

MATERIAL SAFETY DATA SHEET

In Case of Emergency, Call

Novartis Crop Protection, Inc Post Office Box 18300 Greensboro, NC 27419 Novartis : 1-800-888-8372 CHEMTREC : 1-800-424-9300

1. CHEMICAL IDENTIFICATION

Product Name: AWARD Product No.: A-8869 A

EPA Signal Word: Caution

Active Ingredient(%): Fenoxycarb (1%) CAS No.: 72490-01-8

Chemical Name: Ethyl(2-[4-phenoxyphenoxy]ethyl)carbamate

Chemical Class: Carbamate (non-cholinesterase inhibiting) Insecticide

2. COMPOSITION/INFORMATION ON INGREDIENTS

Material	OSHA PEL	ACGIH TLV	Other	NTP/IARC/OSHA Carcinogen
Stablizer	Not Established	Not Established	10 mg/m3 (Oil Mist)*	No
Fenoxycarb (1%)	Not Established	Not Established	Not Established	No

^{*} recommended by manufacturer

3. HAZARDS IDENTIFICATION

Notes to Physician

There is no specific antidote if this product is ingested.

If a large amount has been ingested and emesis is inadequate, lavage stomach.

The active ingredient of this product has a high affinity for activated charcoal. Five mg/kg activated charcoal suspension (50g/400ml water) can be given to absorb the remaining toxicant.

This product is a carbamate-type (non-cholinesterase inhibiting) insecticide.

Treat symptomatically.

Symptoms of Acute Exposure

Exposure may cause slight eye irritation.

Hazardous Decomposition Products

None Known

Physical Properties

Appearance: Yellow Granular Solid

Odor: Not Available

Unusual Fire, Explosion and Reactivity Hazards

None Known

4. FIRST AID MEASURES

If poisoning is suspected, immediately contact a physician, the nearest hospital, or the nearest Poison Control Center. Tell the person contacted the complete product name, and the type and amount of exposure. Describe any symptoms and follow the

advice given.

Ingestion: If victim is fully conscious, give a large quantity of water to drink and induce vomiting. Never give anything

by mouth to an unconscious person.

Eve Contact: Immediately rinse eyes with a large amount of running water. Hold eye lids apart to rinse the entire surface

of the eyes and lids. Do not apply any medicating agents except on the advice of a physician.

Skin Contact: Wash with plenty of soap and water, including hair and under fingernails. Do not apply any medicating

agents except on the advice of a physician. Remove contaminated clothing and decontaminate prior to use.

Inhalation: Move victim from contaminated area to fresh air. Apply artificial respiration if necessary.

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Treat symptomatically.

Medical Condition Likely to be Aggravated by Exposure

None Known

5. FIRE FIGHTING MEASURES

Fire and Explosion

Flash Point (Test Method): Not Applicable

Flammable Limits (% in Air): Lower: %; Upper: % Not Applicable

Autoignition Temperature: Not Available

Flammability: Not Flammable (DOT 49CFR 173.124)

Unusual Fire, Explosion and Reactivity Hazards

None Known

In Case of Fire

Use dry chemical, foam, or CO2 extinguishing media. Wear full protective clothing and self-contained breathing apparatus. Evacuate nonessential personnel from the area to prevent human exposure to fire, smoke, fumes or products of combustion. Prevent use of contaminated buildings, area, and equipment until decontaminated.

6. ACCIDENTAL RELEASE MEASURES

In Case of Spill or Leak

Wear chemical safety glasses with side shields or chemical goggles, rubber gloves, rubber boots, long-sleeved shirt, long pants, head covering, and use a particulate filter, NIOSH approved per 42 CFR Part 84. Select N or R or P type as appropriate for the oil characteristics of any other air contaminants present. Filter efficiency may range from 95 - 99.97% as appropriate for the size distribution of dusts present. For small spills, sweep up, keeping dust to a minimum, and place in an approved chemical container. Wash the spill area with water containing a strong detergent, absorb with pet litter or other absorbent material, sweep up and place in a chemical container. Seal the container and handle in an approved manner. Flush the area with water to remove any residue. Do not allow wash water to contaminate water supplies.

7. HANDLING AND STORAGE

Store the material in a well-ventilated, secure area out of the reach of children and domestic animals. Do not store food, beverages or tobacco products in the storage area. Prevent eating, drinking, tobacco usage, and cosmetic application in areas where there is a potential for exposure to the material. Always wash thoroughly after handling.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

RECOMMENDATIONS FOR MANUFACTURING, COMMERCIAL BLENDING, AND PACKAGING WORKERS.

Ingestion: Prevent eating, drinking, tobacco usage and cosmetic application in areas where there is a potential for

exposure to the material. Always wash thoroughly after handling.

Eye Contact: To avoid eye contact, wear safety glasses with side shields or chemical goggles.

Skin Contact: To avoid skin contact, wear rubber gloves, rubber boots, long-sleeved shirt, long pants and a head covering.

Inhalation: To avoid breathing dust, use a particulate filter, NIOSH approved per 42 CFR Part 84. Select N or R or P

type as appropriate for the oil characteristics of any other air contaminants present. Filter efficiency may

range from 95 - 99.97% as appropriate for the size distribution of dusts present.

Applicators/Handlers: Please refer to the product label for personal protective clothing/equipment.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Yellow Granular Solid

Odor: Not Available
Melting Point: Not Available
Boiling Point: Not Applicable
Specific Gravity/Density: 20.00 lbs./cu.ft.
pH: Not Available

Solubility in H2O

Fenoxycarb : 5.7 mg/L @ 25°C

Vapor Pressure

Fenoxycarb : 7.80E-03 mPa @ 20°C

10. STABILITY AND REACTIVITY

Reactivity

Stability: Stable

Hazardous Polymerization: Will Not Occur Conditions to Avoid: None Known

Hazardous Decomposition Products

None Known

11. TOXICOLOGICAL INFORMATION

Acute Toxicity/Irritation Studies

Ingestion: practically non-toxic

Oral LD50 (Rat) : > 5,000 mg/kg body weight

Dermal: <u>slightly toxic</u>

Dermal LD50 (Rabbit) : > 2,000 mg/kg body weight

Inhalation: <u>slightly toxic</u>

Inhalation LC50 (Rat) : > 3.48 mg/l air - 4 hours

Eye Contact: slightly irritating (Rabbit)
Skin Contact: non-irritating (Rabbit)
Skin Sensitization: Not a sensitizer (Guinea Pig)

Mutagenic Potential

Fenoxycarb: None observed

Reproductive Hazard Potential

Fenoxycarb: None observed

Chronic/Subchronic Toxicity Studies

Fenoxycarb: Liver effects at high doses (rats, mice and dogs)

Carcinogenic Potential

Fenoxycarb: None observed (rats); liver and lung tumors at high doses (mice)

Other Toxicity Informatio

Not Available

Toxicity of Other Components

Stablizer

Excessive inhalation of oil mist may affect the respiratory system. Sensitive individuals may experience dermatitis after long exposure of oil on skin.

Target Organs

Active Ingredients

Fenoxycarb : Lung and Liver

Inert Ingredients

Stablizer : Not Available

12. ECOLOGICAL INFORMATION

Summary of Effects

Fenoxycarb:

Toxic to fish and invertebrates; however, rapid degradation mitigates effects.

Eco-Acute Toxicity

Fenoxycarb: Rainbow Trout 96-hour LC50 0.66 ppm

Bluegill Sunfish 96-hour LC50 0.74 ppm Daphnia magna 48-hour LC50 0.6 ppm Bobwhite Oral LD50 >7,000 mg/kg Mallard Oral LD50 >3,000 mg/kg

Bobwhite 8-day Dietary LC50 >5,620 ppm Mallard 8-day Dietary LC50 >20,000 ppm

Eco-Chronic Toxicity

Fenoxycarb: Invertebrate (Daphnia Magna) Life Cycle MATC 1.6 ppt (trillion)

Mallard Reproduction NOEC 48.0 ppb Bobwhite Reproduction NOEC 160 ppm

Fish (Fathead minnow) Early Life Stage NOEL 400 ppm

Environmental Fate

Fenoxycarb:

Not Available

13. DISPOSAL CONSIDERATION

Disposal

Do not reuse product containers. Dispose of product containers, waste containers, and residues according to local, state, and federal health and environmental regulations.

Characteristic Waste Not Applicable
Listed Waste: Not Applicable

14. TRANSPORT INFORMATION

DOT Classification:

Not Applicable; No Label or Placard Required

B/L Freight Classification

Insecticides or Fungicides; Agricultural, N.O.S.

International Transportation

Not Applicable

15. REGULATORY INFORMATION

SARA Title III Classification

Section 311/312: Acute Health Hazard

Chronic Health Hazard

Section 313 chemical(s): Fenoxycarb (1%) (CAS No. 72490-01-8)

Proposition 65

Not Applicable

CERCLA Reportable Quantity (RQ)

None

RCRA Classification

Not Applicable

TSCA Status

Exempt from TSCA

16. OTHER INFORMATION

NFPA Hazard Ratings

Health: 1 Flammability: 0 Reactivity: 0 0 Least

1 Slight

2 Moderate3 High

4 Severe

Questions concerning the safe handling of the product should be referred to:

Industrial Health 1-800-334-9481

Issued Date: 6/28/91

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The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein.

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