

# MSDS molybdenum disulfide

## General

**Synonyms:** molybdenum disulfide, molybdenum disulphide, molybdenum (IV) sulphide

**Molecular formula:** MoS<sub>2</sub>

**CAS No:** 1317-33-5

**EINECS No:** 215-263-9

## Physical data

**Appearance:** dark grey or black powder

**Melting point:** 1185 C but sublimes from around 500 C

**Boiling point:** NA

**Vapor density:** NA

**Vapor pressure:** NA

**Density (g cm<sup>-3</sup>):** 5.06

**Flash point:** NA

**Explosion limits:** NA

**Auto-ignition temperature:** NA

**Water solubility:** insoluble

**Spec Gravity:** 4.8

## Health Hazards Data

LD50 LC50 Mixture: PRODUCT'S LD50 (ORAL RAT) WAS NOT STATED

Route Of Entry- Inhalation: YES

Skin: YES

Ingestion: NO

Carcinogenicity - NTP: NO

IARC: NO

OSHA: NO

Effects of Exposure: ACUTE: EXPOSURE MAY CAUSE EYE, SKIN AND RESPIRATORY TRACT IRRITATION. INGESTION NOT STATED. CHRONIC: NONE SPECIFIED

Explanation Of Carcinogenicity: NO INGREDIENT OF A CONCENTRATION OF 0.1% OR

GREATER IS LISTED AS A CARCINOGEN OR SUSPECTED CARCINOGEN.

Signs And Symptoms Of Over exposure: EYES: CAN CAUSE IRRITATION, REDNESS. SKIN:

PROLONGED CONTACT CAN CAUSE IRRITATION, DERMATITIS. INHALATION: CAN CAUSE IRRITATION.

Medical Conditions Aggravated By Exposure: NONE SPECIFIED

First Aid: SKN-WASH WITH SOAP AND WATER.

EYES-FLUSH WITH LOTS OF WATER.

INHALED-REMOVE TO FRESH AIR. GET MEDICAL ATTENTION IF BREATHING IMPAIRED.

INGESTED-NONE STATED.

## Handling and Disposal

Spill Release Procedures: CLEAN UP BY VACUUMING OR WET SWEEPING TO MINIMIZE DUST EXPOSURE. PROVIDE CLEAN UP PERSONNEL WITH NIOSH APPROVED DUST RESPIRATORS.

Neutralizing Agent: NONE SPECIFIED BY MANUFACTURER.

Waste Disposal Methods: DISPOSE OF IN A CHEMICAL LANDFILL IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL ENVIRONMENTAL REGULATIONS.

Handling And Storage Precautions: USE ADEQUATE VENTILATION TO MAINTAIN LEVELS BELOW TWA LIMITS.

Other Precautions: NONE.

## Fire and Explosion Hazard Information

Extinguishing Media: CARBON DIOXIDE, FOAM, DRY CHEMICAL, HALON.

Fire Fighting Procedures: NOT CONSIDERED A FIRE HAZARD AND DOES NOT SUPPORT COMBUSTION.

Unusual Fire/Explosion Hazard: NONE.

## Control Measures

Respiratory Protection: USE NIOSH APPROVED DUST, FUME AND; MIST RESPIRATOR IF TWA/TLV LIMITS ARE EXCEEDED.

Ventilation: USE LOCAL EXHAUST AND MECHANICAL (GENERAL) AS NECESSARY TO MAINTAIN LEVELS BELOW TWA LIMITS.

Protective Gloves: NONE NORMALLY REQUIRED.

Eye Protection: WEAR SAFETY GLASSES OR GOGGLES.

Other Protective Equipment: NONE.

Work Hygienic Practices: DLA-: WASH HANDS AFTER HANDLING AND BEFORE EATING, DRINKING, OR SMOKING. LAUNDER CONTAMINATED CLOTHES BEFORE REUSE.

## Reactivity Data

Stability Indicator: YES

Stability Condition To Avoid: NONE.

Materials To Avoid: STRONG OXIDIZING AGENTS SUCH AS HYDROGEN PEROXIDE.

Hazardous Decomposition Products: IRRITATING AND/OR TOXIC FUMES INCLUDING SULFUR OXIDES AND HYDROGEN SULFIDE MAY BE RELEASED.

Hazardous Polymerization Indicator: NO

Conditions To Avoid Polymerization: WILL NOT OCCUR.

## Transportation Information

### Detail DOT Information

DOT PSN Code: ZZZ

DOT Proper Shipping Name: NOT REGULATED BY THIS MODE OF TRANSPORTATION

### Detail IMO Information

IMO PSN Code: ZZZ

IMO Proper Shipping Name: NOT REGULATED FOR THIS MODE OF TRANSPORTATION

## Stability

Stable. Incompatible with oxidizing agents, acids.



Rose Mill Co.  
Bemol Lubricants  
100 Brook Street  
West Hartford, CT 06110

[www.RoseMill.com](http://www.RoseMill.com)