

# WESTERN RESERVE CHEMICAL

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## MATERIAL SAFETY DATA SHEET

### MBDS

CAS #

**95-32-9**

#### 1. Product Identifications

Product Name: MBDS  
Chemical Name: 4-Morpholinyl-2-benzothiazole  
disulfide  
Formula:  $C_{11}H_{12}N_2OS_3$

#### 2. Physical Description/Properties

Specific Gravity: 1.51  
Melting Point, °C min. 123  
PH Value N/A  
Appearance: Light yellow soft granules or powder  
Odor: Slight Aromatic  
Taste: Slight Bitter  
Solubility: Soluble in chloroform and toluene  
Insoluble in water and petroleum ether.  
Volatiles % 0.5 max  
Ash % 1.0 max

#### 3. Hazard Information

##### **Combustible dust**

Keep away from heat, sparks and flame.  
Eye irritant-Can cause redness, tearing and swelling.  
Skin contact may cause allergic reaction. May cause skin defatting.  
Inhalation may cause upper respiratory irritation.  
Ingestion is unlikely to cause serious illness or death, but should be considered an ingestion hazard.

**4. First Aid Information**

Skin: Remove contaminated clothing and wash before re-use. Immediately wash contaminated skin with running water.

Ingestion: Immediately rinse mouth with water. Induce vomiting only at the instruction of a physician. Seek immediate medical attention.

Eyes: Flush with water for 15 minutes. Seek medical attention if irritation persists.

Inhalation: Remove person to fresh air. Get immediate medical attention if breathing is difficult or short.

**5. Handling and Storage**

Storage: Store in a dry well-ventilated area avoiding direct exposure to sunlight. Avoid storage temperature above 110°F.

Stability in storage: one year

**6. Employee Protection Recommendations**

The employee should wear protective clothes and avoid direct physical contact with the product.

Eye Protection: Wear chemical safety glasses or goggles

Hand Protective Requirements: Wear protective gloves.

Skin Protective Requirements: Wear overalls.

Ventilation: Local exhaust

**7. Toxicological Information**

Low toxicity

LD50 acute oral for rats: 11,000mg/kg

**8. Fire and Explosion Data**

Flash point: Not available

Exposure standard limits: Not available

Flammable

Extinguish Media: Spray water, Carbon Dioxide, foam, sand or dry chemical.

**9. Reactivity**

Chemical stability: Stable when stored in original container protected from heat and moisture.

Hazardous Polymerization: Does not occur.

Materials to avoid: Strong oxidizers and nitrosating agents.

Hazardous products of decomposition: Oxides of carbon, nitrogen and sulfur and morpholine.

**10. Accidental Release and Disposal**

Spills: Sweep and place in closable container. Avoid generation of dust. Wear appropriate protective clothing and safety devices. Do not use water to remove spilled material.

Disposal: Bury waste and empty containers in licensed landfill in adherence to federal, state and local regulations.

**11. Transportation Information**

DOT Status	Not regulated
DOT shipping name	None
DOT reportable qty. (lbs)	None
ICAO/IATA Status	Not regulated
Proper shipping name	None
UN/NA number	None
IMDG Status	Not regulated
TDG Canada	Not regulated

**12. Regulatory Information**

Worldwide Inventory Status	
TSCA (USA):	Listed
Canadian DSL:	Listed
Canadian NDSL:	N/A
EINECS/ELINCS (Europe):	Listed
Japanese Inventory (ENCS):	Listed
Korean Chemical Inventory (ECL):	Listed
Australian Chemical Inventories (AICS):	Listed
New Zealand (NZ):	Listed
Philippines (PICCS) Inventory:	Listed
China (CLECS):	Listed

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### US Regulatory Rules

SARA Section 302:	None Found
SARA 311/312 Hazard Categories:	Immediate Delayed Fire
SARA 313 Chemical:	N/A

### Other Regulations:

California Proposition 65:	None
New Jersey Right-to-Know List:	N/A
Pennsylvania Right-to-Know List:	N/A
Florida Right-to-Know:	N/A
Minnesota Right-to-Know:	N/A
MA Right-to-Know Law:	N/A

### Canadian Regulations WHMIS

Hazard Class:	D2B TOXIC MATERIALS/Materials Causing Other Toxic Effects
NPRI:	N/A

## **13. Other Information**

OSHA:	Hazardous by definition of hazard communication 29 CFR 1910.1200
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HMIS Classification Health 2 Flammability 1 Reactivity 0

Important Note: The information provided is without warranty regarding its accuracy or completeness. The information may not be valid under all conditions. The user has the final responsibility for determining the suitability of the product in a given application.