

MATERIAL SAFETY DATA SHEET



CHEM-TOX 50% MALATHION EMULSIFIABLE CONCENTRATE

SECTION 1 • IDENTIFICATION

IDENTITY:
CHEM-TOX 50% MALATHION EMULSIFIABLE CONCENTRATE
EPA Registration No. **45385-43** • Product Code: **EC-516**
ACTIVE INGREDIENT CHEMICAL NAMES: Malathion (0,0,-Dimethyl-S(1,2-di(ethoxy-carbonyl)-ethyl) phosphorothioate)
CHEMICAL FAMILY: Organic Phosphates
Manufacturer's Name:
CTX/Cenol, Inc.
Address: 138 West Drive
Lodi, Ohio 44254
Prepared by: Bart Baker Date Prepared: July 16, 2008

HMIS Rating: Health: 2
Flammability: 2
Reactivity: 1
Protection: Safety Glasses & Rubber Gloves

Emergency Telephone Number:
CHEMTREC at 1-800-424-9300 or
National Pesticide Telecommunications Network at **1-800-858-7378**
Telephone Number for Information:
9 AM to 5 PM EST - 888-281-7025

SECTION 2 HAZARDOUS INGREDIENTS

HAZARDOUS COMPONENTS	CAS NUMBER	PEL	STEL	<-OSHA LIMITS ->		OPTIONAL %
				CEILING	ACGIH TLV	
Diethyl Mercaptosuccinate (Malathion)	121-75-5	15mg/m ³	0.6mg/m ³	N/A	10mg/m ³ (skin)	50
Aromatic Solvent	68477-31-6	N/A	N/A	N/A	N/A	N/A

SECTION 3 • PHYSICAL / CHEMICAL DATA

BOILING POINT: (F):156°-157° F @ 0.7MM
SOLUBILITY IN H₂O: Emulsifiable
EVAPORATION RATE: N/A
APPEARANCE / ODOR: Clear Brown liquid. Mercaptan odor.

SPECIFIC GRAVITY: (Water = 1): 1.2315 @ 20°C
VAPOR DENSITY: 2.4 mg/cm @ 20° C
MELTING POINT: 2.85° C
VAPOR PRESSURE: 3.4 x 10⁻⁶mm/hg @ 25° C

SECTION 4 • FIRE & EXPLOSION HAZARD DATA

FLASH POINT: >113° F METHOD USED: TCC
FLAMMABLE LIMITS: N/A
EXTINGUISHING MEDIA: Use water fog, foam, dry chemical or CO₂.

UNUSUAL FIRE & EXPLOSION HAZARDS: Keep work area free of hot metal and surfaces and other sources of ignition.

SPECIAL FIRE FIGHTING PROCEDURES: The use of self contained breathing apparatus is recommended for fire fighters. Water may be unsuitable as an extinguishing media, but helpful in keeping adjacent containers cool. Avoid spreading burning liquid with water used for cooling purposes.

SECTION 5 • REACTIVITY DATA

CHEMICAL STABILITY: UNSTABLE. Rapid hydrolysis in water above pH7 & below 5, will decompose if stored in contact with activated iron, tin plate, lead and copper.
CHEMICAL STABILITY: STABLE. Storage at temperatures not exceeding 25° C is recommended..
INCOMPATIBILITY: As above.
HAZARDOUS POLYMERIZATION: Will not occur.

CONDITIONS TO AVOID: Never heated above 55° C and also local heating above this temperature should be avoided.

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: Thermal decomposition (fro instance fire) may produce dimethylsulfide, sulfur dioxide, carbon monoxide, carbon dioxide, phoshoruspentoxide, nitrogen oxides.

SECTION 6 • HEALTH HAZARD DATA

HAZARDS TO HUMANS AND DOMESTIC ANIMALS - CAUTION-
ROUTES OF ENTRY: INHALATION? SKIN? INGESTION?
YES YES YES

CARCINOGENICITY: NTP? IARC MONOGRAPH? OSHA REGULATED?
NO NO N/A
FLAMMABLE LIMITS: LEL UEL
N/A N/A

SECTION 6 • HEALTH HAZARD DATA (cont.)

TOXICITY CATEGORY: Acute oral LD 50 rat 599-1400 mg/kg. Acute dermal LD 50 rat greater than 4400 mg/kg.

ENVIRONMENTAL HAZARDS: This product is toxic to fish. Do not apply directly to lakes, streams or ponds. Do not apply when weather conditions favor drift from treated areas. Do not contaminate water by cleaning of equipment or disposal of wastes. This product is highly toxic to bees exposed to direct treatment or residues on crops. Protective information may be obtained from your Agricultural Extension Service.

Harmful if swallowed. Avoid contact with skin. Avoid breathing spray mist. Wash thoroughly after handling and before eating or smoking. Avoid contamination of food and feed. Keep out of reach of domestic animals. Do not use on humans, pets or livestock.

FOR OUTDOOR APPLICATION ONLY. NOT TO BE USED INDOORS.

EMERGENCY FIRST AID TREATMENT

IF SWALLOWED: Call a physician or Poison Control Center immediately. Drink one or two glasses of water and induce vomiting by touching the back of the throat with finger. Repeat until fluid is clear. Do not induce vomiting or give anything by mouth to an unconscious person.

IF INHALED: Remove victim to fresh air. Apply artificial respiration if indicated.

IF ON SKIN: Remove contaminated clothing and wash affected area with soap and water.

IF IN EYES: Flush with plenty of water. Call physician if irritation persists.

SECTION 7 • PRECAUTIONS FOR SAFE HANDLING

IN CASE MATERIAL IS RELEASED OR SPILLED: Keep sources of ignition and hot metal surfaces isolated from the spill. Refer to NACA Disposal methods for organic phosphates and related materials. **DO NOT CONTAMINATE WATER, FOOD OR FEED BY CLEANING OF EQUIPMENT OR DISPOSAL OF WASTE.**

WASTE DISPOSAL METHOD: Spill and waste disposal procedures approved by state and local authorities must be observed.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

Open dumping is prohibited. Do not store, use, pour or spill near heat or open flame. Store in original container in locked, cool, dry cabinet or room.

SECTION 8 • CONTROL MEASURES

RESPIRATORY PROTECTION: Use a NIOSH approved cartridge respirator.

VENTILATION: LOCAL EXHAUST: General, Mechanical.

SPECIAL:

PROTECTIVE GLOVES: Impermeable gloves

EYE PROTECTION: Safety glasses or goggles.

OTHER PROTECTIVE EQUIPMENT: Impermeable aprons, the availability of eye washes and safety showers in work area is recommended.

OTHER PRECAUTIONS: Personnel should avoid inhalation of vapors. Personal contact with product should be avoided.

SECTION 9 • SHIPPING INFORMATION

Environmentally Hazardous Substances, liquid, N.O.S. (Pyrethrins)

HAZARD CLASS: Environmentally Hazardous Substance

UN NUMBER: UN3082, PGIII

DOT SHIPPING NAME: Malathion

Manufacture makes no warranty, express or implied, other than indicated on Label and MSDS. Customer assumes all risk of use and/or handling of this material when such use and / or handling is contrary to Label and MSDS

D.O.T. Hazard Classification: ORM-A

DOT LABELS REQUIRED: NO

Bill of lading Description: Chemicals, NOI

10# NA2783

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