

Material Safety Data Sheet

TOLCIDE MBT

Date Prepared: 11/20/06

Supersedes Date: 12/10/03

1. PRODUCT AND COMPANY IDENTIFICATION

RHODIA INC. RHODIA NOVECARE CN7500 8 Cedar Brook Drive Cranbury NJ 08512-7500

Emergency Phone Numbers:

FOR EMERGENCIES INVOLVING A SPILL, LEAK, FIRE, EXPOSURE OR ACCIDENT CONTACT: CHEMTREC (800-424-9300 within the United States or 703-527-3887 for international collect calls) or Rhodia CAERS (Communication and Emergency Response System) at 800-916-3232.

19.13

For Product Information:

(888) 776-7337

EPA FIFRA Registration Number:

33677-1

Chemical Name or Synonym:

THIOCYANIC ACID, METHYLENE ESTER; METHYLENE BIS(THIOCYANATE)

Molecular Formula:

 $C_3H_2N_2S_2$

2. HAZARDS IDENTIFICATION

A. EMERGENCY OVERVIEW:

Physical Appearance and Odor:

white to pale yellow crystalline solid, sharp, irritating odor.

Warning Statements:

DANGER! HIGHLY TOXIC IF INHALED. TOXIC IF SWALLOWED. CORROSIVE TO SKIN AND EYES. CAUSES SEVERE SKIN AND EYE BURNS. POSSIBLE SENSITIZER. May cause nervous system, liver, kidney, respiratory tract and gastrointestinal tract effects based on animal data.

B. POTENTIAL HEALTH EFFECTS:

Acute Eve:

Will cause corrosive effects (burns or irreversible damage) to the eyes. Can cause redness, burns, tearing.

Acute Skin:

Corrosive. Severe irritant. Harmful if absorbed through skin. Can cause redness, burns, sensitization,

Acute Inhalation:

Extremely toxic if inhaled. Causes coughing, shortness of breath, chest pain, significant respiratory tract irritation.

Acute Ingestion:

Toxic if ingested. Can cause irritation, nausea, vomiting.

Chronic Effects:

(See Section 11-Chronic for a discussion of animal studies.).

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component CAS Reg Number OSHA Hazard WT/WT
METHYLENE BIS(THIOCYANATE) 6317-18-6 Y ~ 99

4. FIRST AID MEASURES

FIRST AID MEASURES FOR ACCIDENTAL:

Eye Exposure:

Hold eyelids open and flush with a steady, gentle stream of water for at least 15 minutes. Seek immediate medical attention.

Skin Exposure:

In case of contact, immediately wash with plenty of soap and water for at least 15 minutes. Seek medical attention. Remove contaminated clothing and shoes while washing. Clean contaminated clothing and shoes before re-use or discard if they cannot be thoroughly cleaned.

Inhalation:

Remove victim from immediate source of exposure and assure that the victim is breathing. If breathing is difficult, administer oxygen, if available. If victim is not breathing, administer CPR (cardio-pulmonary resuscitation). Seek immediate medical attention.

Ingestion:

NEVER attempt to induce vomiting. Consult a doctor if necessary. Wash out mouth with water and keep at rest. Seek immediate medical attention.

MEDICAL CONDITIONS POSSIBLY AGGRAVATED BY EXPOSURE:

Skin, liver, kidney disease may be aggravated by exposure.

NOTES TO PHYSICIAN:

All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

Treat symptomatically. No specific antidote available.

5. FIRE FIGHTING MEASURES

FIRE HAZARD DATA:

Flash Point:

Not Applicable

Extinguishing Media:

Recommended: dry chemical, foam, water fog, carbon dioxide, Use extinguishing method suitable for surrounding fire

Special Fire Fighting Procedures:

Firefighters should wear NIOSH/MSHA approved self-contained breathing apparatus and full protective clothing. Stay upwind; keep out of low areas. Personnel involved with handling this product should be thoroughly familiar with its hazards and the proper methods for fire fighting.

Unusual Fire and Explosion Hazards:

Hazardous Decomposition Materials (Under Fire Conditions): oxides of nitrogen oxides of sulfur oxides of carbon

Hazardous Decomposition Materials (Under Fire Conditions):

oxides of nitrogen oxides of sulfur oxides of carbon

6. ACCIDENTAL RELEASE MEASURES

Evacuation Procedures and Safety:

Personnel handling this material should be thoroughly trained to handle spills and releases. Wear appropriate protective gear for the situation. See Personal Protection information in Section 8.

Containment of Spill:

Follow procedure described below under Cleanup and Disposal of Spill. Dike area to prevent runoff. Collect and contain contaminated absorbent and dike material for disposal.

Cleanup and Disposal of Spill:

Shovel up into an appropriate closed container (see Section 7: Handling and Storage). Avoid creation of dusty conditions. The material should be properly packaged and disposed of in compliance with applicable regulations.

Environmental and Regulatory Reporting:

Product may be harmful to aquatic life in very low concentrations. Do not flush to drain. Runoff from fire control or dilution water may cause pollution. Prevent material from entering public sewer system or any waterways. Spills may be reportable to the National Response Center (800-424-8802) and to state and/or local agencies.

7. HANDLING AND STORAGE

Minimum/Maximum Storage Temperatures:

< 50 C (122 F)

Handling:

WARNING]] Exercise care in handling and using this product. Personnel handling this product should be thoroughly trained as to its hazards. Do not breathe dusts. Avoid direct or prolonged contact with skin and eyes.

READ LABEL CAREFULLY BEFORE USE. KEEP OUT OF REACH OF CHILDREN AND ANIMALS. Do not release dusts directly to the atmosphere.

Storage:

Store in an area that is clean, dry, well-ventilated, cool, Keep out of direct sunlight. Store away from; acids, bases, oxidizers, Container material to avoid: mild steel.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Introductory Remarks:

These recommendations provide general guidance for handling this product. Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application. While developing safe handling procedures, do not overlook the need to clean equipment and piping systems for maintenance and repairs. Waste resulting from these procedures should be handled in accordance with Section 13: Disposal Considerations.

Assistance with selection, use and maintenance of worker protection equipment is generally available from equipment manufacturers.

Exposure Guidelines:

No exposure limits were found for this product or any of its ingredients.

Engineering Controls:

Where engineering controls are indicated by use conditions or a potential for excessive exposure exists, the following traditional exposure control techniques may be used to effectively minimize employee exposures.

Respiratory Protection:

Respirators are required. Select NIOSH/MSHA approved equipment based on actual or potential airborne concentrations and in accordance with the appropriate regulatory standards and/or industrial recommendations.

Eye/Face Protection:

Eye and face protection requirements will vary dependent upon work environment conditions and material handling practices. Appropriate ANSI Z87 approved equipment should be selected for the particular use intended for this material.

Eye contact should be prevented through use of chemical safety glasses with side shields or splash proof goggles. An emergency eye wash must be readily accessible to the work area. Face contact should be prevented through use of a face shield.

Skin Protection:

Skin contact should be prevented through use of suitable protective clothing, gloves and footwear, selected with regard for use conditions and exposure potential. Consideration must be given both to durability as well as permeation resistance.

Work Practice Controls:

Personal hygiene is an important work practice exposure control measure and the following general measures should be taken when working with or handling this material:

- (1) Do not store, use, and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored.
- (2) Wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics, or using the toilet.
- (3) Wash exposed skin promptly to remove accidental splashes or contact with this material.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical properties here represent typical properties of this product. Contact the business area using the Product Information phone number in Section 1 for its exact specifications.

Physical Appearance:

white to pale yellow crystalline solid.

Odor:

sharp, irritating odor.

:Hq

3 to 5 at 100 wt/wt%.

Specific Gravity:

Not Available

Density:

1.045 g/ml at 20 C (68 F).

Water Solubility:

slightly soluble

Melting Point Range:

105 to 106 C (221 to 223 F)

Boiling Point Range:

Not Available

Vapor Pressure:

Not Available

Vapor Density:

Not Available

Octanol/Water Partition Coefficient:

2.2

Molecular Weight:

130.2

10. STABILITY AND REACTIVITY

Chemical Stability:

This material is stable under normal handling and storage conditions described in Section 7.

Conditions To Be Avoided:

heat

Materials/Chemicals To Be Avoided:

strong bases strong acids strong oxidizing agents

Decomposition Temperature Range:

> 110 C (230 F)

The Following Hazardous Decomposition Products Might Be Expected:

Decomposition Type: thermal

oxides of nitrogen oxides of sulfur oxides of carbon

Hazardous Polymerization Will Not Occur.

Avoid The Following To Inhibit Hazardous Polymerization:

none known

11. TOXICOLOGICAL INFORMATION

Acute Eye Irritation:

Toxicological Information and Interpretation:

eye - eye irritation, rabbit. Corrosive. This material is expected to cause significant irritation to the eyes.

Acute Skin Irritation:

Toxicological Information and Interpretation:

skin - sensitization, guinea pig. Sensitizing.

skin - skin irritation, rabbit. Corrosive. This material is expected to cause significant irritation to the skin.

Acute Dermal Toxicity:

Toxicological Information and Interpretation:

LD50 - lethal dose 50% of test species, > 2000 mg/kg, rat.

Acute Respiratory Irritation:

Toxicological Information and Interpretation:

lung - lung irritation (qualitative), **. This material is expected to cause significant irritation to the respiratory tract.

Acute Inhalation Toxicity:

Toxicological Information and Interpretation:

LC50 - lethal concentration 50% of test species, 0.032 mg/l/4 hr, rat. Very Toxic.

Acute Oral Toxicity:

Toxicological Information and Interpretation:

LD50 - lethal dose 50% of test species, 81.4 mg/kg, rat. Toxic.

Chronic Toxicity:

This product does not contain any substances that are considered by OSHA, NTP, IARC or ACGIH to be "probable" or "suspected" human carcinogens.

Toxicological Information and Interpretation - MUTAGENICITY, **. Ames Test: Negative. - MUTAGENICITY, **. Chinese hamester ovary cells (chromosomal aberrations): Positive. - MUTAGENICITY, **. Mouse micronucleus (in vivo): Negative. - MUTAGENICITY, **. Mouse Lymphoma Positive. - TERATOGENICITY, rabbit. Reported not to be a teratogen. - TERATOGENICITY, rat. Reported not to be a teratogen. - SUB-CHRONIC EXPOSURE, 2 mg/kg/90 days, rat. no-effect level (NOEL).

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12. ECOLOGICAL INFORMATION

Ecotoxicological Information:

May cause adverse environmental impact if material reaches waterways.

Ecotoxological Information and Interpretation:

EC50 - effective concentration 50% of test species, 0.07 mg/l/48 hr, Daphnia.

LC50 - lethal concentration 50% of test species, 0.24 mg/l/96 hr, rainbow trout (Oncorhynchus mykiss).

LC50 - lethal concentration 50% of test species, 0.21 mg/l/96 hr, bluegill sunfish (Lepomis macrochirus).

EC50 - effective concentration 50% of test species, 0.012 mg/l/72 hr, algae.

Chemical Fate Information:

The material is not readily biodegradable (OECD 301E). Product is not expected to bioaccumulate.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method:

Chemical additions, processing or otherwise altering this material may make the waste management information presented in this MSDS incomplete, inaccurate or otherwise inappropriate. Please be advised that state and local requirements for waste disposal may be more restrictive or otherwise different from federal laws and regulations. Consult state and local regulations regarding the proper disposal of this material. Open dumping is prohibited. Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide is a violation of Federal Law. If 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 United States Environmental Protection Agency Regional Office for guidance.

EPA Hazardous Waste - NO

14. TRANSPORT INFORMATION

Transportation Status: IMPORTANT! Statements below provide additional data on listed DOT classification.

The listed Transportation Classification does not address regulatory variations due to changes in package size, mode of shipment or other regulatory descriptors.

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US DOT:

Hazard Class..... 8 (6.1)
Shipping Name:
CORROSIVE SOLID, TOXIC, N.O.S.
Technical Shipping Name:
METHYLENE BIS THIOCYANATE
ID Number...... UN2923
Packing Group.... II
Labels......... CORROSIVE AND POISON
Emergency Guide #.... 154
DOT Marine Pollutants:

The ingredients listed below have been determined to be present in concentrations that make them reportable as regular or severe DOT Marine Pollutants.

Ingredient/Chemical Family Marine Pollutant Class METHYLENE BIS(THIOCYANATE) DOT MARINE POLLUTANT

TDG:

Hazard Class..... 8 (6.1)

Shipping Name: CORROSIVE SOLID, TOXIC, N.O.S.

Technical Shipping Name: METHYLENE BIS THIOCYANATE

ID Number...... UN2923 Packing Group.... II

IMO:

Hazard Class..... 8 (6.1)

Shipping Name: CORROSIVE SOLID, TOXIC, N.O.S.

Technical Shipping Name: METHYLENE BIS THIOCYANATE

ID Number..... UN2923 Packing Group.... II

IATA:

Hazard Class..... 8 (6.1)

Shipping Name: CORROSIVE SOLID, TOXIC, N.O.S.

Technical Shipping Name: METHYLENE BIS THIOCYANATE

ID Number...... UN2923 Packing Group.... II

15. REGULATORY INFORMATION

Inventory Status

Inventory	Status
UNITED STATES (TSCA)	Υ
CANADA (DSL)	Υ
EUROPE (EINECS/ELINCS)	Υ
AUSTRALIA (AICS)	Y
JAPAN (MITI)	Y
SOUTH KOREA (KECL)	Υ

Y = All ingredients are on the inventory.

E = All ingredients are on the inventory or exempt from listing.

P = One or more ingredients fall under the polymer exemption or are on the no longer polymer list. All other ingredients are on the inventory or exempt from listing.

N = Not determined or one or more ingredients are not on the inventory and are not exempt from listing.

FEDERAL REGULATIONS

Inventory Issues:

This product is excluded from TSCA because it is solely for FIFRA regulated use.

SARA Title III Hazard Classes:

OAKA TILIC III TIUZUIU OIGOOCC.	
Fire Hazard	- NO
Reactive Hazard	- NO
Release of Pressure	- NO
Acute Health Hazard	- YES
Chronic Health Hazard	- NO

STATE REGULATIONS:

This product does not contain any components that are regulated under California Proposition 65.

16. OTHER INFORMATION

National Fire Protection Association Hazard Ratings--NFPA(R):

- 3 Health Hazard Rating-Serious
- 1 Flammability Rating-Slight
- 1 Instability Rating—Slight

National Paint & Coating Hazardous Materials Identification System-HMIS(R):

- 3 Health Hazard Rating-Serious
- 1 Flammability Rating-Slight
- 1 Reactivity Rating-Slight

Reason for Revisions:

Change and/or addition made to Section 11, Regulatory Review and Update.

Key Legend Information:

ACGIH - American Conference of Governmental Industrial Hygienists

OSHA - Occupational Safety and Health Administration

TLV - Threshold Limit Value

PEL - Permissable Exposure Limit

TWA - Time Weighted Average

STEL - Short Term Exposure Limit

NTP - National Toxicology Program

IARC - International Agency for Research on Cancer

ND - Not determined

RHODIA - Rhodia Established Exposure Limits

Disclaimer:

The information herein is given in good faith but no warranty, expressed or implied, is made.

** End of MSDS Document **