



SOVEREIGN CHEMICAL COMPANY

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Material Safety Data Sheet

Oxoflex ZMTI Powder

1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION

Sovereign Chemical Company 1225 West Market St. Akron, Ohio 44313 Phone: 330-869-0500 Fax: 330-869-0518	Emergency Contact : Chemtrec: 1-800-424-9300 (continental USA) (1)703-527-3887 (outside continental USA)
Trade Name(s): Oxoflex ZMTI	MSDS Number: 1755
Chemical Name: Methyl-2-mercaptobenzimidazole,Zinc Salt	Synonyms: Zinc salt of 4- and 5-methyl mercaptoimidazole, 2H-Benzimidazole-2-thione,1,3-dihydro-4(or5)-methyl-,Zinc salt
Prepared By: Sovereign Chemical Company	Date of Issue: May 14, 2009 (supersedes: February 23, 2004) Revision Number: 1 Change(s): 3 year update

2. INGREDIENTS

<u>Component</u>	<u>CAS #</u>	<u>Percent</u>	<u>ACGIH (TLV)</u>	<u>OSHA (PEL)</u>	<u>OSHA STEL</u>
2H-Benzimidazole-2-thione,1,3-dihydro-4(or5)-methyl-,Zinc salt	61617-00-3	95.0	10mg/m ³ (Total Dust)	5mg/m ³ (respirable)	15mg/m ³ (total dust)
Hydrotreated Naphthenic Oil (oil treated ZMTI only)	64742-52-5	5.0	10 mg/m ³	5 mg/m ³	

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Cream colored free flowing powder. Use appropriate personal protective equipment. The product itself is not combustible, however, the product as with any powder may form explosive dust/air mixtures if high concentrations of the product dust is suspended in air. During fire situations, irritating and toxic gases may be generated. Keep from entering storm or sanitary sewers, ground water, or soil.

HMIS Rating: Health – 2, Flammability – 1, Reactivity – 0, Personal Protection Equipment - E -safety glasses, protective gloves, face mask and apron

This is recommended personal protection equipment, final personal protection equipment should be determined by the plant safety department based on the actual conditions under which the product is used.

Potential Health Effects:

Eye: Eye contact with dust may cause corneal scratching or moderate irritation to eyes. Flush with running water.

Skin Contact: No skin damage is expected if contact is infrequent. Prolonged exposure may cause skin sensitization on individual with pre-existing skin problems. Wash immediately with copious quantity of water. Seek medical attention if irritation persists.

Ingestion: Is not expected to be an important route of entry. Ingestion of small amounts is not likely to cause acute toxicity or internal damage. Drink plenty of water little at a time. Seek medical attention. Do not induce vomiting.

Inhalation: Seek immediate medical attention and rest well ventilated area.

Chronic & Carcinogenicity: . The product is not known to be carcinogenic.

Mutagenic Effects Non mutagenic – Ames Test

Reproductive Toxicity – Not available

4. FIRST AID MEASURES

Skin: Wash thoroughly with mild soap and water. Seek medical attention. Remove any contaminated clothing and launder thoroughly before reuse. If molten product contact skin, cool under a running stream of water. Get medical attention to remove any molten product than has cooled on the skin.

Eye: Flush with tepid water for at least 20 minutes holding the eyelids wide open. Seek medical attention if irritation develops.

Ingestion: Not expected to be an important route of entry into the body. Product is not toxic in small amounts. If large amounts of the product are ingested, give 2 glasses of water. Never give anything by mouth to an unconscious person. Seek medical attention.

Inhalation: Remove exposed person to fresh air. If breathing is difficult, oxygen may be administered. If breathing has stopped, artificial respiration should be started immediately. Seek medical attention.

5. FIRE FIGHTING MEASURES

Flash Point: Not determined ***LEL:*** ND ***UEL:*** ND ***Auto Ignition Temperature:*** ND

Use water, foam, carbon dioxide, or dry chemical to extinguish fires. Product in or near fires should be cooled with a water spray or fog. A self contained breathing apparatus (SCBA) operating in the positive pressure mode and full fire fighting protective clothing should be worn for combating fires. When burned the product will produce acrid dense smoke and emit carbon dioxide, carbon monoxide, oxides of sulfur, and other toxic fumes. Above its flash point the product can support combustion in the presence of air.

6. ACCIDENTAL RELEASE MEASURES

Pick up with suitable implements and return to original container if reusable. If product is not usable, place in a DOT approved container for disposal. Individuals involved in the cleanup should wear appropriate personal protective equipment. See Section 8. Unnecessary personnel should be kept clear of the area. Keep from entering storm or sanitary sewers, ground water, or soil.

7. HANDLING AND STORAGE

Storage Conditions: Store in closed containers in a dry environment. Do not store near or with strong oxidizing agents or at high temperatures.

Handling: Good housekeeping and engineering practices should be employed to prevent the generation and accumulation of dusts. Product is classified as a dust explosion hazard class II. Wet mopping or vacuuming with a unit that contains a HEPA filter is recommended to clean up any dusts generated during processing or handling. Statement on elimination of ignition sources if needed. Individuals handling this product should wear personal protective equipment specified in Section 8. Plant environment should include controls and equipment specified in Section 8.

8. EXPOSURE CONTROL - PERSONAL PROTECTION

Engineering Controls: Local exhaust ventilation should be provided. Design details for local exhaust ventilation systems may be found in the latest edition of "Industrial Ventilation: A Manual of Recommended Practices" published by the ACGIH Committee on Industrial Ventilation, P.O. Box 16153, Lansing, MI 48910. The need for local exhaust ventilation should be evaluated by a professional industrial hygienist. Local exhaust ventilation systems should be designed by a professional engineer.

Respiratory Protection: Wear a NIOSH approved dust respirator or dust mask if dust is generated.

Eye Protection: Chemical protective goggles are recommended where there is a possibility of eye contact with the product. Safety glasses with side shields are recommended for all other operations.

Protection Gloves: Neoprene or nitrile gloves should be worn to prevent irritation and possible absorption. Cloth gloves are not recommended.

Other Protection Items: Neoprene or nitrile rubber coated apron or other body covering may be required if there is a possibility of regular work clothing becoming contaminated with the product. All soiled or dirty clothing and personal protective equipment should be thoroughly cleaned before reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance/Physical State: Cream colored powder	Melt Point: >280 C
Vapor Density (Air = 1): Not applicable	Octanol/Water Partition Coefficient: Not determined
Vapor Pressure: Not applicable	Evaporation Rate BuOAC = 1: Not applicable
Odor: Slight phenolic	Specific Gravity: 1.5
% Volatile by Volume: Not volatile	Boiling Point: Not applicable
% Solubility (H₂O) : Not soluble in water at room temperature.	pH: Not determined
Other:	

10. STABILITY AND REACTIVITY

Stability /Polymerization: Stable under normal conditions. Hazardous polymerization will not occur.

Incompatibility (conditions to avoid): Avoid contact with strong oxidizing agents. Avoid ignition sources where dust is produced.

Hazardous Decomposition Products: May produce acrid dense smoke, oxides of carbon, water and trace amounts of sulfur oxides.

Special Sensitivity: None that are known.

11. TOXICOLOGICAL INFORMATION*

Acute oral toxicity LD50: 800mg/kg (rat)

Acute dermal toxicity LD50:>2000 mg/kg (Rabbit)

Acute toxicity of the dust LC50:>2.12mg/l (4hrs,Rat)

12. ECOLOGICAL INFORMATION*

Ecotoxicity in water: 6.6 mg/l (EC50),72 hrs(Algae). 10mg/l(EC50),72 hrs (Algae).

1.4 mg/l EC50 48 hrs Daphnia

5.6 gm/l LC50 96 hrs Rainbow trout

Not readily biodegradable .

13. DISPOSAL CONSIDERATIONS

Product should be disposed of in an EPA approved incinerator or landfill in accordance with all local, state, and/or federal regulations. **CERCLA (40 CFR 302.4) Reportable Quantity** Because this product is considered a zinc compound it is subjected to reporting under -Superfund 40 CFR 302.4.

14. TRANSPORTATION INFORMATION

Not hazardous under US DOT and Canadian TDG

15. REGULATORY INFORMATION

SARA Title III, Section 311/312:

Zinc compounds

SARA Title III, Section 313: Zinc compounds are subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

Zinc compound >95%

CERCLA (40 CFR 302.4) Reportable Quantity Because this product is considered a zinc compound it is subjected to reporting under -Superfund 40 CFR 302.4.

TSCA Status: This product is listed on the Toxic Substances Control Act Inventory

CERCLA (40 CFR 302.4) Reportable Quantify: Not regulated

Canadian DSL: All ingredients listed.

WHMIS Class D-2B: Materials causing other toxic effects(TOXIC)

16. OTHER INFORMATION

NE = Not Established

NA = Not Applicable

ND = Not Determined

Information contained in this MSDS sheet have been gathered from the following documents:

Chemical REG-A-DEX, J.J.Keller, September 2000

WHMIS Compliance Manual, Carswell, August 2000

Transportation of Dangerous Good, J.J.Keller, August 2000

Code of Federal Regulations, Transportation, 49 CFR Parts 100 to 185, October 1, 2000

NIOSH Pocket Guide to Chemical Hazards, June 1997

ACGIH Threshold Limit Values, 2000

HMIS Implementation Manual, 2nd Edition

Toxicity and Safe Handling of Rubber Chemicals, BRMA, 3rd Edition

ChemCheck Handbook, Specialty Technical Publishers, September 2000

IARC WEB site

NTP WEB site

* Information taken from RT Vanderbilt documents.

IMPORTANT SAFETY NOTICE: The information in the Material Safety Data Sheet relates only to the specific material(s) described herein and does not relate to use in combination with any other material or substance or in any process. We believe that the information contained herein is current as of the date of issue of this Material Safety Data Sheet. Since the use of this information and these opinions and the conditions of use of this product are not within the control of Sovereign Chemical Company, it is the user's obligation to determine the conditions of safe use of the product.

Users of this product should study this Material Safety Data Sheet and become aware of the product hazards and safety information before using the product. Users should also notify their employees, agents, and contractors of the information on this Material Safety Data Sheet and any product hazards and safety information in order to provide safe use of this product.