3-17-77

EEE BRANCH REVIEW

DATE: IN 12/8/76 OUT 3/17/77 IN _____ OUT _____ IN _____ OUT _____

FISH & WILDLIFE ENVIRONMENTAL CHEMISTRY EFFICACY

FILE OR REG. NO. 39496-R

PETITION OR EXP. PERMIT NO. _____

DATE DIV. RECEIVED _____

DATE OF SUBMISSION _____

DATE SUBMISSION ACCEPTED _____

TYPE PRODUCT(S): I, D, H, F, N, R, S Tobacco Sucker Control Agent

PRODUCT MGR. NO. Taylor

PRODUCT NAME(S) ALFOL 810 Alcohol

COMPANY NAME Continental Oil Company

SUBMISSION PURPOSE Registration

CHEMICAL & FORMULATION Fatty Alcohol n-octanol--45.1% N-decanol-54.5%
N-hexanol--0.4%

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100.0 Pesticidal Use:

ALFOL 810 Alcohol is the technical ingredient for formulations used to control Tobacco suckers.

101.0 Chemical and Physical Properties

101.1 Fatty Alcohol (N-octanol-45.1%,N-Decanol-54.5% n-Hexanol-0.4%)

102.0 Behavior in the environment

Environmental chemistry data not available.

103.0 Toxicological properties

103.1 Acute toxicity

103.1.1 Mammal

TEST: Rat

RESULTS: LD_{50}=18,240(14,250-23,340) mg/kg 95% C.L.

CHEMICAL: ALFOL 810 Alcohol

TITLE: Acute Oral Toxicity (LD_{50}) Study in Rats

ACCESSION NO.: 226806

STUDY DATE: 4-29-65

RESEARCHER: Scientific Associates Inc.

SUBMISSION: Continental Oil Company

103.1.2 Bird

TEST: Avian acute oral

SPECIES: Mallard Duck (anas platyrhynchos)

RESULTS: LD_{50} >4,640 mg/kg

CHEMICAL: ALFOL 810 Alcohol (Technical)

TITLE: Acute Oral LD_{50}-Mallard Duck ALFOL 810 Alcohol

ACCESSION NO.: 226198

STUDY DATE: Sept. 17, 1975

RESEARCHER: Robert Fink: Wildlife Research Division
Truslow Farms, Inc.

SUBMISSION: Continental Oil Company

TEST ACCEPTABILITY: This study meets the requirements for an avian acute oral for a species of waterfowl no mortality or abnormalities were noted. The age of the birds in this study were 14 days at initiation. At this time this is acceptable based upon the high LD_{50} reported and high LC_{50} for this chemical.

103.1.3 Fish:

TEST: Static Bioassay

SPECIES: Bluegill (Lepomis macrochirus)

RESULTS: 96 hr. LC_{50}=9.96 ppm (7.68-12.90 ppm) 95% C.L.

CHEMICAL: ALFOL 810 Alcohol (Technical)

TITLE: Acute toxicity of two conoco compounds to bluegill (Lepomis macrochirus) and rainbow trout (salmo gairdneri)

Accession No: 226198

STUDY DATE: Sept. 1975

RESEARCHER: Robert E. Bentley; E.G.&G. Bionomics, Aquatic Toxicology Laboratory

SUBMISSION: Continental Oil Company

TEST ACCEPTABILITY: This study meets the requirements for a 96 hr. static LC_{50} for a warm water species of fish. The no discernible effect level was 5.60 ppm.

TEST: Static Bioassay

SPECIES: Rainbow Trout (Salmo gairdneri)

RESULTS: 96 hr. LC_{50} >6.50 <10.00 ppm

CHEMICAL: ALFOL 810 Alcohol (Technical)

TITLE: Acute toxicity of two conoco compounds to Bluegill (Leomis macrochirus) and Rainbow Trout (Salmo gairdneri).

ACCESSION NO.: 226198

STUDY DATE: Robert E. Bentley; E.G.&G. Bionomics, Aquatic Toxicology Lab.

SUBMISSION: Continental Oil Co.

TEST ACCEPTABILITY: This study meets the requirements for a 96 hr. static LC_{50} for a cold water species of fish. The no discernible effect level was 2.8 ppm.

103.1.4 Aquatic Invertebrate

TEST: Static Bioassay

SPECIES: Daphnia (Daphnia magna)

RESULTS: 48 hr. LC_{50}=8.24 (5.52 - 12.3) ppm 95% C.L.

CHEMICAL: ALFOL 810 Alcohol (Technical)

TITLE: Acute Toxicity of ALFOL 810 and ALFOL 10 Alcohols to Daphnia magna.

ACCESSION NO.: 226806

STUDY DATE: Sept. 1976

RESEARCHER: E.G.&G. Bionomics

SUBMISSION: Continental Oil Company

TEST ACCEPTABILITY: This study meets the requirements for a 48 hr. static LC_{50} for an aquatic invertebrate no discernible effect level = 1.8 ppm.

103.2 Subacute Toxicity

103.2.1 Bird

TEST: Avian 8 day dietary

SPECIES: Mallard Duck (Anas platyrhynchos)

RESULTS: LC_{50} >10,000 ppm

CHEMICAL: ALFOL 810 Alcohol (Technical)

TITLE: Eight-day dietary LC_{50} - Mallard Duck ALFOL 810 alcohol

ACCESSION NO.: 226198

STUDY DATE: September 17, 1975

RESEARCHER: Robert Fink; Wildlife Research Division, Truslow Farm Inc.

SUBMISSION: Continental Oil Company

TEST ACCEPTABILITY: This study meets the requirements for an avian 8 day dietary LC_{50} for a species of waterfowl.

TEST: Avian 8 day dietary

SPECIES: Bobwhite quail (Colinus virginianus)

RESULTS: $=LC_{50}$ >10,000 ppm

CHEMICAL: ALFOL 810 Alcohol (Technical)

TITLE: Eight-Day dietary LC_{50} Bobwhite quail ALFOL 810 Alcohol

ACCESSION NO.: 226198

STUDY DATE: September 17, 1975

RESEARCHER: Robert Fink, Wildlife Research Division
Truslow Farms Inc.

SUBMISSION: Continental Oil Company

TEST ACCEPTABILITY: This study meets the requirements for an avian 8 day dietary LC_{50} for a species of upland game bird.

104.0 Hazard Assessment:

104.1 Discussion

ALFOL 810 Alcohol is a fatty Alcohol which has minimal acute or subacute toxicity and hazard to wildlife species. This chemical will be used in manufacturing formulations to control tobacco suckers, and these crops are not utilized to any degree by wildlife. Environmental chemistry data was not supplied so any further evolution of hazard from chronic problem in the environment is not possible.

104.1.2 Adequacy of Toxicity Data:

The data supplied are adequate

104.1.3 Additional data required

No additional data is required to support registration of this product for manufacturing use.

104.1.4 Likelihood of exposure to non-target organisms. As this registration is for manufacturing use environmental hazard to non-target organisms is not expected to occur.

104.2 Classification:

ALFOL 810 Alcohol has been given a general use classification for manufacturing. Calculations were not done due to lack of application rates.

105.0 Conclusions:

The Environmental Safety Staff concurs with this registration for manufacturing use and further recommends a general use classification.

Before the registration is granted the precautionary labeling will need to be amended to correct the environmental portion. The following statements must be added to the label "Keep out of lakes, ponds or streams. Do not contaminate water by cleaning of equipment or disposal of wastes."

Thomas F O'Brien NCook

Thomas F. O'Brien 3/17/77
Fish and Wildlife Section
EEEB - RD WH567

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