



American International Chemical, Inc.

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MATERIAL SAFETY DATA SHEET

TETRAMETHYLTHIURAM DISULFIDE (TMTD)

SECTION 1 - CHEMICAL PRODUCT AND COMPANY INFORMATION

American International Chemical, Inc. 135 Newbury Street Framingham, MA 01701	Emergency Number: Chemtrec Information Number:	800-424-9300 703-527-3887 800-238-0001
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Revision Date: August 2007

Synonyms: Thiram Bis(Dimethylthiocarbamyl) Sulfide

CAS #: 137-26-8

DOT Hazard Class: N.O.S. (Thiram) 9 UN 3077

SECTION 2 - COMPOSITION AND INFORMATION ON INGREDIENTS

TMTD 98% MIN.

Exposure Limits

5 mg/m³ TWA - PEL

1 mg/m³ TWA - TLV

SECTION 3 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: White to grayish powder, no odor. May cause irritation to skin, eyes, respiratory system. **TOXIC**, may cause systemic poisoning if ingested. Is a mutagenic in some test systems. Will cause adverse reproduction effects and teratogenic effects at temperatures above 297°F. May decompose and toxic products may be formed.

POTENTIAL HEALTH EFFECTS:

Inhalation: Dust may cause mucous membrane and respiratory irritation with coughing, choking and labored breathing.

Eye Contact: May cause irritation based on a study in rabbits.

Skin Contact: May cause irritation and possible sensitization. May be slightly absorbed through the skin based on animal studies.

Ingestion: May cause systemic poisoning with symptoms of weakness, nausea, vomiting, diarrhea, confusion, dizziness, delirium, tremor, hallucinations, ataxia, ascending paralysis, hypothermia and

peripheral neuropathy (pain, numbness and weakness of the extremities). Respiratory paralysis and death may occur.

CHRONIC EFFECTS OF OVEREXPOSURE: Thiram has been found to be mutagenic in some test systems and to cause adverse reproductive effects in laboratory animals.

OTHER TOXIC EFFECTS: An antabuse-like reaction with flushing, sweating, headache, weakness and hypotension may occur when ethyl alcohol (alcoholic beverages) is ingested following exposure to this material.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Individuals with chronic respiratory and skin diseases may be at increased risk from exposure to this material.

CARCINOGENICITY: Not listed under OSHA, IARC, or NTP.

SECTION 4 - FIRST AID MEASURES

Ingestion: If conscious, give 1-2 glasses of water to dilute and induce vomiting. Never give anything by mouth to or induce vomiting in a person who is unconscious or convulsing. Get immediate medical attention.

Skin Contact: Wash contact area thoroughly with soap and water until not traces of the chemical remain. Remove contaminated clothing immediately and launder before reuse. Get medical attention if rash develops.

Eye Contact: Immediate flush eye with water for at least 15 minutes while lifting upper and lower lids. Get immediate medical attention.

Inhalation: Remove victim to fresh air. If breathing has stopped, give artificial respiration. If breathing is difficult, have qualified personnel administer oxygen. Get immediate medical attention.

SECTION 5 - FIRE FIGHTING MEASURES

Flash Point: 302°F

Flammable Limits: 30 g/m³ as dust @ 270°C

Extinguishing Media: Use media that is appropriate to treat surrounding fire. Not defined as flammable or combustible. Product may support combustion under fire conditions. Use carbon dioxide, dry chemicals, foam, water or water fog.

Special Fire Fighting Procedures:

Evacuate area of all non-emergency personnel. Firefighters should wear full emergency equipment and NIOSH approved positive pressure self-contained breathing apparatus. Fight fire from upwind and cool exposed intact containers and structures with water spray or stream at maximum range. Decontaminate all protective equipment after use, prevent skin contact. This product is toxic to fish. Contain all water run-off with diking.

Unusual Fire Explosion Hazard: Decomposition products are toxic.

Auto Ignition Temperature: Not Applicable

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Isolate hazard area and deny entry to unnecessary or unprotected personnel.
Contain spill, sweep up, collect and place in a disposal container. Avoid runoff into storm sewers and ditches which lead to waterways. Report spill as required by local and state authorities.

SECTION 7 - HANDLING AND STORAGE

Review Section 8 before handling.

Avoid contact with skin, eyes and clothing. Avoid breathing dust. Use normal personal hygiene and housekeeping. Store in cool dry area away from other incompatible materials. **Review Section 10.**

SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

RESPIRATORY PROTECTION: Use NIOSH/MSHA approved respirators.

VENTILATION REQUIREMENTS: Ventilate as necessary to eliminate dust from the work area.

SKIN AND EYE PROTECTION:

Use rubber or neoprene gloves, chemical goggles and clothing sufficient to protect skin from dust.

WORK, HYGIENIC PRACTICES:

As required to protect skin and eyes from dust. Safety showers and/or eye wash should be available. Do not leave food or smoke in work area. Wash thoroughly and remove or clean any contaminated clothing.

EXPOSURE GUIDELINES: 5 mg/m³ TWA - PEL
1 mg/m³ TWA-TLV

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point: Decomposes

Vapor Pressure (MM Hg): Negligible

Vapor Density (AIR=1): Not Applicable

Specific Gravity (H₂O=1): 1.40

Percent Volatile by Volume (%): 0

Melting Point: 147°C (297°F)

Evaporation Rate (Butyl Acetate=1): Not Applicable

Solubility in Water: Negligible

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AMERICAN INTERNATIONAL CHEMICAL, INC. 800 238 0001

pH: No Data Available

SECTION 10 - STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable under normal temperature of pressure.

HAZARDOUS POLYMERIZATION: Will not occur under normal conditions.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon disulfide and oxides of carbon, nitrogen and sulfur.

KEEP AWAY FROM: Excessive heat, acids, oxidizers and copper.

SECTION 11 - TOXICOLOGICAL INFORMATION

LD₅₀

560 mg/kg Oral Rat

> 5 gm/kg Dermal Rat

> 2 gm/kg Dermal Rabbit _____

SECTION 12 - ECOLOGICAL INFORMATION

Not available

SECTION 13 - DISPOSAL CONSIDERATIONS

Dispose of in accordance with all federal, state and local regulations.

RCRA WASTE #: U244

SECTION 14 - TRANSPORTATION INFORMATION

DOT HAZARD CLASS:

Environmentally Hazard Substance: Solid, N.O.S. (Thiram), 9, UN 3077, PG III, Class 9

SECTION 15 - REGULATORY INFORMATION

CERCLA REPORTABLE REQUIREMENTS: (RQ)101 lbs

SARA TITLE III INFORMATION:

Section 302 Extremely hazardous Substance: Unlisted

Section 313 Toxic Chemicals: Unlisted

Section 311/312 Hazard Category: Acute health, chronic health.

SECTION 16 - OTHER INFORMATION

HMIS Hazard Rating

Health 2

Flammability 1

Reactivity 1

0 = Least 1 = Slight

2 = Moderate 3 = High

4 = Extreme

DOT Hazard Label: Miscellaneous - Class 9

Reason for issue: Changed Date

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