



Conforms to HazCom 2012/United States

SDS

Ornazin® 3% EC

SAFETY DATA SHEET



Ornazin® 3% EC

Botanical Insecticide

Section 1. Identification

Product name : Ornazin® 3% EC Botanical Insecticide
Other means of identification : EPA Registration Number 5481-476-67690
Recommend Use: : Botanical Insecticide, Repellant, Insect Growth Regulator and Nematicide
Recommended Restrictions : Keep out of the Reach of Children

Supplier's details : SePRO Corporation
11550 North Meridian Street
Suite 600
Carmel, IN 46032 U.S.A.
Tel: 317-580-8282
Toll free: 1-800-419-7779
Fax: 317-580-8290
Monday - Friday, 8am to 5pm [E.S.T.](http://www.sepro.com)
www.sepro.com

Emergency telephone : INFOTRAC - 24-hour service 1-800-535-5053

The following recommendations for exposure controls and personal protection are intended for the manufacture, formulation and packaging of this product. For applications and/or use, consult the product label. The label directions supersede the text of this Safety Data Sheet for application and/or use.

Section 2. Hazards identification

| | | |
|------------------------------|--|---------------------------|
| Physical hazards | Flammable liquids | Category 4 |
| Health hazards | Serious eye damage/eye irritation Reproductive toxicity | Category 2A Category 2 |
| Environmental hazards | Not classified. | |
| OSHA defined hazards | Not classified. | |

Label elements



Signal word : Warning



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Hazard statement

Combustible liquid.
Causes serious eye irritation.
Suspected of damaging fertility or the unborn child.

Precautionary statement

Prevention

Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Wash thoroughly after handling.
Wear protective gloves/protective clothing/eye protection/face protection.
Use personal protective equipment as required.

Response

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If exposed or concerned: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. In case of fire: Use appropriate media to extinguish.

Storage

Store in a well-ventilated place. Keep cool. Store locked up.

Disposal

Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise classified (HNOC)

None known.

Supplemental information

This is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemicals. The hazard information required on the pesticide label is reproduced below. The pesticide label also includes other important information, including directions for use.

WARNING: Causes substantial but temporary eye injury. Do not get in eyes or on clothing. Wear long-sleeved shirt, long pants, shoes and socks. Wear goggles, face shield or safety glasses. Wash thoroughly with soap and water after handling. Remove and launder contaminated clothing before reuse.

ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish and aquatic invertebrates. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not apply when weather conditions favor drift from the treated area. Do not contaminate water when disposing of equipment washwaters.

Section 3. Composition/information on ingredients

Mixtures

| Chemical Name | Common Name and Synonyms | CAS Number | % |
|------------------------|--------------------------|------------|------|
| Azadirachtin Technical | | 11141-17-6 | 3.0% |

Additional Components

| Chemical Name | Common Name and Synonyms | CAS Number | % |
|-------------------|--------------------------|------------|----|
| Inert Ingredients | | N/A | 97 |

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

Section 4. First aid measures

| | |
|---|---|
| Inhalation | Move to fresh air. Oxygen or artificial respiration if needed. Call a physician if symptoms develop or persist. |
| Skin contact | Wash off with soap and water. Get medical attention if irritation develops and persists. |
| Eye contact | Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists. |
| Ingestion | Rinse mouth. Get medical attention if symptoms occur. |
| Most important symptoms/effects, acute and delayed | Irritation of eyes. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. |
| Indication of immediate medical attention and special treatment needed | Provide general supportive measures and treat symptomatically. Keep victim warm. Keep victim under observation. Symptoms may be delayed. |
| General information | If exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). Show this safety data sheet to the doctor in attendance. |

Section 5. Fire-fighting measures

| | |
|--|--|
| Suitable extinguishing media | Water fog. Foam. Dry chemical powder. Carbon dioxide (CO ₂). |
| Unsuitable extinguishing media | Do not use water jet as an extinguisher, as this will spread the fire. |
| Specific hazards arising from the chemical | The product is combustible, and heating may generate vapors which may form explosive vapor/air mixtures. During fire, gases hazardous to health may be formed. |
| Special protective equipment and precautions for firefighters | Self-contained breathing apparatus and full protective clothing must be worn in case of fire. |
| Fire fighting equipment/instructions | In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk. |
| Specific methods | Use standard firefighting procedures and consider the hazards of other involved materials. |
| General fire hazards | Combustible liquid. |

Section 7. Handling and storage

Personal precautions, protective equipment and emergency procedures

Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Avoid inhalation of vapors and spray mists. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up

Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water.

Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

Environmental precautions Avoid discharge into drains, water courses or onto the ground.

Section 8. Exposure controls/personal protection

Occupational exposure limits

US. Workplace Environmental Exposure Level (WEEL) Guides Components Type Value

| Components | Type | Value |
|--------------|------|--------------------------------|
| Trade Secret | TWA | 2 mg/m ³ 0.5 ppm |

Biological limit values No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls

Ensure adequate ventilation, especially in confined areas. Provide eyewash station.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Skin protection

Hand protection Wear protective gloves.
Other Wear suitable protective clothing.

Respiratory protection

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.

**Thermal hazards**

Not applicable.

General hygiene considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

Section 9. Physical and chemical properties

Appearance

| | |
|-----------------------|-------------|
| Physical State | Liquid |
| Form | Liquid |
| Odor | Clear brown |

| | |
|-------------|-----------------------|
| Odor | Slightly pungent odor |
|-------------|-----------------------|

| | |
|-----------------------|---------------|
| Odor threshold | Not available |
|-----------------------|---------------|

| | |
|-----------|-------------------------|
| pH | 4.2 - 4.4 (5% solution) |
|-----------|-------------------------|

| | |
|-------------------------------------|----------------------------|
| Melting point/freezing point | -112 °F (-80 °C) estimated |
|-------------------------------------|----------------------------|

| | |
|------------------------------|---------------------------|
| Initial boiling point | 352 °F (178 °C) estimated |
|------------------------------|---------------------------|

| | |
|--------------------|--------------------------|
| Flash point | 167 °F (75 °C) estimated |
|--------------------|--------------------------|

| | |
|-------------------------|-----------------------------|
| Evaporation rate | 0.03 (butyl acetate = 1.00) |
|-------------------------|-----------------------------|

| | |
|----------------------------------|-----------------|
| Flammability (solid, gas) | Not applicable. |
|----------------------------------|-----------------|

Upper/lower flammability or explosive limits

| | |
|---|-----------------------|
| Flammability limit lower/upper (%) | 1.5 / 9.7 % estimated |
|---|-----------------------|

| | |
|------------------------|----------------|
| Explosive limit | Not available. |
|------------------------|----------------|

| | |
|-----------------------|------------------------|
| Vapor pressure | 8.32E-01 hPa estimated |
|-----------------------|------------------------|

| | |
|----------------------|----------------|
| Vapor density | Not available. |
|----------------------|----------------|

| | |
|-------------------------|----------------|
| Relative density | Not available. |
|-------------------------|----------------|

Solubility(ies)

| | |
|---------------------------|------------|
| Solubility (water) | Emulsifies |
|---------------------------|------------|

| | |
|----------------------------------|---------------------------|
| Auto-ignition temperature | 540 °F (282 °C) estimated |
|----------------------------------|---------------------------|

| | |
|----------------------------------|----------------|
| Decomposition temperature | Not available. |
|----------------------------------|----------------|

| | |
|------------------|----------------|
| Viscosity | Not available. |
|------------------|----------------|

Other information

| | |
|---------------------|-------------|
| Bulk density | 9.01 lb/gal |
|---------------------|-------------|

**SDS****Ornazin® 3% EC**

Density 1.08 g/cm³
Flammability class Combustible IIIA estimated
Specific gravity 1.052 estimated

Section 10. Stability and reactivity

Reactivity The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability Material is stable under normal conditions.

Possibility of hazardous reactions No dangerous reaction known under conditions of normal use.

Conditions to avoid Avoid temperatures exceeding the flash point. Contact with incompatible materials.

Incompatible materials Strong oxidizing agents.

Hazardous decomposition products Emits hazardous fumes and smoke of unknown composition when heated to decomposition or burned.

Section 11. Toxicological information**Information on likely routes of exposure**

Inhalation Harmful if inhaled.

Skin contact No adverse effects due to skin contact are expected.

Eye contact Causes serious eye irritation.

Ingestion Expected to be a low ingestion hazard.

Symptoms related to the physical, chemical and toxicological characteristics Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.

Information on toxicological effects**Acute toxicity**

Acute toxicity Harmful if inhaled.

| Product/ingredient name | Result | Species | Dose | Exposure |
|-------------------------|-----------------|---------|--------------|----------|
| Ornazin 3% EC | LD50 Dermal | Rabbit | > 5050 mg/kg | - |
| | LD50 Oral | Rat | > 5050 mg/kg | - |
| | LD50 Inhalation | Rat | > 2.6 mg/L | - |

Irritation/Corrosion

Skin corrosion/irritation Prolonged skin contact may cause temporary irritation.

Serious eye damage/eye irritation Causes serious eye irritation.

**Sensitization****Respiratory sensitization** Not a respiratory sensitizer.**Skin sensitization** Skin sensitizer.**Germ cell mutagenicity** No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.**Carcinogenicity****OSHA Specifically Regulated Substances****(29 CFR 1910.1001-1050)** Not listed.**Reproductive toxicity** Suspected of damaging fertility or the unborn child.**Specific target organ toxicity****- single exposure** Not classified**- repeated exposure** Not classified**Aspiration hazard** Not an aspiration hazard.**Chronic effects** Prolonged inhalation may be harmful.

Section 12. Ecological information

Ecotoxicity The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

For Azadirachtin Technical (CAS 11141-17-6)

Chinook salmon
(*Oncorhynchus tshawytscha*) 96 hr LC₅₀: 4 mg/l**Persistence and degradability** No data is available on the degradability of this product.**Bioaccumulative potential****Mobility in soil** No data available.**Other adverse effects** No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

Section 13. Disposal considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.**Local disposal regulations** Dispose in accordance with all applicable regulations.**Hazardous waste code** The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

**Waste from residues/unused products**

Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions). Dispose of container and residues in accordance with all applicable regulations.

Contaminated packaging

Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

Section 14. Transport information

DOT Not regulated as dangerous goods.

IATA Not regulated as dangerous goods.

IMDG Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not established

Section 15. Regulatory information

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

This product is currently 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.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40CFR302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Immediate Hazard - Yes
Delayed Hazard - Yes
Fire Hazard - Yes
Pressure Hazard - No
Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

**SARA 311/312**

Hazardous chemical No

SARA 313 (TRI reporting) Not regulated.**Other federal regulations****Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA)

Not regulated.

US state regulations**California Controlled Substances.****CA Department of Justice (California Health and Safety Code Section 11100)**

Not listed.

Massachusetts RTK - Substance List

TRADE SECRET (CAS Proprietary)

New Jersey Worker and Community Right-to-Know Act

Not listed.

Pennsylvania Worker and Community Right-to-Know Law

TRADE SECRET (CAS Proprietary)

Rhode Island RTK

Not regulated.

California Proposition 65 California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

International Inventories

| Country(s) or region | Inventory name | On inventory (yes/no)* |
|-----------------------------|---|------------------------|
| United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory | No |

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

Section 16. Other information**Date of Issue:** September 10, 2015**References**

ACGIH®: American Conference of Governmental Industrial Hygienists
CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act
EPA: Environmental Protection Agency
FIFRA: Federal Insecticide, Fungicide, and Rodenticide Act



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IARC: International Agency for Research on Cancer
NTP: National Toxicology Program
OSHA: Occupational Safety and Health Agency
SARA: Superfund Amendments and Reauthorization Act
TSCA: Toxic Substances Control Act
DOT: Department of Transportation
IMDG: International Maritime Dangerous Goods
IATA: International Air Transport Association

Version #

01

Further information

Not available.

HMIS® ratings

Health: 2*
Flammability: 2
Physical hazard: 0

NFPA ratings

Health: 2
Flammability: 2
Instability: 0

Disclaimer

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