

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:

Platte Chemical Company
P.O. Box 667 • Greeley, CO 80632-0667

24-Hour Emergency Phone: 1-800-888-8372

Medical Emergencies: 1-800-301-7976

PRODUCT NAME: DIMETHOATE 400
CHEMICAL NAME: Dimethoate; (O,O-Dimethyl-S-[(methylcarbamoyl) methyl] phosphorodithioate)
CHEMICAL FAMILY: Organophosphate insecticide
EPA REG. NO.: 34704-207
MSDS Number: 000207-03b **MSDS Revisions:** Sections 1, 2, 3, 7, 8, 14 and 15

Date Of Issue: 09/05/03

Supersedes: 08/07/03

2. COMPOSITION, INFORMATION ON INGREDIENTS

<u>Chemical Ingredients:</u>	<u>Percentage by Weight:</u>	<u>CAS No.</u>	<u>TLV (Units)</u>
Dimethoate	43.50	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)

3. 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.) May be fatal if swallowed. Causes substantial but temporary eye injury. Harmful if absorbed through skin. Wear protective eyewear (goggles, face shield, or safety glasses). Do not get in eyes, on clothing, or on skin. Wash thoroughly with soap and water after handling and before eating, drinking or using tobacco. Remove contaminated clothing and wash clothing before reuse.

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

Warning Statements:

NOTE TO PHYSICIAN: This product is an organophosphate (cholinesterase-inhibiting) insecticide. Atropine is antidotal and should be given in multiple doses as necessary until the patient is atropinized. In severe cases 2-PAM may be given provided therapy begins within 24 hours of exposure. Monitor serum and RBC cholinesterase. Morphine, theophylline, aminophylline, phenothiazines, reserpine, furosemide, or ethacrynic acid are contraindicated in organophosphate 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.

4. FIRST AID MEASURES

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

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): >109°F/>42.8°C (PMCC)
FLAMMABLE LIMITS (LEL & UEL): 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 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 45°F/7.3°C. Do not store above 100°F/37.8°C. Store in a safe manner. Store in original container only. Keep container tightly closed when not in use. Keep away from children, feed and food products, fertilizer and seed.

EPA HANDLER REQUIREMENTS**Worker Protection Standard – 40 CFR 170**

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 (NIOSH/MSHA approval number prefix TC-23C). For exposures outdoors, dust/mist filtering respirator NIOSH/MSHA approval number prefix TC-21C, or a NIOSH approved respirator with any R, P, or 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 use closed systems, enclosed cabs, or aircraft in a manner that meets with 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 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): 1.09 g/ml

VAPOR PRESSURE: Not established

PERCENT VOLATILE (by volume): 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.

BULK DENSITY: 9.09-9.10 lbs/gal.

BOILING POINT: Not established

EVAPORATION RATE: Not established

SOLUBILITY: Emulsifies

pH: 3.59 (5% solution)

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

Ingestion: May be fatal if swallowed.

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. 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

Dispose of in accordance with local, state and federal regulations. Metal: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by local, state and federal authorities.
 Plastic Jugs: Triple rinse (or equivalent), then offer for recycling at an ACRC site or by reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or if allowed by local, state and federal authorities, by burning. If burned, stay out of smoke.

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 Y 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) 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.
SARA, Title III, Section 302: Threshold Planning Quantity: 500/10000 pounds

16. OTHER

MSDS STATUS: Sections 1, 2, 3, 7, 8, 14 and 15

PREPARED BY: Registrations and Regulatory Affairs

REVIEWED BY: Environmental/ Regulatory Services

***BEI@:** ACGIH has recommended a Biological Exposure Index for this substance = Acetylcholinesterase Inhibiting Pesticides

Although the information and recommendations set forth herein (hereinafter "Information") are presented in good faith and believed to be correct as of the date hereof, Platte Chemical Company makes no representations as to the completeness or accuracy thereof. Information is supplied upon the condition that the persons receiving it will make their own determination as to its suitability for their purposes prior to use. **In no event will Platte Chemical Company be responsible for any damages of any nature including, without limitation, direct, special or consequential, resulting from the use, reliance upon, or the accuracy, completeness or furnishing of such information.** NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OF ANY OTHER NATURE ARE MADE HEREUNDER WITH RESPECT TO INFORMATION OR THE PRODUCT TO WHICH INFORMATION REFERS.