

US EPA ARCHIVE DOCUMENT

079038  
1-DECANOL  
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. 30496-E  
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) Aifol 10 Alcohol  
COMPANY NAME Continental Oil Company  
SUBMISSION PURPOSE Registration  
CHEMICAL & FORMULATION Fatty Alcohol (n-decanol -- 99.3%)  
n-octanol + n-dodecanol -- 0.7%

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100.0 Pesticidal Use

ALFOL 10 Alcohol is the technical ingredient for formulations used to control tobacco suckers.

101.0 Chemical and Physical Properties

101.1 Fatty Alcohol (n-decanol --- 99.3% n-octanol + n-dodecanol -- 0.7%)

102.0 Behavior in the Environment: Environmental Chemistry data not available

103.0 Toxicological properties

103.1 Acute Toxicity

103.1.1 Mammal

TEST: Acute Oral

SPECIES: Rat

RESULTS: LD<sub>50</sub> >26,410 mg/kg

CHEMICAL: ALFOL 10 Alcohol

TITLE: Acute oral toxicity (LD<sub>50</sub>) study in rats

ACCESSION NO.: 226806

STUDY DATE: 4/29/68

RESEARCHER: Scientific Associates, Inc.

SUBMISSION: Continental Oil Company

103.1.2 Bird

TEST: Avian Acute Oral

SPECIES: Mallard (Anas platyrhynchos)

RESULTS: LD<sub>50</sub> >4,640 mg/kg

CHEMICAL: ALFOL 10 Alcohol (Technical)

TITLE: Acute Oral LD<sub>50</sub> - Mallard Duck ALFOL 10 Alcohol

ACCESSION NO.: 226181

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 acute oral for a species of waterfowl. No mortality or abnormalities were noted. The age of the birds of initiation of the study was 14 days. This is acceptable at this time based upon the high LD<sub>50</sub> reported and high LC<sub>50</sub> for this chemical.

103.1.3 Fish

TEST: Static Bioassay

SPECIES: Bluegill (Lepomis macrochirus)

RESULTS: 96 hr. LC<sub>50</sub> = 5.05 (4.12-6.20) ppm 95% C.L.

CHEMICAL: ALFOL 10 Alcohol (Technical)

TITLE: Acute Toxicity of two conoco compounds to Bluegill (Lepomis macrochirus) and Rainbow Trout (Salmo gairdneri)

ACCESSION NO.: 226181

STUDY DATE: September, 1975

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

SUBMISSION: Continental Oil Company

TEST ACCEPTABILITY: This study meets the requirements for a 96 hr. static LC<sub>50</sub> for a warm water species of fish. No discernible effect level was 3.20 ppm.

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TEST: Static Bioassay

SPECIES: Rainbow Trout (Salmo gairdneri)

RESULTS: 96 hr. LC<sub>50</sub> >4.20 <5.60

CHEMICAL: ALFOL 10 Alcohol (Technical)

TITLE: See above

ACCESSION NO.: 226181

STUDY DATE: September 1975

RESEARCHER: See above

SUBMISSION: Continental Oil Company

TEST ACCEPTABILITY: This study meets the requirements for a 96 hr. static LC<sub>50</sub> for a cold water species of fish. No discernible effect level was 2.40 ppm.

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103.4 Aquatic Invertebrate:

TEST: Static Bioassay

SPECIES: Daphnia (Daphnia magna)

RESULTS: ALFOL 10 Alcohol (Technical)  
48 hr LC50 = 6.51 (4.78 - 8.87) ppm 95% C.L.

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

ACCESSION NO.: 226806

STUDY DATE: September 1976

RESEARCHER: E.G.&G. Bionomics

SUBMISSION: Continental Oil Company

TEST ACCEPTABILITY: This study meets the requirements for an acute 48 hr. bioassay for an aquatic invertebrate.

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103.2 Subacute Toxicity

103.2.1 Bird

TEST: Avian 8 day dietary

SPECIES: Mallard Duck (Anas platyrhynchos)

RESULTS: LC<sub>50</sub> >10,000 ppm

CHEMICAL: ALFOL 10 Alcohol (Technical)

TITLE: Eight-day dietary LC<sub>50</sub> - Mallard Duck, ALFOL 10 Alcohol

ACCESSION NO: 226181

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<sub>50</sub> for a species of waterfowl.

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TEST: Avian 8 day dietary

SPECIES: Bobwhite Quail (Colinus virginianus)

RESULTS: LC<sub>50</sub> >10,000 ppm

CHEMICAL: ALFOL 10 Alcohol (Technical)

TITLE: See above

ACCESSION NO.: 226181

STUDY DATE: September 17, 1975

RESEARCHER: Continental Oil Company

TEST ACCEPTABILITY: This study meets the requirements for an avian 8 day dietary LC<sub>50</sub> for a species of upland game bird. At the 10,000 ppm level there was 20% mortality plus reduced body weight gain, wing droop and depression.

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104.0 Hazard Assessment

104.1.1 Discussion

ALFOL 10 Alcohol is a fatty alcohol which has minimal acute or chronic 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 evaluation of hazard from chronic problems 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 10 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 label 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."

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Fish and Wildlife Section  
EEEB-RD WMS67

3/17/77