

# MATERIAL SAFETY DATA SHEET

## Hampford Research, Inc.

### SECTION 1. -----CHEMICAL PRODUCT AND COMPANY IDENTIFICATION-----

#### 2-MERCAPTOBENZOXAZOLE (2-MBO)

CHEMICAL FORMULA: C7 H5 N O S

CAS NUMBER: 2382-96-9

CHEMICAL NAME: 2-Mercaptobenzoxazole

REVISED: 12/15/2004

MANUFACTURER: Hampford Research, Inc  
P.O. Box 1073  
54 Veterans Blvd.  
Stratford, CT 06615

EMERGENCY TELEPHONE NUMBERS: OFFICE (203) 375-1137  
CHEMTREC (800) 424-9300

### SECTION 2. -----COMPOSITION / INFORMATION ON INGREDIENTS-----

COMPONENT	CAS #	% BY WEIGHT	EXPOSURE LIMITS
2-Mercaptobenzoxazole	2382-96-9	95-100	SEE SEC. 3

### SECTION 3. -----HAZARDS IDENTIFICATION-----

EYES: Avoid contact.

SKIN: Avoid contact.

SWALLOWING: Do not swallow.

INHALATION: Exposure Limits: PEL (OSHA) : Particulates (Not otherwise regulated)  
15 mg/m3, 8 Hr. TWA, total dust  
5 mg/m3, 8 Hr. TWA, respirable dust

### SECTION 4. -----FIRST AID MEASURES-----

#### EYE CONTACT:

In case of contact, immediately flush eyes with copious amounts of water for at least 15 minutes. Call a physician.

#### SKIN CONTACT:

In case of contact, immediately flush skin with copious amounts of water for at least 15 minutes. Wash contaminated clothing before reuse.

#### INGESTION:

If swallowed, do not induce vomiting. Immediately give 2 glasses of water. Never give anything by mouth to an unconscious person. Call a physician (Activated charcoal mixture may be administered)

#### INHALATION:

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

### SECTION 5. -----FIRE FIGHTING MEASURES-----

#### UNUSUAL FIRE AND EXPLOSION HAZARDS:

Hazardous gases/vapors produced in fire are oxides of nitrogen, sulfur and carbon. Under severe dusting conditions,

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this material may form explosive mixtures in air.

## **FIRE EXTINGUISHING MEDIA:**

Water spray, carbon dioxide, dry chemical powder or appropriate foam.

## **SPECIAL FIREFIGHTING INSTRUCTIONS:**

Keep personnel removed and upwind of fire. Wear self-contained breathing apparatus. Wear full protective equipment.

## **SECTION 6. -----ACCIDENTAL RELEASE MEASURES-----**

### **PERSONAL PROTECTIVE EQUIPMENT (PPE):**

Wear respirator, chemical safety goggles, rubber boots and heavy rubber gloves. Wear a NIOSH/MSHA approved air purifying respirator.

### **SPILL CLEANUP MEASURES:**

Remove source of heat, sparks, flame, impact, friction or electricity. Recover undamaged and minimally contaminated material for reuse and reclamation. Shovel or sweep up. Avoid raising dust. Place in a bag and hold for proper waste disposal.

## **SECTION 7. -----HANDLING AND STORAGE-----**

### **HANDLING AND STORAGE REQUIREMENTS:**

Store in a dry, cool, well ventilated place. Do not mix with oxidizers. Keep container tightly closed. Avoid dust generation.

## **SECTION 8. -----PERSONAL PROTECTION/EXPOSURE CONTROLS-----**

**EYE/FACE PROTECTION:** Wear safety glasses. Wear coverall chemical splash goggles and face shield when the possibility exists for eye and face contact from airborne material. Eye bath available.

**SKIN PROTECTION:** Wear impervious clothing such as gloves, apron, boots or whole bodysuit as appropriate. Safety shower available.

**RESPIRATORY PROTECTION:** A NIOSH/MSHA approved air purifying respirator with a dust/mist cartridge/canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits.

**ENGINEERING CONTROLS:** Use ventilation that is adequate to keep employee exposure to airborne concentrations below exposure limits. Use a NIOSH/MSHA approved air purifying respirator if there is any potential for an uncontrolled release or if exposure levels are not known.

## **SECTION 9. -----PHYSICAL AND CHEMICAL PROPERTIES-----**

**PHYSICAL STATE:** Powder

**MELTING POINT:** 192-194°C

**BOILING POINT:** N/A

**SPECIFIC GRAVITY:** N/A

**APPEARANCE:** White to light tan

**ODOR:** Slight rotten egg odor

**OTHER:** Solubility in water: insoluble.

## **SECTION 10. -----STABILITY AND REACTIVITY-----**

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**INCOMPATIBILITIES:**

Avoid strong oxidizers.

**HAZARDOUS DECOMPOSITION:**

Hazardous gases/vapors produced are nitrogen oxides, sulfur oxides and carbon oxides.

**CHEMICAL STABILITY:**

Stable at normal temperatures and storage conditions.

**HAZARDOUS POLYMERIZATION:**

Polymerization will not occur.

**SECTION 11. -----TOXICOLOGICAL INFORMATION-----****TOXICOLOGICAL EFFECTS:**

Acute effects

May be harmful by inhalation, ingestion, or skin absorption. May cause irritation. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

RTECS#: DM4882500

2-BENZOXAZOLETHIOL

TOXICITY DATA

IVN-MUS LD50: 180 MG/KG                      CSLNX\* NX#04482

ONLY SELECTED REGISTRY OF TOXIC EFFECTS OF CHEMICAL SUBSTANCES (RTECS) DATA IS PRESENTED HERE. SEE ACTUAL ENTRY IN RTECS FOR COMPLETE INFORMATION.

**SECTION 12. -----ECOLOGICAL INFORMATION-----****ECOLOGICAL EFFECTS:**

Data not yet available.

**SECTION 13. -----DISPOSAL INFORMATION-----****WASTE MANAGEMENT PROCEDURES:**

DISSOLVE OR MIX THE MATERIAL WITH A COMBUSTIBLE SOLVENT AND BURN IN A CHEMICAL INCINERATOR EQUIPPED WITH AN AFTERBURNER AND SCRUBBER. OBSERVE ALL FEDERAL, STATE AND LOCAL ENVIRONMENTAL REGULATIONS.

**SECTION 14. -----TRANSPORT INFORMATION-----****TRANSPORTATION INFORMATION:**

This is a non regulated material. There is no restriction on mode of transportation.

**-----DOT (DOMESTIC SURFACE)-----**

PROPER SHIPPING NAME:

HAZARD CLASS OR DIVISION:

UN / NA NUMBER:

PACKING GROUP:

DOT PRODUCT RQ lbs (kgs):

HAZARD LABEL (s):

HAZARD PLACARD (s):

**-----IMO / IMDG CODE (OCEAN)-----**

PROPER SHIPPING NAME:

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HAZARD CLASS DIVISION NUMBER:  
UN NUMBER:  
PACKAGING GROUP:  
HAZARD LABEL (s):  
HAZARD PACKARD (s):

-----ICAO / IATA (AIR)-----

PROPER SHIPPING NAME:  
HAZARD CLASS DIVISION NUMBER:  
UN NUMBER:  
SUBSIDIARY RISK:  
PACKING GROUP:  
HAZARD LABEL (s):  
RADIOACTIVE?:  
PASSENGER AIR - MAX QTY:  
PASSENGER PACKING INSTRUCTION:  
CARGO AIR - MAX QTY:  
CARGO AIR PACKAGING INSTRUCTION:

**SECTION 15. -----REGULATORY INFORMATION-----**

**REGULATORY INFORMATION:**

Regulatory Listings: AICS (Australia); DSL (Canada); EINECS (EEC); ENCS (Japan); PICCS (Philippines); TSCA (USA), ASIA-PAC  
TITLE III HAZARD CLASSIFICATIONS SECTIONS 311, 312  
Acute: Yes ; Chronic: No; Fire: No; Reactivity: No; Pressure: No  
EC No: 219-191-9 ENCS No. 5-3395

**SECTION 16. -----ADDITIONAL INFORMATION-----**

**ADDITIONAL INFORMATION:**

None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, OSHA or ACGIH as a carcinogen.

The data in this Material Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process. The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. Hampford Research, Inc. shall not be held liable for any damage resulting from handling or from contact with the above product. Hampford Research grants permission to make unlimited paper copies for internal use only.