

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

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

FORMULATED FOR:

LOVELAND PRODUCTS, INC.
P.O. Box 1286 • Greeley, CO 80632-1286

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

PRODUCT NAME: INTENSITY® ONE POST-EMERGENCE GRASS HERBICIDE®

CHEMICAL NAME: Clethodim; (E)-2-[1-[(3-chloro-2-propenyl)oxy]limino]propyl]-5-[2-(ethylthio)propyl]-3-hydroxy-2-cyclohexen-1-one

CHEMICAL FAMILY: Cyclohexanedione Herbicide

EPA REG. NO.: 34704-976

MSDS Number: 000976-13-LPI

MSDS Revisions: Sections 8, 13 and 15

Date of Issue: 05/01/13

Supersedes: 09/09/09

2. HAZARDS IDENTIFICATION SUMMARY

KEEP OUT OF REACH OF CHILDREN – CAUTION – Causes moderate eye irritation. Avoid contact with eyes, skin or clothing. Prolonged or frequently repeated skin contact may cause allergic reaction in some individuals. Harmful if swallowed.

This product is a light yellow liquid with mild aromatic odor. Primary routes of entry are Inhalation, eye contact and skin contact.

3. COMPOSITION, INFORMATION ON INGREDIENTS

<u>Chemical Ingredients:</u>	<u>Percentage by Weight:</u>	<u>CAS No.</u>	<u>TLV (Units)</u>
Clethodim	12.60	99129-21-2	not listed
Other Ingredients*	87.40		
*contains xylene range aromatic solvent+		64742-94-5	
+contains Naphthalene		91-20-3	10 ppm

This product is hazardous according to the OSHA Hazard Communication Standard (29 CFR 1910.1200)

4. FIRST AID MEASURES

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 further treatment advice.
If swallowed:	Immediately call poison control center or doctor. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give any liquid to the person. Do not give anything by mouth to an unconscious person.
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 treatment advice.

FOR A MEDICAL EMERGENCY INVOLVING THIS PRODUCT CALL: 1-866-944-8565. Have the product label or container with you when calling a poison control center or doctor, or going for treatment.

NOTE TO PHYSICIAN: Ingestion of this product or subsequent vomiting can result in aspiration of light hydrocarbon liquid, which can cause pneumonitis. If ingested, probable mucosal damage may contraindicate the use of gastric lavage.

5. FIRE FIGHTING MEASURES

FLASH POINT (°F/Test Method):	>150°F / >65.55°C (Setaflash Closed Cup)
FLAMMABLE LIMITS (LFL & UFL):	Not established
EXTINGUISHING MEDIA:	Use medium appropriate to surrounding fire. Foam, dry chemical, carbon dioxide, and water fog.
HAZARDOUS COMBUSTION PRODUCTS:	Carbon dioxide. Water vapor will emit oxides of nitrogen and sulfur. Incomplete combustion may produce carbon monoxide and toxic compounds of chlorine.
SPECIAL FIRE FIGHTING PROCEDURES:	Remain upwind. Avoid breathing smoke. Wear self-contained breathing apparatus and full protective gear.
UNUSUAL FIRE AND EXPLOSION HAZARDS:	Fire hazard increases as liquid temperature rises above 85°F (29.4°C) Explosive mixtures can form at temperatures at or above flashpoint. Can burn in fire, releasing irritating and toxic gases due to thermal decomposition or combustion. If water is used to fight fire or cool containers, dike to prevent runoff and contamination of municipal sewers and waterways.

6. ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:

Stop leak if possible without risk. Dike and contain spilled material. Absorb spill with inert material, such as pet litter, dry sand, or earth, then place in a chemical waste container. Wash area with soap and water. Absorb and pick up wash liquid and place in a chemical waste container. When exposed to water this material will form an emulsion.

CAUTION: Keep spills and cleaning runoff out of municipal sewers and open bodies of water.

7. HANDLING AND STORAGE

HANDLING: 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.

STORAGE: Keep pesticide in original container. Do not put concentrate or dilute into food or drink containers. Store in cool, dry place. Do not store diluted spray. Do not use or store near heat or open flame. Do not contaminate water, food, or feed by storage or disposal.

Personal Protective Equipment (PPE): Applicators and other handlers must wear: Long-sleeved shirt and long pants, chemical-resistant gloves such as barrier laminate or Viton® >14mils, shoes plus socks, protective eyewear, goggles, face shield or safety glasses. **Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.** Follow manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS: When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets with requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40CFR 170.240 (d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS. Facilities storing or utilizing this product should be equipped with an eyewash facility and a safety shower.

RESPIRATORY PROTECTION: Not normally required, if vapors or mists exceed acceptable levels, wear a MSHA/NIOSH approved respirator, if necessary.

EYE PROTECTION: Chemical goggles or shielded safety glasses.

SKIN PROTECTION: Wear protective clothing as dictated by workplace conditions: long-sleeved shirts and pants, shoes plus socks. Wear chemical-resistant gloves.

	OSHA PEL 8 hr TWA	ACGIH TLV-TWA
Naphthalene	10 ppm/50 mg/m ³	10 ppm/52 mg/m ³ (Skin)

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR: Light yellow liquid with mild aromatic odor	SOLUBILITY: Emulsifies
SPECIFIC GRAVITY (Water = 1): 0.941 g/ml	BULK DENSITY: 7.85 lbs/gal
VAPOR PRESSURE: Not established	BOILING POINT: Not established
PERCENT VOLATILE (by volume): Not established	EVAPORATION RATE: Not established
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

STABILITY: Unstable at extreme pH's, temperature and upon exposure to oxygen or UV light.

CONDITIONS TO AVOID: Avoid temperatures above 90°F (32.2°C), exposure to air, or direct sunlight. Keep containers sealed to avoid exposure to air.

INCOMPATIBILITY: May react with strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.

HAZARDOUS DECOMPOSITION PRODUCTS: Will emit oxides of hydrogen, nitrogen, and sulfur in a fire situation.

HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION

Acute Oral LD₅₀ (female rat): >5,000 mg/kg	Acute Dermal LD₅₀ (rat): >5,000 mg/kg
Eye Irritation (rabbit): Moderate eye irritant (similar product)	Skin Irritation (rabbit): Moderate skin irritant (similar product)
Inhalation LC₅₀ (rat): >2.11 mg/L (4 HR) (similar product)	Skin Sensitization (guinea pig): Sensitizer
Carcinogenic Potential: None listed in OSHA, NTP, IARC or ACGIH	

12. ECOLOGICAL INFORMATION

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 apply where runoff is likely to occur. Do not apply where weather conditions favor drift from areas treated. Do not contaminate water when disposing of equipment wash water or rinsate. The use of this product may pose a hazard to the federally designated endangered species of Solano Grass and Wild Rice. Use of this product is prohibited in the following areas where the species are known to exist: Solano Grass: Solano County, California: the vernal lakes area bounded by the Union Pacific Railroad and Hastings Road to the north, Highway 113 to the east, Highway 12 to the south, and Travis Air Force Base to the west. Wild Rice: Hays County, Texas.

13. DISPOSAL CONSIDERATIONS

PESTICIDE DISPOSAL: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL: Non-refillable container. Do not reuse this container to hold materials other than pesticides or dilute pesticides (rinsate). After emptying and cleaning, it may be allowable to temporarily hold rinsate or other pesticide-related materials in the container. Contact your state regulatory agency to determine allowable practices in your state. Once cleaned, some agricultural plastic pesticide containers can be taken to a container collection site or picked up for recycling. To find the nearest site, contact your chemical dealer or manufacturer, or contact The Agricultural Container Recycling Council (ACRC) at www.acrecycle.org. Triple rinse or pressure rinse container (or equivalent) promptly after emptying. **For packages up to 5 gallons: Triple rinse as follows:** Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. **Pressure rinse as follows:** Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip. **For packages greater than 5 gallons and less than 56 gallons: Triple rinse as follows:** Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. **Pressure rinse as follows:** Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip. **For refillable containers:** Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Do not contaminate water, food, or feed by storage or disposal.

14. TRANSPORT INFORMATION

DOT Shipping Description: 119 GALLONS AND LESS: NOT REGULATED BY DOT

DOT Shipping Description: GREATER THAN 119 GALLONS: NA1993, COMBUSTIBLE LIQUID, N.O.S. (NAPHTHALENE), III, ERG GUIDE 128

U.S. Surface Freight Classification: COMPOUND, TREE OR WEED KILLING, NOI (NMFC 50320, SUB 2: CLASS: 60)

Consult appropriate ICAO/IATA and IMDG regulations for shipment requirements in the Air and Maritime shipping modes.

15. REGULATORY INFORMATION

NFPA & HMIS Hazard Ratings:		NFPA		HMIS			
		1	Health	0	Least	1	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	<u>Y</u>	Fire	<u>Y</u>	Sudden Release of Pressure	<u>N</u>
Delayed	<u>Y</u>	Reactive	<u>N</u>		

Reportable Quantity (RQ) under U.S. CERCLA: Naphthalene (CAS: 91-20-3) 100 lbs.; Glycol Ethers 1 lb.

SARA, Title III, Section 313: Naphthalene (CAS: 91-20-3); 1,2,4 Trimethylbenzene* (CAS: 95-63-6); Glycol Ethers

RCRA Waste Code: Naphthalene – U165

CA Proposition 65: WARNING: This product contains chemicals known to the State of California to cause cancer or birth defects or other reproductive harm.

CAUTION – 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.

16. OTHER INFORMATION

MSDS STATUS: Sections 8, 13 and 15 revised

PREPARED BY: Registrations and Regulatory Affairs

REVIEWED BY: Environmental Health and Safety

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