105 Conclusions

The proposed experimental use pattern should cause no significant increase in exposure or risks to nontarget organisms.

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