

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 IDENTIFICATION

FORMULATED 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)

PRODUCT NAME: 2,4-D; Dimethylamine salt of 2,4-Dichlorophenoxyacetic acid
PRODUCT USE: Herbicide – Group 4
PCP REG. NO.: 5931
MSDS Number: 5931-12-LPI

MSDS Revisions: Section 1

Date of Issue: 09/12/12

Supersedes: 01/07/11

2. HAZARDS IDENTIFICATION SUMMARY

KEEP OUT OF REACH OF CHILDREN – WARNING - POISON – Corrosive. Causes irreversible eye damage. Do not get in eyes or on clothing. Harmful if swallowed, inhaled, or absorbed through skin. Avoid contact with skin. Avoid breathing spray mist. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse. Do not contaminate water used for irrigation, domestic or spray purposes.

This product is amber to nearly black liquid with “fishy” amine-like odor.

Warning Statements:

NOTE TO PHYSICIAN: If in eyes specialized ophthalmologic attention may be necessary. If swallowed probable mucosal damage may contraindicate gastric lavage. There is no specific antidote; treat symptomatically.

3. COMPOSITION, INFORMATION ON INGREDIENTS

<u>Chemical Ingredients:</u>	<u>Percentage by Weight:</u>	<u>CAS No.</u>	<u>TLV (Units)</u>
Dimethylamine salt of 2,4-D	564 g/L	2008-39-1	10 mg/m ³

4. FIRST AID MEASURES

If in eyes: Hold eye open and rinse slowly and gently with water 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 do so. 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 on skin or clothing: Take off contaminated clothing. Rinse skin 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 by mouth-to-mouth, if possible. Call a poison control center or doctor for further 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: Ammonia, oxides of nitrogen, chlorine-containing compounds and other unknown hazardous materials may be formed in a fire situation.

SPECIAL FIRE FIGHTING PROCEDURES: Wear self-contained breathing apparatus with full protective clothing. Fight fire from upwind and keep all non-essential personnel out of area of intense smoke.

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

6. ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:

Contain spill and absorb with suitable absorbent, sweep up material and transfer to containers for possible land application according to label use or for proper disposal. Wash spill area with water containing strong detergent, absorb and sweep up as above. Check local, state and federal regulations for proper disposal.

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: Do not store below 25°F/-3.9°C. If frozen, warm to 70°F/21.1°C and redissolve before using by rolling or shaking the container. Store in a safe manner. Store in original container only. Store in a cool, dry place. Keep container tightly closed when not in use. 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, waterproof gloves, shoes plus socks, and protective eyewear. 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. After each day of use, clothing or PPE must no be reused until it has been cleaned. **For containers over 1 gallon and less than 5 gallons in capacity:** Mixers and loaders who do not use a mechanical system (probe and pump) to transfer the product must wear coveralls or a chemical-resistant apron in addition to other required PPE.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS: When handlers use enclosed cabs, or aircraft in a manner that meets the requirements listed in the worker Protection Standard (WPS) for agricultural pesticides [40 CFR 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 or mists become excessive, wear a 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, chemical-resistant footwear and socks. Wear rubber or chemical-resistant gloves.

	OSHA PEL 8 hr TWA	ACGIH TLV-TWA
2,4-D Acid	10 mg/m ³	10 mg/m ³
Dimethylamine	18 mg/m ³	9.2 mg/m ³

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR: Amber to nearly black liquid with "fishy" amine-like odor. **SOLUBILITY:** Miscible
SPECIFIC GRAVITY (Water = 1): 1.210 g/ml **BULK DENSITY:** 1.21 kg/L.
VAPOR PRESSURE: 0.00141 mm/Hg @ 20°C **BOILING POINT:** Not established
PERCENT VOLATILE (by volume): ±50% **EVAPORATION RATE (Butyl Acetate = 1):** 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: Extreme heat or extreme cold.

INCOMPATIBILITY: Strong bases and oxidizers.

HAZARDOUS DECOMPOSITION PRODUCTS: Ammonia, oxides of nitrogen, chlorine-containing compounds and other unknown hazardous materials may be formed in a fire situation. Incomplete combustion may lead to formation of oxides of carbon.

HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION

Acute Oral LD₅₀ (rat): 1670 mg/kg **Acute Dermal LD₅₀ (rabbit):** > 2000 mg/kg
Eye Irritation (rabbit): Corrosive; causes irreversible eye damage **Skin Irritation (rabbit):** Non-irritating
Inhalation LC₅₀ (rat): >5.28 mg/L (24 HR) **Skin Sensitization (guinea pig):** Not a sensitizer
Carcinogenic Potential: None listed in OSHA, NTP or ACGIH; IARC Group 2B (limited evidence for carcinogenicity in humans).

12. ECOLOGICAL INFORMATION

This product is toxic to aquatic invertebrates. Drift or runoff may adversely affect aquatic invertebrates and non-target plants. For terrestrial uses, 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. Do not apply where runoff is likely to occur. Do not apply when weather conditions favor drift from target area.

13. DISPOSAL CONSIDERATIONS

Do not reuse containers for any purpose. Refillable Container: For disposal, the container may be returned to the point of purchase (dealer/distributor). It must be refilled by the dealer/distributor with the same product. Container is recyclable, and is to be disposed of at a container collection site. Contact your local dealer/distributor for the location of the nearest collection site. Before taking container to the collection site: Triple or pressure-rinse the empty container, adding the rinsate to the spray tank. Make the empty container unsuitable for further use. If there is no container collection site in your area, 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

TDG Shipping Description: NOT REGULATED (Packages will bear USDOT markings and labels)
DOT Shipping Description: For containers **less** than 17.56 gallons (66.47 Liters): NOT REGULATED BY USDOT
 For containers **greater** than 17.56 gallons: RQ ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., 9, UN3082, III (2,4-D), ERG GUIDE 171
U.S. Surface Freight Classification: COMPOUND, TREE OR WEED KILLING, NOI (NMFC 50320, SUB 2: CLASS: 60)
IMDG: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2,4-D), 9, UN3082, III ERG GUIDE 171 MARINE POLLUTANT

15. REGULATORY INFORMATION

NFPA & HMIS Hazard Ratings:	NFPA		HMIS
	3 Health	0 Least	3 Health
	0 Flammability	1 Slight	0 Flammability
	0 Instability	2 Moderate	0 Reactivity
		3 High	C PPE
		4 Severe	

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

Reportable Quantity (RQ) under U.S. CERCLA: 2,4-D Acid (CAS: 94-75-7) 100 pounds.
SARA, Title III, Section 313: 2,4-D Acid (CAS: 94-75-7) 40.0% acid equivalent
RCRA Waste Code: U240; D016
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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