
INHALATION HAZARD FROM DUST, AS IT IS A PASTE,
DUST IS NOT AIRBORN UNDER NORMAL HANDLING.

3. Composition / Information on Ingredients

Ingredients	CAS No.	% by weight
Manganese Oxide	1334-43-0	30-60
Tetramethyl Thiuram Disulfide	137-26-8	1-5
Other Components below reportable levels		>30

4. First Aid Measures

- Ingestion: DO NOT INGEST. If material is ingested, immediately contact a physician or poison control center. Rinse Mouth. Ingestion not likely.
- Inhalation: Remove to fresh air. If symptoms persist, seek medical attention. Oxygen or artificial respiration if needed. If necessary, induce artificial respiration with the aid of a pocket mask equipped with a one way valve or other proper respiratory device. Do not induce mouth to mouth method if victim ingested the substance.
- Skin Contact: Wash with soap and water, consult physician if irritation develops. Remove and isolate contaminated clothing or shoes.
- Eye Contact: Flush with water at least 15 minutes. Get medical attention immediately. If symptoms persist, seek medical attention.

5. Fire Fighting Measures

- Recommended Extinguishing Agent:
Foam, Dry Chemical, Carbon Dioxide, Water Fog
- Special Fire Fighting Procedures:
Self contained breathing apparatus and protective clothing should be worn in fighting fires involving chemicals. (Professionally Trained Personnel). Do not scatter spilled material with high pressure water stream.
- Hazardous Products Formed by Fire
or Thermal Decomposition:
During fire, gasses hazardous to health may be formed.
- Unusual Fire or Explosion Hazards: None
- Compressed Gases: None
Pressure at Room Temperature: Does not apply

6. Accidental Release Measures

- Steps to be taken in cases of
spill or leak:
Wear proper personal protective equipment. Keep people away and Upwind of spill / leak. Remove any sources of ignition from the area and allow hot surfaces to cool. Return uncontaminated material to container and seal container tightly. May present a slip hazard, clean up as appropriate. Dispose of contaminated material or waste.

7. Handling and Storage

Storage: Cool, dry, storage. Keep out of reach of children. Store in closed containers.

Handling: Avoid contact with skin and eyes. Do not breathe vapors. Wear Respirator if necessary to avoid breathing vapors. This product in its purchased form does not create an inhalation hazard from dust. If grinding or sanding or any other process is performed to this compound when cured, will cause airborne particles wear appropriate respirator to avoid breathing any dust or vapors. Wear appropriate safety gear as required in work area.

8. Exposure Controls / Personal Protection

Exposure Limits Ingredients	ACGIH (TLV)	OSHA	OTHER
Manganese Oxide	0.2 mg/m3 TWA	5 mg/m3 Ceiling	
Tetramethyl Thiuram Disulfide	0.05 mg/m3 TWA inhalable fraction and vapor	5 mg/m3 PEL	

Personal Protective Equipment (PPE)

Eyes: Safety Glasses
Full face shield recommended. (during injection process)

Skin: Chemical resistant gloves

Respiratory Protection: NIOSH approved air purifying respirator with an organic vapor cartridge or canister may be permissible under circumstances where airborne concentrations are expected to exceed exposure limits.

Other Protective Clothing or Equipment:

Coveralls or other protective clothing. Safety equipment as required in area.

Work / Hygienic Practices:

Avoid contact with skin and eyes. Don't breathe vapors. Wash hands before eating.

Engineering Controls : Ventilation: Local exhaust if poorly ventilated area or in confined spaces.
General ventilation recommended.

NOTE: THIS PRODUCT IN ITS PURCHASED FORM DOES NOT PRESENT AN INHALATION HAZARD FROM OR DUST, AS IT IS A PASTE, DUST IS NOT AIRBORN UNDER NORMAL HANDLING.

9. Chemical and Physical Properties

Appearance: Dark Brown paste
 Odor: Amine Odor
 pH: 8.7 (cured)
 Solubility in Water: Insoluble
 Specific Gravity: 1.76 (H₂O =1)
 Evaporation Rate: Not Applicable
 Boiling Point: Not Applicable
 Melting Point: Not Applicable
 Vapor Pressure: Not Applicable
 Vapor Density: Not Established
 VOC Content: None
 Flash Point: >201^o F.
 Mixed with part two : Greater than 340°F Method: Cleveland Open Cup

Flammable Limits:

LEL: Not Established
 UEL: Not Established

10. Stability and Reactivity

Stability: Stable
Hazardous Polymerization: Will not occur
Hazardous Decomposition
Or By-Products: During fire, gasses hazardous to health may be formed.
Incompatibility: Strong Oxidizers and Some Acids

11. Toxicology Information

Primary Routes of Entry: Inhalation and eye contact.
Signs and Symptoms of Overexposure: **Inhalation:** avoid breathing vapors, acute inhalation toxicity
Eyes: irritation
Skin : avoid contact with skin, acute dermal toxicity

Existing Conditions Aggravated
by Exposure: None Known

Carcinogenicity

NTP: None
IARC: Tetramethyl Thiuram Disulfide, Group 3 IARC
OSHA Regulated: NO

Toxicity : Not Determined

Acute Health Hazards: **Skin:** avoid contact with skin, acute dermal toxicity.
Inhalation: avoid breathing vapors, acute inhalation toxicity
Eyes: Irritation

Chronic Health Hazards: Due to lack of data the classification is not possible.

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12. Ecological Information

Not expected to be harmful to aquatic organisms. No information is available for the degradability, bioaccumulative potential, or mobility in soil of this product.

13. Disposal Considerations**Recommended Methods of Disposal:**

RCRA 40 CFR 261 Classification : This product as purchased does not fall under current US EPA RCRA definitions of Hazardous Waste. It is recommended that this product in the purchased form be disposed of as a hazardous waste. Certain state regulations could affect whether a material is considered a hazardous waste upon disposal. It must also be noted that a material can become a hazardous waste if it is mixed with or comes in contact with a hazardous substance during use. Under RCRA it is the responsibility of user of a product to determine at the time of disposal, whether a material should be classified as a hazardous waste.

14. Transport Information

DOT (49 CFR 172): Not Regulated

IATA : Not Regulated

Liquid / Solid (per ASTM D 4359-90) : Material is a Liquid

15. REGULATORY INFORMATION

CERCLA HAZARDOUS SUBSTANCES (40 CFR Part 302.4): Tetramethyl Thiuram Disulfide RQ 10

SARA TITLE III SECTION 302 EXTREMELY HAZARDOUS SUBSTANCES (40 CFR Part 355): This product does not contain any SARA 302 Extremely Hazardous Substances.

SARA TITLE III SECTION 311/312 HAZARDOUS CATEGORIZATION (40 CFR Part 370): Certain ingredients of this product are regulated under Sara Title III Section 311/312, see section 3 of this MSDS.

SARA TITLE III SECTION 313 (40 CFR Part 372): Manganese Compounds, Tetramethyl Thiuram Disulfide

U.S. INVENTORY (TSCA): Any chemical substances (as defined in 40 CFR Part 710.2), that are contained in, or used in the manufacture of this product, are reported in the EPA TSCA Inventory. (As required per 40 CFR 710.3)

CALIFORNIA PROPOSITION 65: None

EUROPEAN UNION : Tetramethyl Thiuram Disulfide: CLP Acute Toxicity 4, Aquatic Acute 1, Aquatic Chronic 1, Skin Irritant 2, Skin Sensitivity 1, Eye Irritant 2
Manganese Oxide : CLP Acute Toxicity 4, Skin Irritant 2, Eye irritant 2.

CANADA WHMIS: Ingredient Disclosure List : None

OZONE DEPLETERS: * This product is not manufactured with or contains any Class I or Class II Ozone Depleting Chemicals. (ODC's)

16. OTHER INFORMATION

The information contained in this MSDS sheet is based upon data supplied by our suppliers and data determined by us in our facilities at the time these products were formulated. We have reviewed any information that we received from sources outside our company. We believe that information to be correct but cannot guarantee its accuracy or completeness. Health and safety data in this sheet may not be adequate for all individuals and/or situations. It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations. If after reviewing this MSDS you have determined that this product poses unusual risks to you, your plant, or your plant personnel, or if you cannot comply fully with all safety recommendations, do not use this product. This product is intended for a temporary repair. The responsibility for whether or not the product is suitable for use rest solely with the purchaser. We recommend that the product be tested prior to use. Your use of this information is beyond our control, therefore, the information is provided without warranty expressed or implied. We accept no liability beyond the purchase price of the material.

Estimated HMIS® Code:

Health Hazard:	1
Flammability Hazard:	1
Physical Hazard:	0

Personal Protection: NPCA recommends that PPE codes be determined by the employer, who is familiar with the actual conditions under which chemicals in the facility are used.

Attn: Technician

(For industrial use by professionally trained personnel only) If being injected, steps should be taken to insure that the injection pressure in conjunction with pressure that may occur from gassing off of the compound does not exceed the pressure limitations of the piping system. If the compound is gassing off, gasses should be vented. Also, be aware it is quite common that the application temperature will exceed the compound flash point. Be aware of the possibility of a flash and take necessary precautions. See section 8 of SDS for personal protective equipment. Ventilation may be needed during heating/curing stage to exhaust organic vapors resulting from vaporization of certain organic agents. Always avoid direct contact with heated vapors being emitted from the compound. These vapors may be irritating to the skin, eyes and respiratory system. Read product technical data and safety information before use.

PREPARATION INFORMATION

Prepared By:	Safety Department
Company:	Jet-Lube LLC / Deacon
Revision Date:	05-01-15 Revision: E