

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: Dimethoate: O,O-Dimethyl S-[methylcarbamoylmethyl] phosphorodithioate

PRODUCT USE: Insecticide – Group 1B

PCP REG. NO.: 9382

MSDS Number: 9382-12-LPI

MSDS Revisions: Sections 1, 4

Date of Issue: 09/12/12

Supersedes: 03/14/10

2. HAZARDS IDENTIFICATION SUMMARY

KEEP OUT OF REACH OF CHILDREN – WARNING - POISON – Harmful or fatal if swallowed, inhaled or absorbed through the skin. Avoid breathing vapour of spray mist. Use only with adequate ventilation. Do not use indoors. Avoid prolonged or repeated contact with skin. Wash thoroughly after handling and before eating or smoking. Avoid contamination of feed and food stuffs. Keep away from heat, spark and open flame. Do not use in milk processing or storage rooms. Remove livestock and poultry from buildings when spraying. Do not contaminate feed troughs, litter or drinking fountains.

This product is clear light amber to yellow liquid with a solvent and slight mercaptan odour.

Warning Statements:

NOTE TO PHYSICIAN: This product is an organophosphate (cholinesterase-inhibiting) insecticide. Atropine is antidotal and should be administered only if symptoms of cholinesterase inhibition are present. In severe cases Pralidoxime chloride (2-PAM; PROTOPAM) may be given as an adjunct to atropine. Use according to label directions. Monitor serum and RBC cholinesterase. Morphine, theophylline, aminophylline, phenothiazines, reserpine, furosemide, or ethacrynic acid are contraindicated in organophosphates poisonings. Administer intravenous fluids cautiously, if needed, to correct dehydration. Symptoms of cholinesterase inhibition include headache, dizziness, blurred vision, weakness, nausea, cramps, diarrhea, discomfort in the chest, nervousness, sweating, miosis, tearing, salivation, pulmonary edema, uncontrollable twitches, convulsions, coma, and loss of reflexes and sphincter control.

3. COMPOSITION, INFORMATION ON INGREDIENTS

<u>Chemical Ingredients:</u>	<u>Percentage by Weight:</u>	<u>CAS No.</u>	<u>TLV (Units)</u>
Dimethoate	43.50 / 480 g/L	60-51-5	not listed
Cyclohexanone	38.72	108-94-1	50 mg/m ³
Inert Ingredients*	17.78		

(*Contains ingredients that are hazardous according to the OSHA Hazard Communication Standard (29 CFR 1910.1200)

4. FIRST AID MEASURES

- If swallowed:** Call a poison control centre or doctor immediately for treatment advice. Do not give any liquid to the person. Do not induce vomiting unless told to do so by a poison control centre 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 centre or doctor for treatment advice.
 - If on skin or clothing:** Take off contaminated clothing. Rinse skin with plenty of water for 15-20 minutes. Call a poison control centre or doctor for treatment advice.
 - 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 centre or doctor for treatment advice.
- NOTE TO PHYSICIAN:** This product may cause cholinesterase inhibition. Atropine is antidotal. 2-PAM may be effective as an adjunct to Atropine. Vomiting may cause aspiration pneumonia.

FOR A MEDICAL EMERGENCY INVOLVING THIS PRODUCT CALL: 1-800-561-8273. Have the product container or label with you when calling a poison control centre or doctor, or going for treatment.

5. FIRE FIGHTING MEASURES

- FLASH POINT (°F/Test Method):** >109.0°F / >42.8°C (PMCC)
- FLAMMABLE LIMITS (LFL & UFL):** Not established
- EXTINGUISHING MEDIA:** Dry chemical, carbon dioxide, foam, water spray or fog.
- HAZARDOUS COMBUSTION PRODUCTS:** Oxides of sulfur, phosphorus-containing compounds, carbon monoxide and other unknown hazardous materials may be formed.
- 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.
- UNUSUAL FIRE AND EXPLOSION HAZARDS:** If water is used to fight fire and cool the containers, contain run-off by diking to prevent contamination of water supplies. Containers in fire may burst or explode from excessive heat.

6. ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:

For small spills, absorb with an absorbent material such as pet litter. Sweep up and transfer to containers for possible land application according to label use or for proper disposal. Wash the spill with water containing a strong detergent, absorb with pet litter or other absorbent material, sweep up and place in a chemical container and handle in an approved manner. Check local, state and federal regulations for proper disposal. Flush the area with water to remove any residue. For large spills: contain liquid by diking the area, keep product out of water supplies. If possible, use a pump to pick up liquid, then use absorbent material to absorb any residual liquid. Place both in a chemical container. Flush area with a household bleach and water mixture (1:1) and then absorb the liquid as described above in small spills.

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 after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

STORAGE: Keep out of direct sunlight. Do not store below temperature of 39.2°F / 4°C. Do not store above 86°F / 30°C. Store in a safe manner. Store in original container only. Keep container tightly closed when not in use. Combustible liquid and vapour. Do not use, pour, spill or store near heat or open flame. 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, nitrile rubber or Viton®; chemical-resistant footwear plus socks, protective eyewear and chemical-resistant headgear for overhead exposure. For exposures in enclosed areas, a respirator with organic vapor removing cartridge and with a prefilter approved for pesticides (MSHA/NIOSH approval number prefix TC-23C), or a canister approved for pesticides (MSHA/NIOSH approval number prefix TC-14G) or a NIOSH approved respirator with an organic vapor (OV) cartridge or canister with any R, P, or HE prefilter. For exposures outdoors, dust/mist filtering respirator NIOSH/MSHA approval number prefix TC-21C, or a NIOSH approved respirator with any R, P, of HE filter. 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 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 used closed systems, enclosed cabs, or aircraft in a manner that meets with 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 exceed acceptable levels, wear a NIOSH approved pesticide respirator.

EYE PROTECTION: Chemical goggles or shielded safety glasses.

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

	OSHA PEL 8 hr TWA	ACGIH TLV-TWA
Cyclohexanone	200 mg/m ³	50 mg/m ³ (Skin)
Xylene	435 mg/m ³	434 mg/m ³
Cumene	245 mg/m ³ (Skin)	246 mg/m ³
Trimethylbenzene	not listed	123 mg/m ³

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOUR: Clear light amber to yellow liquid with a solvent and slight mercaptan odour.

SOLUBILITY: Emulsifies

SPECIFIC GRAVITY (Water = 1): 1.09 g/ml

BULK DENSITY: 1.09 kg/L

pH: 3.59 (5% solution)

VAPOUR PRESSURE: Not established

BOILING POINT: Not established

PERCENT VOLATILE (by volume): 27.5%

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 ignition sources.

INCOMPATIBILITY: Strong oxidizers, acids and bases.

HAZARDOUS DECOMPOSITION PRODUCTS: Thermal decomposition – oxides of sulfur, oxides of nitrogen, phosphorus-containing compounds and other unknown hazardous materials may be formed in a fire situation. Incomplete combustion may lead to formation of carbon monoxide and/or other asphyxiants.

HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION

Acute Oral LD₅₀ (rat): 425 mg/kg

Eye Irritation (rabbit): Substantial but temporary eye injury

Inhalation LC₅₀ (male rat): >5.34 mg/L (4 hr).

Carcinogenic Potential: Nothing listed in OSHA, NTP, IARC, or ACGIH.

Acute Dermal LD₅₀ (rabbit): 2020 mg/kg

Skin Irritation (rabbit): Slight irritant

Skin Sensitization (Guinea Pig): Not established.

12. ECOLOGICAL INFORMATION

Dimethoate is toxic to wildlife and aquatic invertebrates. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water by cleaning equipment or disposal of wastes. Dimethoate is highly toxic to bees exposed to direct treatment or to residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area.

13. DISPOSAL CONSIDERATIONS

Do not reuse containers for any purpose. This product is acutely hazardous. 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: ORGANOPHOSPHORUS PESTICIDE, LIQUID, TOXIC, FLAMMABLE, (DIMETHOATE, CYCLOHEXANONE), 6.1, (3), UN3017, III.

US DOT Shipping Description: RQ ORGANOPHOSPHORUS PESTICIDE, LIQUID, TOXIC, FLAMMABLE, (DIMETHOATE, CYCLOHEXANONE), 6.1, (3), UN3017, III, RQ (DIMETHOATE) ERG GUIDE 131

IMDG Shipping Description: ORGANOPHOSPHORUS PESTICIDE, LIQUID, TOXIC, FLAMMABLE, (DIMETHOATE, CYCLOHEXANONE), 6.1, (3), UN3017, III MARINE POLLUTANT, ERG GUIDE 171

U.S. Surface Freight Classification: INSECTICIDES OR FUNGICIDES, INSECT OR ANIMAL REPELLENTS, NOI, OR VERMIN EXTERMINATORS, ANIMAL OR POULTRY, NOI; POISON (NMFC 102100; CLASS 77.5)

Consult appropriate ICAO/IATA regulations for shipment requirements in the Air shipping mode.

15. REGULATORY INFORMATION

NFPA & HMIS Hazard Ratings:	NFPA		HMIS
	2 Health	0 Least	2 Health
	2 Flammability	1 Slight	2 Flammability
	1 Instability	2 Moderate	1 Reactivity
		3 High	I 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: Dimethoate (CAS: 60-51-5): 10 pounds; Cyclohexanone (CAS: 108-94-1) 5000 pounds

SARA, Title III, Section 313: Dimethoate (CAS: 60-51-5) 43.5%; 1,2,4 Trimethylbenzene (CAS: 95-63-6) 3.2% maximum; Xylene (CAS: 1330-20-7) 0.3% maximum; Cumene (CAS: 98-82-8) 0.2% maximum

RCRA Waste Code: P044

CA Proposition 65: Not listed.

16. OTHER INFORMATION

MSDS STATUS: Sections 1 and 4 revised

PREPARED BY: Registrations and Regulatory Affairs

REVIEWED BY: Environmental Health and Safety

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