

# MATERIAL SAFETY DATA SHEET

# METRIBUZIN 4L

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:** 1-800-301-7976  
**U.S. Coast Guard National Response Center:** 1-800-424-8802

**PRODUCT NAME:** METRIBUZIN 4L  
**CHEMICAL NAME:** Metribuzin: 4-Amino-6-(1,1-dimethylethyl)-3-(methylthio)-1,2,4-triazin-5 (4H)-one  
**CHEMICAL FAMILY:** Triazinone Herbicide  
**EPA REG. NO.:** 34704-990  
**MSDS Number:** 000990-08-LPI

**MSDS Revisions:** New

**Date of Issue:** 01/21/08

**Supersedes:** New

## 2. HAZARDS IDENTIFICATION SUMMARY

**KEEP OUT OF REACH OF CHILDREN – CAUTION –** Harmful if swallowed or absorbed through skin. Avoid contact with eyes, skin or clothing.

This product is a white liquid suspension with slight odor. Primary routes of entry are skin contact, eye contact, and inhalation.

**NOTES TO PHYSICIAN:** Treat patient symptomatically. Symptoms of Poisoning: this compound does not cause any definite symptoms that would be diagnostic. Poisoning is accompanied by breathing difficulties and sedation.

## 3. COMPOSITION, INFORMATION ON INGREDIENTS

<u>Chemical Ingredients:</u>	<u>Percentage by Weight:</u>	<u>CAS No.</u>	<u>TLV (Units)</u>
Metribuzin	41.00	21087-64-9	5 mg/m <sup>3</sup>
Inert Ingredients	59.00		

## 4. FIRST AID MEASURES

**If swallowed:** Call a poison control center or doctor immediately for treatment advice. Have affected 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 for treatment advice.

**FOR A MEDICAL EMERGENCY INVOLVING THIS PRODUCT CALL: 1-800-301-7976.** Have the product label or container with you when calling a poison control center or doctor, or going for treatment.

## 5. FIRE FIGHTING MEASURES

**FLASH POINT (°F/Test Method):** > 212°F / 100°C.  
**FLAMMABLE LIMITS (LFL & UFL):** Not applicable.  
**EXTINGUISHING MEDIA:** Water, dry chemical, CO<sub>2</sub>, foam, or sand.  
**HAZARDOUS COMBUSTION PRODUCTS:** May thermally decompose under fire conditions emitting CO, SO<sub>2</sub>, and oxides of nitrogen.  
**SPECIAL FIRE FIGHTING PROCEDURES:** Wear self-contained breathing apparatus with full protective clothing. Evacuate area and fight fire from a safe distance. Minimize the amount of water used for firefighting. Equipment should be completely decontaminated after use.

**UNUSUAL FIRE AND EXPLOSION HAZARDS:** If water is used to fight fire or cool containers, contain runoff, using dikes to prevent contamination of water supplies. Avoid using heavy water streams.

## 6. ACCIDENTAL RELEASE MEASURES

### STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:

Avoid contact with spilled material or contaminated surfaces. Use recommended safety equipment when absorbing and sweeping up spilled material. Place in a covered container for reuse or disposal. Scrub spill area with soap and water. Rinse with water. Use dry absorbent material such as clay granules to absorb spilled material and collect wash solution for proper disposal in accordance with all Federal, State and Local regulations. Contaminated soil may have to be removed and disposed of.

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

**7. HANDLING AND STORAGE**

**HANDLING:** Do not breathe dusts. 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:** Store in a cool dry place and in such a manner as to prevent cross contamination with other pesticides, fertilizers, food, and feed. Store in original container and out of reach of children, preferably in a locked storage area. Protect from excessive heat. 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 made of any waterproof material, and socks plus footwear. Follow manufacturer's instructions for cleaning/ 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 the requirements listed in the Worker Protection Standard (WPS) for agri-cultural pesticides (40 CFR 170.240(d)(4-6), the handler PPE requirements may be reduced or modified as specified in the WPS.

**RESPIRATORY PROTECTION:** Under normal handling conditions no respiratory protection is needed. However, if needed to prevent respiratory irritation, NIOSH-approved respirator may be used.

**EYE PROTECTION:** Chemical goggles or shielded safety glasses.

**SKIN PROTECTION:** Wear protective clothing: long-sleeved shirts and pants, shoes plus socks. Wear chemical-resistant gloves.

	<b>OSHA PEL 8 hr TWA</b>	<b>ACGIH TLV-TWA</b>
Metribuzin	not listed	5 mg/m <sup>3</sup>

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**APPEARANCE AND ODOR:** White liquid suspension with slight odor. **SOLUBILITY:** Miscible

**SPECIFIC GRAVITY (Water = 1):** 1.16 g/ml @ 20°C **BULK DENSITY:** 9.68 lbs/gal

**VAPOR PRESSURE:** Not established **BOILING POINT:** > 212°F

**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:** Stable

**CONDITIONS TO AVOID:** Sustained temperatures above 100°F / 37.78°C; highly alkaline conditions for extended periods of time.

**INCOMPATIBILITY:** Alkalines, aldehydes, and ketones.

**HAZARDOUS DECOMPOSITION PRODUCTS:** May thermally decompose under fire conditions emitting amines, CO<sub>2</sub>, SO<sub>2</sub>, and mercaptans.

**HAZARDOUS POLYMERIZATION:** Will not occur.

**11. TOXICOLOGICAL INFORMATION**

**Acute Oral LD<sub>50</sub> (male rat):** 1865 mg/kg **Acute Dermal LD<sub>50</sub> (male / female rat):** >2000 mg/kg

**Eye Irritation (rabbit):** Minimal eye irritant **Skin Irritation (rabbit):** Slight irritant

**Inhalation LC<sub>50</sub> (rat):** 3.055 mg/L (4 hr). **Skin Sensitization (guinea pig):** Not a sensitizer

**Carcinogenic Potential:** None listed in OSHA, NTP, or IARC. ACGIH lists Metribuzin as TLV-A4: Not Classifiable as a Human Carcinogen. EPA lists Metribuzin as EPA-D: Not Classifiable as to Human Carcinogenicity.

**12. ECOLOGICAL INFORMATION**

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 wash water or rinsate. Metribuzin can leach through soil and can contaminate groundwater which may be used for drinking water. Metribuzin has been found in groundwater as a result of agricultural use. Refer to product label for additional Ground Water Advisories.

**13. DISPOSAL CONSIDERATIONS**

Do not reuse empty container. Triple rinse (or equivalent), then offer for recycling at an ACRC site (go to <http://www.acrecycle.org/> for locations) or by reconditioning, or puncture and dispose of in a sanitary landfill or by alternative methods allowed by State and local authorities, by burning. Do not contaminate water, food or feed by storage or disposal. Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

**14. TRANSPORT INFORMATION**

**DOT Shipping Description:** NOT REGULATED BY USDOT FOR SURFACE TRANSPORTATION

**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**

<b>NFPA &amp; HMIS Hazard Ratings:</b>	NFPA		HMIS
	1 Health	0 Least	1 Health
	1 Flammability	1 Slight	1 Flammability
	1 Instability	2 Moderate	1 Reactivity
		3 High	H PPE
		4 Severe	

**SARA Hazard Notification/Reporting**

<b>SARA Title III Hazard Category:</b>	Immediate	<u>Y</u>	Fire	<u>N</u>	Sudden Release of Pressure	<u>N</u>
	Delayed	<u>N</u>	Reactive	<u>N</u>		

**Reportable Quantity (RQ) under U.S. CERCLA:** Not listed  
**SARA, Title III, Section 313:** Metribuzin (CAS: 21087-64-9) 41.0%  
**RCRA Waste Code:** Not listed  
**CA Proposition 65:** Not listed

**16. OTHER INFORMATION**

**MSDS STATUS:** New

**PREPARED BY:** Registrations and Regulatory Affairs

**REVIEWED BY:** Environmental / Regulatory Services

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