

Safety Data Sheet

Prothor SC2

Emergency Phone
Health 1-800-369-4352 (Propharma)
Environmental 1-800-535-5053 (Infotrac)

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Prothor SC2
Chemical Name: Imidacloprid
Recommended use of the chemical and restrictions on use: Termiticide and insecticide

Company: Ensystem II, Inc.
Address: 202 Fairway Dr, Fayetteville, NC 28305
Daytime Phone: 1-888-398-3772

2. HAZARDS IDENTIFICATION

Hazard classification

Classification in accordance with Federal OSHA Hazard Communication Standard
29CFR 1910.1200
Eye irritation: Category 2B
Signal word: Warning

Hazard Statements
Causes eye irritation

Precautionary statements
Wash thoroughly after handling
IF IN EYES: Rinse cautiously with water for 5 minutes. Remove contact lenses if present and can be done without injuring the eyes. Continue rinsing.
If eye irritation persists: Get medical attention.

Label Elements
Hazard pictograms



Signal Word: Warning

Hazard Statement

H302: Harmful if swallowed.
H402: Harmful to aquatic life.

Prevention

P102: Keep out of reach of children.
P264: Wash contacted areas thoroughly after handling.
P270: Do not eat, drink or smoke when using this product.
P273: Avoid release to the environment.
P281: Use personal protective equipment as required.

Response

P352: Wash with plenty of soap and water
P301+P312: IF SWALLOWED: Call a Poison Control Center or doctor if you feel unwell.
P301+p330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P332+P313: If skin irritation occurs: Get Medical advice.
P391: Collect any spills.
P370+P378: Not combustible. Use extinguishing media suited to burning materials.

Storage

P402+P404: Store in a dry place. Store in closed container.
P403+P235: Store in a well-ventilated place. Keep cool.

Disposal

P501: Dispose of contents and containers as specified on the registered label.

3. COMPOSITION / INFORMATION ON INGREDIENTS

| | | |
|--------------|-------|------------------|
| Imidacloprid | 21.4% | CAS# 138261-41-3 |
| Glycerine | 8.0% | CAS# 56-81-5 |

4. FIRST-AID

Description of first-aid measures

General advice: In all cases of overexposure, when symptoms such as nausea, difficulty in breathing, burned or irritated skin are exhibited, get medical attention immediately. Take affected person to a doctor or emergency treatment facility. If possible have product label available when calling or visiting a Poison Control Center.

Inhalation: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. If this occurs, consult a physician immediately.

Eye Contact: No effects expected. If irritation does occur, flush contaminated eye(s) with lukewarm, gently flowing water for 5 minutes until the product is removed. Obtain medical advice if irritation becomes painful or lasts more than a few minutes. Take special care if exposed person is wearing contact lenses.

Skin Contact: Wash skin gently and thoroughly with plenty of soap and water for 5 minutes or until chemical is removed.

Ingestion: If swallowed, do NOT induce vomiting. Wash mouth with water and contact a Poison Control Center or a doctor/physician. Never give anything by mouth to an unconscious person.

5. FIRE-FIGHTING MEASURES

Fire and Explosion Hazards: The major hazard in fires is usually inhalation of heated and toxic or oxygen deficient (or both), fire gases. There is no risk of an explosion from this product under normal circumstances if it is involved in a fire.

This product is likely to decompose only after heating to dryness, followed by further strong heating

Fire decomposition products from this product are likely to be irritating if inhaled.

Advice for firefighters

Extinguishing Media: Not combustible. Use extinguishing media suited to burning materials.

Special protective equipment for firefighters: Protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots and gloves) as well as NIOSH approved Self-Contained Breathing Apparatus (SCBA).

Flash Point: Does not Burn.

Upper Flammability Limit: Does not burn.

Lower Flammability Limit: Does not burn.

Auto-ignition Temperature: Not Applicable- does not burn.

Flammability Class: Does not burn.

6. ACCIDENTAL RELEASE MEASURES

Accidental release: In the event of a major spill, prevent spillage from entering drains or water courses. As a minimum, wear coveralls, goggles and gloves. No special recommendations for clothing materials. Eye/face protective equipment should comprise as a minimum, protective goggles. If there is a significant chance that vapors or mists are likely to build up in the cleanup area, we recommend that you use a respirator. Usually, no respirator is necessary when using this product.

Stop leak if safe to do so, and contain spill. Absorb onto sand, vermiculite or other suitable absorbent material. If spill is too large or if absorbent material is not available, try to create a dike to stop material spreading or going into drains or waterways. Sweep up and shovel or collect recoverable product into labeled containers for recycling or salvage, and dispose of promptly. Recycle containers wherever possible after careful cleaning. Refer to the product label for specific instructions. After spills, wash area preventing runoff from entering drains. If a significant quantity of material enters drains, advise emergency services. Full details regarding disposal of used containers, spillage and unused material may be found on the label. If there is any conflict between this SDS and the Label, instructions on the label take precedence. Be sure to consult with local agencies before disposing of any spilled material. Thoroughly launder clothing before storage or re-use.

7. HANDLING AND STORAGE

Handling: Use good personal hygiene. Keep exposure to this product to a minimum and minimize the quantities kept in the work areas. See Section 8 for control measures. The measures detailed below under "Storage" should be followed during handling in order to minimize risks to persons using the product in the workplace. Also avoid contact or contamination of product with incompatible materials listed in Section 10.

Storage: Keep out of reach of children. Product should be stored in compliance with local regulations. Store in a well ventilated, cool, dry area. Keep away from heat sources.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limits are listed below:

| Component | Regulation | Type of listing | Value/Notation |
|----------------------------------|------------|-----------------|-------------------------|
| Imidacloprid | TX ESL | AN ESL | 5µg/m ³ |
| Imidacloprid | TX ESL | ST ESL | 50µg/m ³ |
| Glycerine (Respirable Fraction) | OSHA Z-1 | PEL | 5 mg/ m ³ |
| Glycerine (Respirable Fraction) | ACGIH | TWA | 5 mg/ m ³ |
| Glycerine (Vapor) | TX ESL | ST ESL | 1000 mg/ m ³ |

These recommendations are for Manufacturing. Applicators should see the product label for proper personal protective equipment.

Exposure controls

Provide general and/or local exhaust ventilation to control airborne levels below the exposure limits.

Respiratory Protection: Atmospheric levels should be maintained below the exposure guidelines. When respiratory protection is required or during emergency conditions, use a NIOSH approved respirator and in accordance with the appropriate regulatory standards and/or industry recommendations.

Hand/Skin Protection: Wear chemical resistant nitrile rubber gloves. Wear long-sleeved shirt and long pants and shoes plus socks.

Eye/Face Protection: Tightly fitting safety goggles

General protective measures: Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables are available. Use detergent and warm water. Keep and wash PPE separately from other laundry.

9. PHYSICAL AND CHEMICAL PROPERTIES

| | |
|-------------------------------|--|
| Appearance/Odor: | Cream opaque suspension |
| Odor: | Characteristic odor |
| Boiling point/range: | Approximately 100°C at 100kPa |
| Freezing Point: | Below 0°C |
| Volatiles: | Water Component |
| Vapor Pressure: | 2.37kPa at 20°C (water vapor pressure) |
| Vapor Density: | Same as Water |
| Specific Gravity: | 1.0 Approx. |
| Water Solubility: | Miscible |
| pH: | 5-7 (as supplied) |
| Volatility: | No Data |
| Odor Threshold: | No Data |
| Evaporation Rate: | Same as water |
| Partition Coefficient: | No Data |
| Auto-ignition Temp: | Not applicable- does not burn |

10. STABILITY AND REACTIVITY

Reactivity: This product is unlikely to react or decompose under normal storage conditions. However, if you have any doubts, contact the supplier for advice on shelf life properties.

Conditions to Avoid: Protect this product from light. Store in the closed container in a dry, cool, well ventilated area out of direct sunlight.

Incompatibilities: Strong acids, strong bases, strong oxidizing agents

Hazardous Decomposition Products: This product is likely to decompose only after heating to dryness, followed by further strong heating. Combustion forms carbon dioxide, and if incomplete, carbon monoxide, and possible smoke. Water is also formed. May form nitrogen and its compounds, and under certain circumstances, oxides of nitrogen. Occasionally hydrogen cyanide gas in reducing atmospheres. May form hydrogen chloride gas, other compounds of chlorine. Carbon monoxide poisoning produces headache, weakness, nausea, dizziness, confusion, dimness of vision, disturbance of judgement, and unconsciousness followed by coma and death.

Additional Information: Hazardous polymerization will not occur.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity: Inhalation LC50/Rat/>5.33mg/l (exposure time 4 hours in the form of a liquid aerosol) Oral LD50/Rat (male)/>4,870mg/kg Dermal LD50/Rabbit/>2,000 mg/kg

Skin Irritation: No skin irritation (rabbit)

Eye Irritation: Minimally irritating (rabbit)

Sensitization: Non-sensitizing. (guinea pig)

Chronic Toxicity: Imidacloprid did not cause specific target organ toxicity in experimental animal studies.

No teratogenic effect

No carcinogenic effects

Reproductive toxicity effects: Imidacloprid caused reproduction toxicity in a two-generation study in rats only at dose levels also toxic to the parent animals. The reproduction toxicity seen with imidacloprid is related to parental toxicity.

No mutagenic effects

Only acute toxicity studies have been performed on the formulated product.

The non-acute information pertains to the active ingredient.

12. ECOTOXICOLOGICAL INFORMATION

Toxicity

Acute toxicity to fish

LC₅₀, (rainbow trout (*Oncorhynchus mykiss*)) 96 Hour, 211 mg/l The value relates to the active imidacloprid.

Acute toxicity to aquatic invertebrates

EC₅₀, *Daphnia magna* (water flea), 48 Hour, 85 mg/l The value relates to the active imidacloprid.

Acute toxicity to algae/aquatic plants

EC50 (*Desmodesmus subspicatus*) >10mg/l growth rate; Exposure time 72 h The value relates to the active imidacloprid.

Toxicity to above ground organisms

LC₅₀, *Apis mellifera* (bees), 2 hour, mortality, 6.5 mg/l

LC₅₀, *Colinus virginianus* (bobwhite quail), 4 hour, 1,844 ppm.

Persistence and degradability

Imidacloprid: not rapidly biodegradable

Mobility in soil

Potential for mobility in soil is moderate.

Partition coefficient K_{oc} 225

Bioaccumulation

Imidacloprid: does not bioaccumulate.

Environmental precautions

Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate surface or ground water by cleaning equipment or disposal of wastes, including equipment wash water. Apply this product as specified on the label. Do not apply this product or allow it to drift to blooming crops or weeds of bees are visiting the treatment area.

13. DISPOSAL CONSIDERATIONS

Product: Do not contaminate surface or ground water by cleaning equipment or disposal of wastes, including equipment wash water. Do not contaminate food or feed by disposal. Dispose in accordance with all local, state and federal regulations.

Packaging: Do not re-use empty containers. Triple rinse containers and offer them for recycling or reconditioning or puncture and dispose of in a sanitary land fill or incineration.

RCRA Information: Characterization and proper disposal of this material as a special or hazardous waste is dependent upon Federal, State and local laws and are the user's responsibility. RCRA classification may apply.

14. TRANSPORT INFORMATION

49CFR: Not dangerous goods/not Hazardous material

Classification for SEA transport (IMO-IMDG):

Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

(IMIDACLOPRID SOLUTION)

UN # UN3082

Hazard Class: 9

Packing group III

Marine pollutant: YES

Classification for AIR transport (IATA/ICAO):

UN number 3082

Class 9

Packaging group III

Environm. Hazardous Mark Yes

Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S.

(IMIDACLOPRID SOLUTION)

Freight Classification INSECTICIDES OR FUNGICIDES, N.O.I. OTHER THAN POISON

15. REGULATORY INFORMATION

The information herein is given in good faith, but no warranty, expressed or implied, is made. Consult Ensystem II for further information.

US Federal Regulations

TSCA list

Glycerine 56-81-5

US Toxic Substances Control Act (TSCA) Section 12(b) Export Notification (40 CFR 707, Subpt D)

None

SARA Title III - Section 302 – Notification and Information

None

SARA Title III – Section 313 – Toxic Chemical Release Reporting

None

US States Regulatory Reporting

CA Prop65

This product does not contain any substances known to the State of California to cause cancer.

This product does not contain any substances known to the State of California to cause reproductive harm.

US State Right-To-Know Ingredients

Glycerine 56-81-5

United States TSCA Inventory (TSCA)

This product contains chemical substance(s) exempt from USEPA TSCA Inventor requirements. It is regulated as a pesticide subject to the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA requirements).

Federal Insecticide, Fungicide and Rodenticide Act

EPA Registration Number: 83923-4

This chemical is a pesticide product registered by the 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, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

Caution

Harmful if swallowed, inhaled or absorbed through skin. Causes eye irritation. Avoid contact with skin, eyes or clothing. Avoid breathing vapor.

16. Other Information

Hazard rating System

NFPA

| Health | Fire | Reactivity |
|--------|------|------------|
| 1 | 1 | 1 |