

MATERIAL SAFETY DATA SHEET

DIMETHOATE 2.67 EC

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: DIMETHOATE 2.67 EC
CHEMICAL NAME: Dimethoate; (O,O-Dimethyl-S-(N-methylcarbamoylmethyl) phosphorodithioate)
CHEMICAL FAMILY: Organophosphate Insecticide
EPA REG. NO.: 34704-489
MSDS Number: 000489-11-LPI

MSDS Revisions: Sections 3, 4, 7

Date of Issue: 08/05/11

Supersedes: 01/08/10

2. HAZARDS IDENTIFICATION SUMMARY

KEEP OUT OF REACH OF CHILDREN – WARNING - AVISO – Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle (If you do not understand the label, find someone to explain it to you in detail.) **WARNING:** May be fatal if swallowed. Causes substantial but temporary eye injury. Harmful if absorbed through skin. Do not get in eyes or on clothing. Avoid contact with skin.

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

3. COMPOSITION, INFORMATION ON INGREDIENTS

<u>Chemical Ingredients:</u>	<u>Percentage by Weight:</u>	<u>CAS No.</u>	<u>TLV (Units)</u>
Dimethoate	30.50	60-51-5	not listed
Cyclohexanone	34.00	108-94-1	50 mg/m ³
Other Ingredients*	35.50		

(*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 center 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 center or doctor. Do not give anything by mouth to an unconscious person.

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 treatment advice.

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 further 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 center or doctor for treatment advice.

NOTE TO PHYSICIAN: Atropine is antidotal. Pralidoxime chloride may be effective as an adjunct to atropine. This product may cause cholinesterase inhibition. Aspirated cyclohexanone may cause severe lung damage. If swallowed stomach contents should be evacuated quickly in a manner which avoids aspiration. Otherwise treatment should be directed at the control of symptoms and clinical condition. Contains petroleum distillates. May pose an aspiration pneumonia hazard.

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.

5. FIRE FIGHTING MEASURES

FLASH POINT (°F/Test Method): 109°F/42.8°C (PMCC)

FLAMMABLE LIMITS (LFL & UFL): None 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 for disposal. 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 clothing/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, well-ventilated area. Avoid temperatures below 32°F / 0°C and above 90°F / 32.2°C. Do not contaminate water, food or feed by storage or disposal.

Personal Protective Equipment: Mixers, loaders, applicators, flaggers, and other handlers must wear: long-sleeved shirt and long pants, shoes plus socks, chemical-resistant gloves, goggles or face shield, NIOSH-approved dust/mist filtering respirator with MSHA/NIOSH approval number prefix TC-21C or a NIOSH-approved respirator with any R, P, or HE filter, chemical-resistant apron when mixing, loading, cleaning up spills, or equipment. 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. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS: Mixers and loaders supporting aerial application to alfalfa, cotton, soybeans, corn, safflower, sorghum, and wheat must use a closed system that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4)]. The system must be capable of removing the pesticide from the shipping container and transferring it into mixing tanks and/or application equipment. At any disconnect point, the system must be equipped with a dry disconnect or dry couple shut-off device that is warranted by the manufacturer to minimize drippage to no more than 2 ml per disconnect. In addition, mixers and loaders must: wear the personal protective equipment required on this labeling for mixers/loaders, except no respirator is required; wear protective eyewear, if the system operates under pressure; and be provided and have immediately available for use in an emergency, such as a broken package, spill, or equipment breakdown, chemical resistant footwear and a respirator of the type specified in the PPE section of this labeling. Pilots must use an enclosed cockpit that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(6)]. Pilots need not wear the PPE required in this labeling for applicators, but must wear at least a long-sleeve shirt, long pants, shoes, and socks. When handlers use closed systems, or enclosed cabs in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides (40 CFR 170.240(d)(4-5), 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 with cartridges for pesticide vapors.

EYE PROTECTION: Chemical goggles or shielded safety glasses.

SKIN PROTECTION: Wear protective clothing: long-sleeved shirts and pants, hat, chemical-resistant footwear plus 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 (BEI)*
Cumene	245 mg/m ³ (Skin)	246 mg/m ³
Trimethylbenzene	not listed	123 mg/m ³

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR: Clear, light amber to yellow liquid with solvent and mild mercaptan odor.

SPECIFIC GRAVITY (Water = 1): 1.01 g/ml

VAPOR PRESSURE: 28.44 mm Hg

PERCENT VOLATILE (by volume): ±65%

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.

SOLUBILITY: Emulsifies

pH: 3.87 (5% solution)

BULK DENSITY: 8.43 lbs/gal.

BOILING POINT: Not established

EVAPORATION RATE: < 1

10. STABILITY AND REACTIVITY

STABILITY: Stable

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.

CONDITIONS TO AVOID: Excessive heat and ignition sources.

11. TOXICOLOGICAL INFORMATION

Acute Oral LD₅₀ (rat): 425 mg/kg

Eye Irritation (rabbit): Substantial but temporary eye injury

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

Carcinogenic Potential: None 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. 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. 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

PESTICIDE DISPOSAL: Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance. **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. Do not contaminate water, food or feed by storage or disposal.

14. TRANSPORT INFORMATION

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

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 and IMDG regulations for shipment requirements in the Air and Maritime shipping modes.

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	H 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: Dimethoate (CAS: 60-51-5): 10 pounds; Cyclohexanone (CAS: 108-94-1) 5000 pounds
SARA, Title III, Section 313: Dimethoate (CAS: 60-51-5) 30.5%; 1,2,4 Trimethylbenzene (CAS: 95-63-6) 9.0% maximum; Xylene (CAS: 1330-20-7) 0.8% maximum; Cumene (CAS: 98-82-8) 0.4% maximum
RCRA Waste Code: P044
CA Proposition 65: Not listed.
SARA, Title III, Section 302: Threshold Planning Quantity: 500/10000 pounds

16. OTHER INFORMATION

MSDS STATUS: Sections 3, 4, and 7 revised

PREPARED BY: Registrations and Regulatory Affairs

REVIEWED BY: Environmental/ Regulatory Services

Disclaimer and Limitation of Liability: This data sheet was developed from information on the constituent materials identified herein and does not relate to the use of such materials in combination with any other material or process. No warranty is expressed or implied with respect to the completeness or ongoing accuracy of the information contained in this data sheet, and LOVELAND PRODUCTS, Inc. disclaims all liability for reliance on such information. This data sheet is not a guarantee of safety. Users are responsible for ensuring that they have all current information necessary to safely use the product described by this data sheet for their specific purpose.