

**IN CASE OF EMERGENCY DUE TO A MAJOR SPILL, FIRE OR POISONING INVOLVING THIS PRODUCT CALL DAY OR NIGHT, 1-800-561-8273 or CHEMTREC 1-800-424-9300**

**1. CHEMICAL PRODUCT AND COMPANY INFORMATION**

**MANUFACTURED FOR:**

LOVELAND PRODUCTS CANADA, INC.  
789 Donnybrook Drive • Dorchester, Ontario N0L 1G5

**24-Hour Emergency Phone:** 1-800-561-8273  
**Additional Emergency Phone (Canutec):** 1-613-996-6666 (Collect)

**CHEMICAL IDENTITY:** Trifluralin:  $\alpha, \alpha, \alpha$ -trifluoro-2, 6-dinitro-*N, N*-dipropyl-*p*-toluidine  
**PRODUCT USE:** Herbicide – Group 3  
**PCP REG. NO.:** 22744  
**MSDS Number:** 22744-12-LPI

**MSDS Revisions:** Section 1

**Date of Issue:** 09/12/12

**Supersedes:** 01/13/11

**2. HAZARDS IDENTIFICATION SUMMARY**

**KEEP OUT OF REACH OF CHILDREN – CAUTION –** Causes eye irritation. Harmful if swallowed, inhaled or absorbed through the skin. Avoid breathing dust and contact with skin, eyes or clothing. This product may cause skin sensitization in some individuals.

This product is a yellow to orange granule with a mild aromatic odor.

**3. COMPOSITION, INFORMATION ON INGREDIENTS**

<u>Chemical Ingredients:</u>	<u>Percentage by Weight:</u>	<u>CAS No.</u>	<u>TLV (Units)</u>
Trifluralin	10.00	1582-09-8	none established
Inert Ingredients, including Clay (contains Crystalline Silica)	90.00	8031-18-3 14808-60-7	0.05 mg/m <sup>3</sup>

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

**FOR A MEDICAL EMERGENCY INVOLVING THIS PRODUCT CALL: 1-800-561-8273.** 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):** Does not flash.  
**FLAMMABLE LIMITS (LFL & UFL):** Not established.  
**EXTINGUISHING MEDIA:** Use medium appropriate to surrounding fire. Dry chemical, carbon dioxide, foam, water spray or fog.  
**HAZARDOUS COMBUSTION PRODUCTS:** Oxides of nitrogen and carbon other unknown hazardous materials may be formed in a fire situation.  
**SPECIAL FIRE FIGHTING PROCEDURES:** Wear self-contained breathing apparatus and full protective gear.  
**UNUSUAL FIRE AND EXPLOSION HAZARDS:** If water is used to fight fire, contain runoff, using dikes to prevent contamination of water supplies. Do not allow water runoff to enter nearby streams, ponds or lakes.

**6. ACCIDENTAL RELEASE MEASURES**

**STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:**  
In case of leak or spill, scoop or sweep up material and place in a container for possible land application according to label use or for proper disposal. Wash the spill area with water containing a strong detergent. Check local and provincial regulations for proper disposal.  
**CAUTION:** Keep spills and cleaning runoff from flowing onto adjacent land, or into municipal sewers and open bodies of water.

**7. HANDLING AND STORAGE**

**HANDLING:** Wash hands after handling, and 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 original container only. In case of spill, contain material and dispose as waste. Do not contaminate water, food or feed by storage or disposal.

**Personal Protective Equipment: Applicators and other handlers must wear:** long sleeved shirt and long pants, chemical resistant gloves such as barrier laminate, butyl rubber  $\geq$  14 mils, nitrile rubber  $\geq$  14 mils, or Viton®  $\geq$  14 mils, and shoes plus socks. Follow manufacturer's instructions for cleaning and maintaining PPE. If no 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.

**RESPIRATORY PROTECTION:** Not normally required, if vapors exceed acceptable levels, wear a MSHA/NIOSH approved pesticide respirator with cartridges for pesticide vapors.

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

**SKIN PROTECTION:** Wear protective clothing: long-sleeved shirts and pants, hat, rubber boots with socks. Wear rubber or chemical-resistant gloves.

Crystalline Silica	<b>OSHA PEL 8 hr TWA</b> $\frac{30 \text{ mg/m}^3}{\% \text{ SiO}_2 + 2}$	<b>ACGIH TLV-TWA</b> 0.05 mg/m <sup>3</sup>
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**9. PHYSICAL AND CHEMICAL PROPERTIES**

**APPEARANCE AND ODOUR:** Yellow to orange granule with mild aromatic odor. **SOLUBILITY:** Insoluble

**SPECIFIC GRAVITY (Water = 1):** 0.769 g/ml **BULK DENSITY:** 768.9 kg/m<sup>3</sup>

**VAPOUR 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:** Stable

**CONDITIONS TO AVOID:** Excessive heat and cold.

**INCOMPATIBILITY:** Strong oxidizers and acids.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Oxides of nitrogen and carbon, fluorinated compounds, and/or other asphyxiants and unknown hazardous materials may be formed in a fire situation.

**HAZARDOUS POLYMERIZATION:** Will not occur.

**11. TOXICOLOGICAL INFORMATION**

**Acute Oral LD<sub>50</sub> (rat):** >5050 mg/kg **Acute Dermal LD<sub>50</sub> (rabbit):** >2020 mg/kg

**Eye Irritation (rabbit):** Causes moderate eye injury **Skin Irritation (rabbit):** Causes slight irritation

**Inhalation LC<sub>50</sub> (male rat):** >2.38 mg/L (4 HR). **Skin Sensitization (Guinea Pig):** Not a sensitizer

**Carcinogenic Potential:** Crystalline silica is classified as carcinogenic to humans by IARC; a potential occupational carcinogen by NIOSH; a suspected human carcinogen by ACGIH; and known to be a human carcinogen by NTP.

**12. ECOLOGICAL INFORMATION**

This pesticide is extremely toxic to freshwater marine, and estuarine fish and aquatic invertebrates including shrimp and oyster. 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 apply in a manner which will directly expose canals, lakes, streams, ponds, marshes or estuaries to aerial drift. Do not contaminate water when disposing of equipment wash waters.

**13. DISPOSAL CONSIDERATIONS**

Do not reuse containers for any purpose. Completely empty bag by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into application equipment. For disposal, empty container may be returned to the point of purchase (distributor/dealer). Follow provincial instructions for any required additional cleaning of container. Make the empty container unsuitable for further use. Dispose of the container in accordance with provincial requirements. For information on disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency. Do not contaminate water, food, or feed by storage or disposal.

**14. TRANSPORT INFORMATION**

**DOT Shipping Description:** Less than 100 pounds: NOT REGULATED BY USDOT

**DOT Shipping Description:** 100 pounds and greater: RQ ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., 9, UN3077, III (TRIFLURALIN) ERG GUIDE 171

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

**TDG Shipping Description:** NOT REGULATED (Packages will bear USDOT markings and labels)

**15. REGULATORY INFORMATION**

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

**SARA Hazard Notification/Reporting**

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

**Reportable Quantity (RQ) under U.S. CERCLA:** Trifluralin (CAS: 1582-09-8) 10 lbs.  
**SARA, Title III, Section 313:** Trifluralin (CAS: 1582-09-8) 10.0% [TRI Threshold 100 lbs.]  
**RCRA Waste Code:** Not listed  
**CA Proposition 65:** Not listed

**16. OTHER INFORMATION**

**MSDS STATUS:** Section 1 revised

**PREPARED BY:** Registrations and Regulatory Affairs

**REVIEWED BY:** Environmental Health and Safety

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