

REVIEW SUMMARY

7-25-74

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ECOLOGICAL EFFECTS BR.
REVIEW SUMMARY

(Chemical) - Mariner Aquatic Herbicide System E

Common endothall acid from dihydroxy aluminum salt of
endothall

Chemical 7-oxabicyclo(2.2.1)heptane-2,3-dicarboxylic acid

Company 3 M

Submission TEMP PERMIT PETITION REGISTRATION 1035

Date submitted Date received 7-25-74

This apparently acts as disodium endothall

Type of chemical herbicide

Use non-flowing H₂O in lakes, ponds, stagnant canals +
waterways

Date submitted for review

Environmental safety:

Mammal LD₅₀ _____

Mammal chronic _____

Fish _____

Bird _____

Shrimp, crab, oyster _____

Other _____

Environmental chemistry (70-15)

Fish residue ✓

Other _____

Field observation - no fish killed as direct effect of System E

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Chemical System E (endothall)

Conclusions:

1. appears O.K. for standing H_2O situations; no fish killed in field studies, plankton and benthos recovers in about 45 days
2. if want use in running H_2O situations: probably need LC_{50} on bobwhite (a study was cited but it did not state the type of endothall); acute and chronic studies on crayfish, shrimp and some ~~other~~ benthic + planktonic forms

Recommendations

concur w/ 70-15 comments → (1) use only on specified waters that are under complete control of user (2) 3 day limitation on use of fish extended to 14 (3) 14 day limit for irrigation extended to 28