

Material Safety Data Sheet



Transportation (24hrs) INFOTRAC: 800-535-5053
CHEMTREC: 800-424-9300
General Phone: 317-580-8282

EPA Reg. Number: 5481-476-67690

May 21, 2004

Ornazin[®] 3% EC Botanical Insecticide

SePRO Corporation: Carmel, IN

1. PRODUCT & COMPANY IDENTIFICATION

Product: Ornazin 3% EC Botanical Insecticide

Company Identification:

SePRO Corporation
11550 North Meridian Street, Suite 600
Carmel, IN 46032-4565
www.sepro.com

2. COMPOSITION/INFORMATION ON INGREDIENTS

Azadirachtin-----CAS# 11141-17-6-----3.0%
Inert Ingredients -----97.0%

This document is prepared pursuant to the OSHA Hazard Communication Standard (29 CFR 1910.1200). In addition, other substances not 'Hazardous' per this OSHA Standard may be listed. Where proprietary ingredient shows, the identity may be made available as provided in this standard.

3. HAZARDS IDENTIFICATION

WARNING!! Keep out of reach of children.
May cause eye irritation. May cause skin irritation.
May cause skin sensitization. May cause central nervous system depression (CNS). Contains a combustible liquid.

POTENTIAL HEALTH EFFECTS

ROUTE(S) OF ENTRY: Potential routes of entry include skin and eye contact, ingestion, and inhalation of mists.

SIGNS OF ACUTE OVEREXPOSURE: May cause skin and eye irritation. May cause skin sensitization.

SIGNS OF CHRONIC OVEREXPOSURE: None known.

CARCINOGENICITY: None of the components of this product are known to be carcinogenic.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: None known.

4. FIRST AID

EYE CONTACT: Immediately flush the eyes with copious amount of clear, cool running water for minimum of 15 minutes. Hold the eyelids apart during the flushing to ensure rinsing of the entire surface of the eyes and lids with water. Contact a physician immediately. If there will be a delay in

getting medical attention, rinse the eyes for at least another 15 minutes.

SKIN CONTACT: Immediately flush all affected areas with larger amounts of clear water for at least 15 minutes. Remove contaminated clothing. Do not attempt to neutralize with chemical agents. Wash clothing before reuse. If skin irritation develops, contact a physician immediately.

INGESTION: Immediately dilute the swallowed product by giving large quantities of water, but do not induce vomiting. If vomiting occurs, give fluids again. Have a physician determine if condition of patient will permit induction of vomiting or evacuation of stomach. Never give anything by mouth to an unconscious person. Contact a physician immediately.

INHALATION: Remove victim to fresh air. If breathing has ceased, clear the victim's airway and start mouth-to-mouth artificial respiration. If breathing is difficult, give oxygen. Contact a physician immediately. Be sure the contact areas are clean to prevent contamination of the rescuer.

NOTES TO PHYSICIAN: Treat symptomatically. Contact your local POISON CONTROL Center for more information.

5. FIRE FIGHTING MEASURES

FIRE EXTINGUISHING MEDIA: Foam, carbon dioxide, dry chemical, water fog, water spray.

FIRE CONTROL TACTICS: Do not breathe fumes. Wear complete fire fighting gear, including protective gloves, eye protection, and self-contained breathing apparatus. Wash clothes before reuse.

EXPLOSIVITY:

Mechanical Impact: Will not occur
Static Discharge: Will not occur

HAZARDOUS COMBUSTION PRODUCTS:

Incomplete combustion of this product may result in fumes and vapors of unknown composition. Stay upwind in case of fire.

6. ACCIDENTAL RELEASE MEASURES

GENERAL: Use adequate ventilation, as well as impervious clothing and safety goggles. Keep bystanders upwind and away from the spill. If the spill is in an enclosed area it may be necessary to wear a self-contained respirator.

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SMALL SPILL: Cover with absorbent (clay, sawdust, straw, kitty litter, etc.), to absorb the liquid. Sweep into an open drum. Clean the area with common powdered household detergent and a stiff brush and just enough water to make a slurry. Absorb and sweep into the same open drum. Rinse with water, absorb, and add to a waste drum. Close the drum and dispose of properly.

LARGE SPILL: Dike the spill to prevent contamination of local water sources. Siphon the majority of the liquid into drums for use or disposal, depending on the circumstances. Clean the area as described for a small spill.

7. HANDLING AND STORAGE

HANDLING: Wear recommended personal protective equipment (PPE) (See Section 8). Avoid breathing fumes or spray. Avoid contact with skin, eyes, or clothing. Wash PPE after each day of use and before reuse. Wash hands and face thoroughly after use.

STORAGE: Store product in original container in a secure, dry and temperate area. Do not freeze. Do not use, pour, spill or store product near heat or open flame. Keep container closed when not in use. Do not store near food, feed, fertilizers, or seeds. Do not use or store around the home. Avoid contact with water. Keep away from children and pets.

8. EXPOSURE CONTROL/PERSONAL PROTECTION

ENGINEERING CONTROLS: Provide fresh air or general ventilation during formulation, mixing, application and after application.

RESPIRATORY PROTECTION: A properly FIT-TESTED NIOSH/MSHA approved respirator fitted with organic vapor cartridges may be required when working with this product. Specific use regulations are listed on the label.

SKIN PROTECTION: Long-sleeved shirt and long pants, chemical resistant gloves, and shoes plus socks are required when working with this product. If there is a possibility of splashing or spillage, a chemical resistant apron or chemical resistant coverall should also be worn.

EYE PROTECTION: Safety glasses must be worn when working with any chemical. If there is a

possibility of splashing or spillage, safety goggles or faceshield should also be worn.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR: Clear brown liquid with a slightly pungent odor

ODOR THRESHOLD: Not Determined

BOILING POINT: approx. 178°C (334°F)

FREEZING/MELTING POINT: Not determined

VAPOR PRESSURE (mm Hg): 0.20

VAPOR DENSITY: Not available

PERCENT VOLATIVE BY VOLUME: Not determined

SPECIFIC GRAVITY: 1.08

DENSITY: 9.01 lb/gal

EVAPORATION RATE: 0.03 (relative to n-butyl acetate = 1.00)

SOLUBILITY (water): Emulsifies

SOLUBILITY (other): Soluble in alcohols and low molecular weight ketones.

pH: 4.2-4.4 as 5% solution

PARTITION COEFFICIENT (OW): Not available

10. STABILITY AND REACTIVITY

NFPA HAZARD RATING:

0		Flammability
/ \		/ \
2	3	Health Reactivity
\ /		\ /
0		Special

0-Least, 1-Slight, 2-Moderate, 3-High, 4-Severe

FLAMMABLE PROPERTIES:

Flash Point (TCC): 165°F (74°C)

Autoignition Temperature: 540°F (282°C)

Flammable Limits:

Lower Flammable Limit: 1.5%

Upper Flammable Limit: 9.7%

CHEMICAL STABILITY (Conditions to avoid): This product is under normal storage and use conditions.

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Avoid high temperatures and direct sunlight during storage.

INCOMPATIBILITY WITH OTHER MATERIALS:
Strong oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS:
None known from normal decomposition. Partial combustion may result in carbon monoxide and carbon dioxide, as well as unknown compounds.

HAZARDOUS POLYMERIZATION: This product will not polymerize

11. TOXICOLOGICAL INFORMATION

Oral LD₅₀ (rat): >5050 mg/kg
Skin LD₅₀ (rat): >5050mg/kg
Inhalation LC₅₀ (rat): >2.6mg/L
Eye irritation: Moderate irritant (Toxicity Category II)
Skin irritation: Slight irritant (Toxicity Category IV)
Skin sensitization (Guinea pig): Sensitizer (Buehler Method). May cause sensitization by skin contact.

Teratogenicity: No evidence is available to indicate this product will be teratogenic.

Mutagenicity: No evidence is available to indicate this product will be mutagenic.

Carcinogenicity: None of the components of this product have been found to be carcinogenic.

Reproductivity Toxicity: May cause reproductive toxicity based on animal data for one of the inert ingredients.

Toxicology synergistic products: No information is available.

12. ENVIRONMENTAL INFORMATION

Not expected to cause ecological problems.
Uncontrolled releases of this product should be avoided.

13. DISPOSAL CONSIDERATIONS

All recovered product should be packaged, labeled, transported, and disposed or reclaimed in conformance with applicable laws and regulations and in conformance with good engineering practices. Avoid landfilling liquids. Reclaim where possible. Contact Federal, State, and local agencies for further information on disposal.

14. TRANSPORTATION INFORMATION

DOT Class: Not Regulated
UN Number: Not Regulated

IMDG Class (sea): Not Regulated
IATA Class (air): Not Regulated
Marine Pollutant: No
Packing Group: Not Regulated
Hazard label(s): Not Regulated
ADR Class (road): Not Regulated
Proper shipping name(s): Not Regulated
Reportable Quantity: No
Packaging Size: Quart

15. REGULATORY INFORMATION

NOTICE: The information herein is presented in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ from one location to another; it is the buyer's responsibility to ensure that its activities comply with federal, state or provincial, and local laws. The following specific information is made for the purpose of complying with numerous federal, state or provincial, and local laws and regulations.

U.S. FEDERAL REGULATIONS: This product is registered under EPA/FIFRA Regulations. It is a violation of Federal Law to use this product in any manner inconsistent with its labeling. Read and follow all label directions. This product is excluded from listing requirements under EPA/TSCA.

CANADIAN REGULATIONS: This product is not registered in Canada.

EUROPEAN UNION REGULATIONS: This product is not registered in the European Union.

SARA TITLE III DATA:

Section 311 & 312 Hazard Categories:

Immediate Health Hazard: Yes

Delayed Health Hazard: Yes

Fire Hazard: Yes

Reactive Hazard: No

Sudden Pressure Release Hazard: No

Section 302 Extremely Hazardous Substance: None

Section 313 Toxic Chemicals: None

CERCLA/EPCRA REPORTABLE QUANTITIES (RQ): None

STATE REGULATIONS:

CALIFORNIA (Proposition 65): None

OTHERS: None

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16. OTHER INFORMATION

USES AND RESTRICTIONS:

Bio-pesticide

MSDS STATUS--NEW

SOURCE: AMVAC 280_3

EDITION NO.: 01

FIRST ISSUE: 15-NOV-01

REVISED: 05/21/04

ABBREVIATIONS:

- ACGIH** - American Conference of Governmental Industrial Hygienists
- ADR** - European Agreement Concerning the International Carriage of Dangerous Goods by Road
- CERCLA** - Comprehensive Environmental Response, Compensation, and Liability Act
- DOT** - Department of Transportation
- EPA** - Environmental Protection Agency
- EPCRA** - Emergency Planning and Community Right-to-Know Act
- FIFRA** - Federal Insecticide, Fungicide, and Rodenticide Act
- IARC** - International Agency for Research on Cancer
- IATA** - International Maritime Dangerous Goods
- IMDG** - International Maritime Dangerous Goods
- NTP** - National Toxicology Program
- SARA** - Superfund Amendments and Reauthorization Act
- TSCA** - Toxic Substances Control Act

The Information Herein Is Given In Good Faith, But No Warranty, Express Or Implied, Is Made. Consult SePRO Corporation For Further Information.