

SAFETY DATA SHEET

SDS NUMBER: 000879-15-LPI

SDS REVISIONS: FORMAT

DATE OF ISSUE: 07/31/15

PROCON-Z®
SUPERSEDES: 05/10/10

FOR CHEMICAL EMERGENCY, SPILL, LEAK, FIRE, EXPOSURE OR ACCIDENT, CALL CHEMTREC - DAY OR NIGHT 1-800-424-9300

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

1.1 PRODUCT IDENTIFIER:

TRADE NAME: PROCON-Z® FUNGICIDE

1.2 RECOMMENDED USE: BROAD SPECTRUM AND SYSTEMIC DISEASE CONTROL FOR TURF AND ORNAMENTALS

1.3 SUPPLIER DETAILS:

LOVELAND PRODUCTS, INC.

P.O. Box 1286 • Greeley, CO 80632-1286

1.4 24 Hour Emergency Phone: 1-800-424-9300 - **Medical Emergencies:** 1-866-944-8565

U.S. Coast Guard National Response Center: 1-800-424-8802

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to 29 CFR 1910.1200

Specific Organ Toxicity - Repeated	Category 2	H335
Specific Organ Toxicity – Respiratory Irritation	Category 3	H373
Eye Damage/Eye Irritation	Category 2B	H320
Flammable Liquid	Category 4	H226

2.2 Label elements



Signal word: WARNING

Hazard Statement: H320 – Causes eye irritation.
H335 – May cause respiratory irritation.
H373 – May cause damage to organs through prolonged or repeated exposure.
H227 – Combustible liquid.

Precautionary Statement:

(Prevention): P264 – Wash hands and face thoroughly after handling.
P210 – Keep away from heat/sparks/open flames/hot surfaces – No smoking.
P260 – Do not breathe dust/fume/gas/mist/vapors/spray.
P271 – Use only outdoors or in a well-ventilated area.
P280 – Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary Statement:

P305+P351+P338: IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing.

P342+P311: Immediately call a POISON CENTER or doctor/physician.

P303+P361+P353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P363 – Wash contaminated clothing before reuse.

P332+P313: If skin irritation occurs: Get medical advice/attention.

(Response): P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P370 – In case of fire: Use CO₂, dry chemical, or foam for extinction.

P301+P310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

P331 – Do NOT induce vomiting.

P330 – Rinse mouth.

Precautionary Statement:

(Storage): P405 – Store locked up.

Precautionary Statement:

(Disposal): P501 – Dispose of contents/container to an approved waste disposal plant.

2.3 Other hazards

None known

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3. COMPOSITION, INFORMATION ON INGREDIENTS**3.1 Substances****3.2 Mixtures****Classification according to 29 CFR 1910.1200**

Chemical Name:	CAS No.	Classification	Concentration [%]
Tetrahydrofurfuryl Alcohol (THFA)	97-99-4	Eye dam./irrit. 2B; H320	Trade Secret
Propiconazole	60207-90-1	STOT 2; H335	14.30
Other ingredients	Trade Secret	STOT. 3; H373 Flam. Liq. 3; H226	<85.70

Ingredients not precisely identified are proprietary or non-hazardous.

4. FIRST AID MEASURES**4.1 Description of First Aid Measures**

General Advice: Get medical attention if symptoms occur.

- 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 the poison control center or doctor. Do not give anything by mouth to an unconscious person.
- If in eyes:** Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.
- 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 for treatment advice.
- If inhaled:** Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.

4.2 Most Important Symptoms and Effects, Acute and Delayed

Symptoms: Causes eye irritation. May cause respiratory irritation. May cause damage to organs through prolonged or repeated exposure.

4.3 Immediate Medical Attention and Special Treatment

Treatment: **NOTES TO PHYSICIAN:** If ingested, induce emesis or lavage stomach. Treat symptomatically.
FOR A MEDICAL EMERGENCY INVOLVING THIS PRODUCT CALL: 1-866-944-8565
 Take container, label or product name with you when seeking medical attention.

5. FIRE FIGHTING MEASURES**5.1 EXTINGUISHING MEDIA:**

Suitable Extinguishing Media: Use medium appropriate to surrounding fire. Dry chemical, carbon dioxide (CO₂), foam.

5.2 SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE:

Specific Hazards During Firefighting: Combustible liquid. Can release vapors that form explosive mixtures at temperatures at or above the flash point. Heavy vapors can flow along surfaces to distant ignition sources and flash back. During a fire, irritating and possibly toxic gases may be generated by thermal decomposition or combustion.

5.3 SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIREFIGHTERS

Special Protective Equipment for Firefighters: Self-contained breathing apparatus and full protective gear should be worn in fighting large fires involving chemicals. Use water spray to keep fire exposed containers cool. Keep people away. Isolate fire and deny unnecessary entry.

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6. ACCIDENTAL RELEASE MEASURES

6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

Personal Precautions: Avoid inhalation of vapors and spray mist and contact with skin and eyes. Ensure adequate ventilation. Wear suitable protective clothing. Remove all sources of ignition.

6.2 ENVIRONMENTAL PRECAUTIONS

Environmental Precautions: 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 contaminate water when disposing of equipment washwaters or rinsate.

6.3 METHODS AND MATERIALS FOR CONTAINMENT AND CLEAN-UP

Methods for Clean-Up: Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. After removal flush contaminated area thoroughly with water.
Small Spills: 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.

7. HANDLING AND STORAGE

7.1 PRECAUTIONS FOR SAFE HANDLING:

Advice on Safe Handling: Keep away from heat/sparks/open flames/hot surfaces. — No smoking.
Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry. Discard clothing and other absorbent material that have been drenched or heavily contaminated with the product's concentrate. Do not reuse them. Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

7.2 CONDITIONS FOR SAFE STORAGE:

Requirements for Storage Areas and Containers: Store in a well-ventilated, secure area out of reach of children and domestic animals. Do not store food, beverages or tobacco products in the storage area. Prevent eating, drinking, tobacco use, and cosmetic application in areas where there is a potential for exposure to the material. Store locked up. Do not contaminate water, food or feed by storage or disposal.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 CONTROL PARAMETERS:

OCCUPATIONAL EXPOSURE LIMITS

U.S. Workplace Exposure Level (AIHA) WEELs

Components	Type	Value
Tetrahydrofurfuryl alcohol	TWA	0.5 ppm

U.S. Workplace Exposure Level (OSHA) PELs

Components	Type	Value
No listings	TLV	

Biological limit values

ACGIH Biological Exposure Indices

Components	Value	Specimen
No listings		

8.2 EXPOSURE CONTROLS:

Engineering Measures

THE FOLLOWING RECOMMENDATIONS FOR EXPOSURE CONTROLS/PERSONAL PROTECTION ARE INTENDED FOR THE MANUFACTURE, FORMULATION, PACKAGING AND USE OF THIS PRODUCT. FOR COMMERCIAL APPLICATIONS AND/OR ON-FARM APPLICATIONS OF END USE PRODUCTS CONTAINING THIS MATERIAL, CONSULT THE SDS OR PRODUCT LABEL FOR THE END USE PRODUCT.

Individual Protection Measures:

Eye / Face Protection: Goggles or shielded safety glasses are recommended.
Skin Protection: Coveralls. Chemical-resistant gloves, such as viton, polyethylene or polyvinylchloride. Socks and chemical-resistant footwear.
Respiratory Protection: In case of inadequate ventilation or risk of inhalation of mists or vapors, use suitable respiratory equipment approved by MSHA/NIOSH. Wear respiratory protection during operations where spraying or misting occurs. If respirators are used, a program should be in place to assure compliance with 29 CFR 1910.134, the OSHA Respiratory Protection standard. Wear air supplied respiratory protection if exposure concentrations are unknown.

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9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 APPEARANCE : Liquid
ODOR: Aromatic, solvent-like.
ODOR THRESHOLD: No data available.
COLOR: Clear yellow to orange.
pH: 6 – 8 (1% solution)
MELTING POINT / FREEZING POINT: No data available
BOILING POINT: 331°F / 166.1°C
FLASH POINT: 181°F / 82.8°C (Setaflash).
FLAMMABILITY (solid, gas): Combustible.
UPPER / LOWER FLAMMABILITY OR EXPLOSIVE LIMITS: No data available.
VAPOR PRESSURE: 4.2×10^7 @ 25°C (based on Propiconazole).
SOLUBILITY: Soluble.
PARTITION CO-EFFICIENT, n-OCTANOL / WATER: No data available.
AUTO-IGNITION TEMPERATURE: No data available.
DECOMPOSITION TEMPERATURE: No data available.
VISCOSITY: (kinematic): No data available
SPECIFIC GRAVITY (Water = 1): 1.09 g/ml
BULK DENSITY: 9.09 lbs./gal / 1.09 kg/L

Note: These physical data are typical values based on material tested but may vary from sample to sample.
Typical values should not be construed as a guaranteed analysis of any specific lot or as specification items.

10. STABILITY AND REACTIVITY

10.1 REACTIVITY

Stable

10.2 CHEMICAL STABILITY

Stable under normal temperature conditions

10.3 POSSIBILITY OF HAZARDOUS REACTIONS

No data available. Will not polymerize.

10.4 CONDITIONS TO AVOID

Flame, heat, ignition sources.

10.5 INCOMPATIBLE MATERIALS

None known.

10.6 HAZARDOUS DECOMPOSITION PRODUCTS

None known.

11 TOXICOLOGICAL INFORMATION

11.3 LIKELY ROUTES OF EXPOSURE

Dermal, inhalation.

LC₅₀ (rat): 2.6 mg/L (4H)

LD₅₀ Oral (female rat): 4,340 mg/kg.

LD₅₀ Dermal (rat): > 2,020 mg/kg

Acute Toxicity Estimates: No data available.

Eye Irritation (rabbit): Moderate eye irritant.

Skin Irritation (rabbit): Non-irritating.

Inhalation: May cause respiratory irritation.

Ingestion: Harmful if swallowed.

Specific Target Organ Toxicity: No data available.

Aspiration: May be fatal if swallowed and enters airways.

Skin Sensitization (guinea pig): Not a sensitizer

Carcinogenicity: No data available.

Germ Cell Mutagenicity: No data available.

Interactive Effects: None known.

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12 ECOLOGICAL INFORMATION

12.3 ECOTOXICITY

Toxic to aquatic life with long lasting effects. The pesticide is toxic to fish and aquatic invertebrates.

Ecotoxicological Data

	Species	Test Results
Propiconazole	Rainbow trout	0.83 ppm – 96-hour LC ₅₀
	Daphnia magna	3.2 ppm – 48-hour EC ₅₀

Drift or runoff may adversely affect non-target plants.
Do not apply directly to water.
Do not contaminate water when disposing of equipment wash water.
Do not apply when weather conditions favor drift from target area.

12.2 PERSISTENCE AND DEGRADABILITY

Biodegradability: No data available.

12.3 BIOACCUMULATIVE POTENTIAL

Bioaccumulation: Low potential for accumulation.

12.4 MOBILITY IN SOIL

Low mobility.

12.5 OTHER ADVERSE EFFECTS

Assessment: No data available.

13 DISPOSAL CONSIDERATIONS

13.1 WASTE TREATMENT METHODS

Wastes may be disposed of on site or at an approved waste disposal facility. Triple rinse (or equivalent), adding rinse water to spray tank. Offer container for recycling or dispose of in a sanitary landfill or by other procedures approved by appropriate authorities. Recycling decontaminated containers is the best option of container disposal. The Agricultural Container Recycling Council (ACRC) operates the national recycling program. To contact your state and local ACRC recycler visit the ACRC web page at <http://www.acrecycle.org/>. Do not contaminate water, food or feed by storage or disposal.

14 TRANSPORT INFORMATION

14.3 LAND TRANSPORT

DOT Shipping Description: < 119 GALLONS: NOT REGULATED.

DOT Shipping Description: >119 GALLONS: NA1993, COMBUSTIBLE LIQUID, N.O.S. (TETRAHYDROFURFURYL ALCOHOL), III, ERG GUIDE 128

U.S. Surface Freight Classification: INSECTICIDES OR FUNGICIDES, INSECT OR ANIMAL REPELLENTS, NOI, OTHER THAN POISON (NMFC 102120; CLASS: 60)

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15 REGULATORY INFORMATION**15.1 SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS****NFPA & HMIS Hazard Ratings:**

NFPA

HMIS

2 Health	0 Least	2 Health
2 Flammability	1 Slight	2 Flammability
0 Instability	2 Moderate	0 Reactivity
	3 High	B PPE
	4 Severe	

SARA Hazard Notification/Reporting

SARA Title III Hazard Category: Immediate Y Fire Y Sudden Release of Pressure N
 Delayed N Reactive N

Reportable Quantity (RQ) under U.S. CERCLA: Not listed.**SARA, Title III, Section 313:** Propiconazole (CAS: 60207-90-1) 14.30%**RCRA Waste Code:** Not listed**CA Proposition 65:** Not listed.

This chemical 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. Following is the hazard information as required on the pesticide label:

WARNING

Causes substantial, but temporary eye injury.

Do not get in eyes or on clothing.

Harmful if swallowed, inhaled or absorbed through skin.

Avoid contact with skin or clothing.

Avoid breathing vapor or spray mist.

16 OTHER INFORMATION**SDS STATUS:** Format revised.**PREPARED BY:** Registrations and Regulatory Affairs**REVIEWED BY:** Environmental Health and Safety**EPA REG. NO.:** 34704-879

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