

SECTION 1 Identification

1.1. Product identifier

Product form : Mixture
Trade name : OpteraPro

1.2. Other means of identification

Other means of identification : EPA Reg. No: 228-768

1.3. Recommended use of the chemical and restrictions on use

Recommended use : Insecticide
Restrictions on use : All other uses not recommended above

1.4. Supplier's details

Nufarm Americas, Inc.
11901 South Austin Avenue
Alsip, IL 60803
United States
T 1-800-345-3330
www.nufarm.com

1.5. Emergency phone number

Emergency number : For Hazardous Materials or Dangerous Goods Incident Spill, Leak, Fire, Exposure, or Accident
Call CHEMTREC Day or Night: 1-800-424-9300 (Toll Free, USA) / 703-527-3887 (Virginia, USA)
CCN 16105
Back-up Emergency Number: +1 703-741-5970 (Washington, DC)

SECTION 2 Hazard Identification

2.1. Classification of the substance or mixture

GHS US classification

Not classified

2.2. Label elements

GHS US labeling

No labeling applicable

2.3. Hazards associated with known or reasonably anticipated uses

No additional information available

2.4. Hazards not otherwise classified

No additional information available

2.5. Unknown acute toxicity

No additional information available

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According to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

SECTION 3 Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS US classification
Prothioconazole	CAS-No.: 178928-70-6	17.37 – 19.2	Aquatic Acute 2, H401 Aquatic Chronic 2, H411
Propylene glycol	CAS-No.: 57-55-6	8.68 – 9.6	Not classified

Full text of hazard classes and H-statements : see section 16

SECTION 4 First aid measures

4.1. Description of necessary first-aid measures

First-aid measures general	: First aider: Pay attention to self-protection. Never give anything by mouth to an unconscious person. Give artificial respiration if necessary. Induce artificial respiration with mask fitted with one-way valve or other suitable device but, not mouth-to-mouth.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor/physician if you feel unwell.
First-aid measures after skin contact	: Wash skin with plenty of water. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.
First-aid measures after eye contact	: Rinse eyes with water as a precaution. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Rinse mouth. Do NOT induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Call a poison center/doctor/physician if you feel unwell.

4.2. Most important symptoms/effects, acute and delayed

Symptoms/effects after inhalation	: May cause respiratory irritation.
Symptoms/effects after skin contact	: None under normal conditions.
Symptoms/effects after eye contact	: None under normal conditions.
Symptoms/effects after ingestion	: Ingestion may cause nausea and vomiting.
Most Important Symptoms/Effects	: To our knowledge, the product does not present any particular risk, under normal conditions of use.

4.3. Indication of immediate medical attention and special treatment needed, if necessary

Other medical advice or treatment	: Treat symptomatically.
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SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media	: Water spray. Dry powder. Foam. Carbon dioxide.
Unsuitable extinguishing media	: Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

Fire hazard	: No fire hazard.
Hazardous decomposition products in case of fire	: Thermal decomposition generates: Carbon dioxide. Carbon monoxide. Chlorine. Nitrous oxide. Sulfur oxides.

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According to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

5.3. Special protective equipment and precautions for fire-fighters

- Firefighting instructions : Use water spray or fog for cooling exposed containers. Prevent fire-fighting water from entering environment.
- Protection during firefighting : Self-contained breathing apparatus. Complete protective clothing.

SECTION 6 Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Avoid all personal contact including breathing in the mist, spray, vapors, gas. Do not take actions involving personal risks.

For non-emergency personnel

- Protective equipment : Wear the recommended personal protective equipment.
- Emergency procedures : Evacuate the danger area. If outdoors, move to an area upwind of the danger area. If possible without taking personal risks, Remove ignition sources, ventilate area. Prevent other non-emergency personnel from entering the danger area.

For emergency responders

- Protective equipment : Wear the recommended personal protective equipment.
- Emergency procedures : Evacuate personnel to a safe area. Ventilate spillage area.

- Environmental precautions : Very toxic to aquatic life with long lasting effects. Do not let the product reach soil, drains, sewers, or surface and ground water.

6.2. Methods and materials for containment and cleaning up

- For containment : Contain with non-combustible inert absorbent.
- Methods for cleaning up : Take up in non-combustible inert absorbent and place into container for disposal. Decontaminate surfaces and equipment with water and detergent. Dispose of collected material as soon as possible in accordance with applicable local/regional/national/international regulations. Until a sufficient level of dilution is achieved, the decontamination water may pose the same hazards as the product.

For further information refer to section 8: "Exposure controls/personal protection", For further information refer to section 13

SECTION 7 Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear personal protective equipment. Use only outdoors or in a well-ventilated area.
- Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product. Contaminated work clothing should not be allowed out of the workplace.

7.2. Conditions for safe storage, including incompatibilities

- Storage conditions : Store locked up. Keep cool. Protect from sunlight. Keep only in original container.

SECTION 8 Exposure controls/personal protection

8.1. Control parameters

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According to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Propylene glycol (57-55-6)

USA - AIHA - Occupational Exposure Limits

WEEL TWA	10 mg/m ³ aerosol
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8.2. Appropriate engineering controls

Appropriate engineering controls	: Ensure good ventilation of the work station. Use general ventilation, local exhaust ventilation, or process enclosure to keep the airborne concentrations below the permissible exposure limits.
Environmental exposure controls	: Avoid release to the environment. Take measures to reduce or limit air emissions and releases to soil and the aquatic environment.

8.3. Individual protection measures, such as personal protective equipment

Personal protective equipment:

Personal protective equipment should be chosen according to national standards and in discussion with the supplier of the protective equipment.

Hand protection:

Protective gloves made of : Nitrile rubber

Eye protection:

Safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

Personal protective equipment symbol(s):



SECTION 9 Physical and chemical properties

9.1. Basic physical and chemical properties

Physical state	: Liquid
Appearance	: Liquid.
Color	: Beige
Odor	: Characteristic
Odor threshold	: No data available
pH	: 6.88
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: 88.9 °C
Flash point	: No data available
Flammability (solid, gas)	: Not applicable.
Vapor pressure	: No data available
Relative vapor density at 20°C	: No data available
Relative density	: 1.1042 (19.9-20.1°C)
Solubility	: No data available
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available

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According to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Viscosity, kinematic	: No data available
Viscosity, dynamic	: 13560 mPa·s (20 °C)
Explosion limits	: No data available
Particle characteristics	: No data available

9.2. Data relevant with regard to physical hazard classes (supplemental)

No additional information available

SECTION 10 Stability and reactivity

10.1. Reactivity

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

10.2. Chemical stability

Stable under normal conditions of use.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Incompatible materials.

10.5. Incompatible materials

Oxidizing agents. Strong acids. Strong bases.

10.6. Hazardous decomposition products

Thermal decomposition generates: Carbon dioxide. Carbon monoxide. Chlorine. Nitrogen oxides. Sulfur oxides.

SECTION 11 Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

OpteraPro	
LD50 oral rat	> 5000 mg/kg body weight
LD50 dermal rat	> 2000 mg/kg body weight
LC50 Inhalation - Rat	> 6.269 mg/l/4h
Propylene glycol	
LD50 oral rat	22000 mg/kg body weight
LD50 oral	8000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg body weight
LD50 dermal	20800 mg/kg
LC50 Inhalation - Rat	> 44.9 mg/l/4h

Skin corrosion/irritation : Not classified. Not irritating to rabbits on cutaneous application
pH: 6.88

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According to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Propylene glycol	
Skin corrosion/irritation, human	Not irritating

Serious eye damage/irritation : Not classified. Not irritating to rabbits on ocular application
pH: 6.88

Propylene glycol	
Additional information	Not irritating to rabbits on ocular application

Respiratory or skin sensitization : Not classified. Does not cause cutaneous sensitization for guinea-pigs

Propylene glycol	
Patch test, human	Not sensitive
Additional information	No sensitizing reaction was observed for guinea pigs

Germ cell mutagenicity : Not classified

Propylene glycol	
Dominant lethal test, rat	Negative

Carcinogenicity : Not classified

Propylene glycol	
Carcinogenicity: Lifetime study, Dermal, mouse	2-21 mg/day (No increased incidence in tumors)

Reproductive toxicity : Not classified
STOT-single exposure : Not classified
STOT-repeated exposure : Not classified

Propylene glycol	
NOAEL (subchronic,oral,animal/male,90 days)	443 mg/kg body weight

Aspiration hazard : Not classified
Symptoms/effects after inhalation : May cause respiratory irritation.
Symptoms/effects after skin contact : None under normal conditions.
Symptoms/effects after eye contact : None under normal conditions.
Symptoms/effects after ingestion : Ingestion may cause nausea and vomiting.
Most Important Symptoms/Effects : To our knowledge, the product does not present any particular risk, under normal conditions of use.

SECTION 12 Ecological information

12.1. Ecotoxicity

Ecology - general : Very toxic to aquatic life with long lasting effects.
Hazardous to the aquatic environment, short-term (acute) : Not classified
Hazardous to the aquatic environment, long-term (chronic) : Not classified

Prothioconazole	
LC50 - Fish [1]	1.83 mg/l
EC50 - Crustacea [1]	1.3 mg/l
ErC50 algae	1.1 mg/l

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According to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Propylene glycol	
LC50 - Fish [1]	100 mg/l
EC50 - Crustacea [1]	1000 mg/l
EC50 72h - Algae [1]	24200 mg/l
EC50 72h - Algae [2]	19300 mg/l
EC50 96h - Algae [1]	19000 mg/l
EC50 96h - Algae [2]	19100 mg/l
ErC50 algae	1000 mg/l
NOEC chronic crustacea	1000 mg/l
NOEC chronic algae	1000 mg/l

12.2. Persistence and degradability

OpteraPro	
Persistence and degradability	Not rapidly degradable
Prothioconazole	
Persistence and degradability	Not rapidly degradable
Propylene glycol	
Persistence and degradability	Rapidly degradable

12.3. Bioaccumulative potential

Prothioconazole	
Bioconcentration factor (BCF REACH)	19
Bioaccumulative potential	Does not bioaccumulate.

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Ozone : Not classified
Fluorinated greenhouse gases : No

SECTION 13 Disposal considerations

Regional waste regulation : Disposal must be done according to official regulations.
Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.
Product/Packaging disposal recommendations : Dispose of this material and its container at hazardous or special waste collection point. Refer to all applicable national, international and local regulations or provisions.
Ecological waste information : Avoid release to the environment.

SECTION 14 Transport information

In accordance with DOT / IMDG / IATA

OpteraPro

Safety Data Sheet

According to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

DOT	IMDG	IATA
14.1. UN number		
Not regulated	3082	3082
14.2. Proper Shipping Name		
Not regulated	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Chlorantraniliprole Technical)	Environmentally hazardous substance, liquid, n.o.s. (Chlorantraniliprole Technical)
14.3. Transport hazard class(es)		
Not regulated	9	9
14.4. Packing group		
Not regulated	III	III
14.5. Environmental hazards		
	Dangerous for the environment: Yes Marine pollutant: Yes	
No supplementary information available		

14.6. Transport in bulk

Not applicable

14.7. Special precautions for user

DOT

Not regulated

IMDG

Special provision (IMDG) : 274, 335, 969
Limited quantities (IMDG) : 5 L
Excepted quantities (IMDG) : E1
Packing instructions (IMDG) : LP01, P001
Packing provisions (IMDG) : PP1
IBC packing instructions (IMDG) : IBC03
Tank instructions (IMDG) : T4
Tank special provisions (IMDG) : TP1, TP29
EmS-No. (Fire) : F-A - FIRE SCHEDULE Alfa - GENERAL FIRE SCHEDULE
EmS-No. (Spillage) : S-F - SPILLAGE SCHEDULE Foxtrot - WATER-SOLUBLE MARINE POLLUTANTS
Stowage category (IMDG) : A

IATA

PCA Excepted quantities (IATA) : E1
PCA Limited quantities (IATA) : Y964
PCA limited quantity max net quantity (IATA) : 30kgG
PCA packing instructions (IATA) : 964
PCA max net quantity (IATA) : 450L
CAO packing instructions (IATA) : 964
CAO max net quantity (IATA) : 450L
ERG code (IATA) : 9L

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Safety Data Sheet

According to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

SECTION 15 Regulatory information

15.1. Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory, except for:

Prothioconazole	CAS-No. 178928-70-6	17.37 – 19.2%
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This product or mixture is not known to contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

FIFRA Labelling

EPA Registration Number	228-768
This chemical is a pesticide product registered by the U.S. 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. The following is the hazard information as required on the pesticide label.	
FIFRA Precautionary Statement	Keep out of reach of children. Harmful if swallowed. Harmful if absorbed through skin.
FIFRA Human Health Hazards	Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse.
FIFRA First Aid	IF SWALLOWED: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person. IF ON SKIN OR CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor immediately for treatment advice.
FIFRA Environmental Hazards	This pesticide is toxic to aquatic invertebrates, oysters and shrimp. Do not apply directly to water. Drift and runoff may be hazardous to aquatic organisms in water adjacent to use sites.

15.2. International regulations

CANADA

Prothioconazole (178928-70-6)

Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)

Propylene glycol (57-55-6)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

No additional information available

National regulations

Propylene glycol (57-55-6)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

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Safety Data Sheet

According to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

15.3. State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

Component	State or local regulations
Propylene glycol(57-55-6)	U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16 Other information

According to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Revision date : 11/5/2025

Issue date : 12/7/2023

Full text of hazard classes and H-statements	
H401	Toxic to aquatic life
H411	Toxic to aquatic life with long lasting effects

Indication of changes:		
Section	Changed item	Comments
	Supersedes	Modified
1	Name	Modified
1	Trade name	Modified
15	FIFRA Environmental Hazards	Added
15	FIFRA First Aid	Added
15	FIFRA Human Health Hazards	Added
15	FIFRA Precautionary Statement	Added
15	Regulatory reference	Added
15	EPA Registration Number	Added

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.