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Since 1985



**TECHNO PHARMCHEM**

An ISO 9001 : 2008 Certified Company

Registered Off. : 101-A, Deep Enclave, Pocket 'D', Ashok Vihar, Phase-III, Delhi-110 052 (India)  
Corporate Off. : 152, Vardhman City Centre, Near Shakti Nagar Underbridge, Delhi-110052 (India)  
Works : Plot No.1022, Modern Industrial Estate, Bahadurgarh-124507, Haryana (India)  
Telephone : 0091 - 11 - 23646422 E-mail : tecpharm@gmail.com  
Website : www.technopharmchem.com

## MOLYBDENUM DISULPHIDE MATERIAL SAFETY DATA SHEET

### SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

#### 1.1 Product identifier

Product form : Substance  
CAS No : 1317-33-5  
Product code : 38059  
Chemical structure : MoS<sub>2</sub>  
Synonyms : Molybdenum (IV) sulfide

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

##### 1.2.1. Relevant identified uses

Industrial/professional use spec : Industrial  
For professional use only :  
Use of the substance/mixture : Laboratory Reagent

##### 1.2.2. Uses advised against

No additional information available

#### 1.3. Details of the manufacturer of the safety data sheet

Techno Pharmchem  
Plot No.1022, Modern Industrial Estate,  
Bahadurgarh-124507, India  
T +91 11 23646422  
info@technopharmchem.com

#### 1.4. Emergency telephone number

Emergency number: +91 11 23646422 (9:30am – 5.30pm)

### SECTION 2: HAZARDS IDENTIFICATION

#### 2.1. Classification of the substance or mixture

Classification according to regulation (EC) No. 1272/2008[CLP]

Acute toxicity H332

(inhalation: gas) Category 4

Full text of classification categories and H-statements: see section 16

Classification according to directive 67/548/EEC or 1999/45/EC

Not classified

#### Adverse physicochemical, human health and environmental effects

No additional information available

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## 2.2. Label elements

Labeling according to regulation (EC) No. 1272/2008 [CLP]

Signal word (CLP) : Warning  
Hazard statements (CLP) : H332 – Harmful if inhaled

## 2.3. Other hazards

No additional information available

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1. Substances

Name : MOLYBDENUM DISULPHIDE  
CAS No : 1317-33-5  
Full text of R- and H- phrases: see section 16

### 3.2. Mixtures

Not applicable

## SECTION 4: FIRST AID MEASURES

### 4.1. Description of first aid measures

First – aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Give oxygen or artificial respiration if necessary. If you feel unwell, seek medical advice.  
First – aid measures after skin contact : Wash skin with plenty of water. If skin irritation occurs: Get medical advice/attention.  
First – aid measures after eye contact : Remove contact lenses, if present and easy to do. Continue rinsing. Rinse cautiously with water for several minutes. If eye irritation persists: Get medical advice/attention.  
First – aid measures after ingestion : Rinse mouth out with water. If you feel unwell, seek medical advice.

### 4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries after inhalation : Harmful if inhaled.

### 4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

## SECTION 5: FIRE FIGHTING MEASURES

### 5.1. Extinguishing media

Suitable extinguishing media : Dry chemical powder, alcohol-resistant foam, carbon dioxide (CO<sub>2</sub>)  
Unsuitable extinguishing media : Do not use a heavy water stream



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## 5.2. Special hazards arising from the substance or mixture

No additional information available

## 5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### 6.1. Personal precautions, protective equipment and emergency procedures

#### 6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

#### 6.1.2. For emergency responders

Protective equipment : Use personal protective equipment as required.  
Emergency procedures : Ventilate area.

### 6.2. Environmental precautions

Avoid release to the environment.

### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Clear up rapidly by scoop or vacuum.

### 6.4. Reference to other sections

No additional information available

## SECTION 7: HANDLING AND STORAGE

### 7.1. Precautions for safe handling

Hygiene measures : Wash hands and other exposed area with mild soap and water before eating, drinking or smoking and when leaving work.

### 7.2. Conditions for safe storage, including any compatibilities

Storage conditions : Store in original container. Keep container tightly closed. Store in a dry place

### 7.3. Specific end use (s)

No additional information available

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. Control parameters

No additional information available



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## 8.2. Exposure controls

Hand protection	:	Protective gloves
Eye protection	:	Chemical goggles or safety glasses
Skin and body protection	:	Wear suitable protective clothing
Respiratory protection	:	Wear respiratory protection.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on basic physical and chemical properties

Physical state	:	Solid
Molecular mass	:	160.06 g/mol
Color	:	Black powder.
Odor	:	No data available
Odor threshold	:	No data available
pH	:	No data available
Relative evaporation rate (butylacetate=1)	:	No data available
Melting Point	:	2375°C
Freezing point	:	No data available
Boiling point	:	No data available
Flash point	:	No data available
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Flammability (Solid, gas)	:	No data available
Vapor pressure	:	No data available
Relative vapor density at 20°C	:	5.51
Relative density	:	No data available
Density	:	5.06 g/cm <sup>3</sup>
Solubility	:	Water: Insoluble in water
Log pow	:	No data available
Viscosity, kinematic	:	No data available
Viscosity, dynamic	:	No data available
Explosive properties	:	No data available
Oxidizing properties	:	No data available
Explosive limits	:	No data available

### 9.2. Other information

No additional information available

## SECTION 10: STABILITY AND REACTIVITY

### 10.1. Reactivity

No additional information available

### 10.2. Chemical Stability

Stable under normal conditions

### 10.3. Possibility of hazardous reactions

No additional information available

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#### 10.4. Conditions to avoid

Direct sunlight. Air contact. Moisture

#### 10.5. Incompatible materials

No additional information available

#### 10.6. Hazardous decomposition products

No additional information available

### SECTION 11: TOXICOLOGICAL INFORMATION

#### 11.1. Information on toxicological effects

Acute toxicity	:	Inhalation: Harmful if inhaled
Skin corrosion/irritation	:	Not classified
Serious eye damage/irritation	:	Not classified
Respiratory or skin sensitization	:	Not classified
Germ cell mutagenicity	:	Not classified
Carcinogenicity	:	Not classified
Reproductive toxicity	:	Not classified
Specific target organ toxicity (single exposure)	:	Not classified
Specific target organ toxicity (repeated exposure)	:	Not classified
Aspiration hazard	:	Not classified

### SECTION 12: ECOLOGICAL INFORMATION

#### 12.1. Toxicity

No additional information available

#### 12.2. Persistence and degradability

No additional information available

#### 12.3. Bioaccumulative potential

No additional information available

#### 12.4. Mobility in soil

No additional information available

#### 12.5. Results of PBT and vPvB assessment

No additional information available

#### 12.6. Other adverse effects

No additional information available

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## SECTION 13: DISPOSAL CONSIDERATIONS

### 13.1. Waste treatment methods

Product/package disposal recommendations : Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

## SECTION 14: TRANSPORT INFORMATION

### 14.1. UN Number

ADR/RID: - IMDG: - IATA: -

### 14.2. UN proper shipping name

ADR/RID : Not dangerous goods  
IMDG : Not dangerous goods  
IATA : Not dangerous goods

### 14.3. Transport hazard class (es)

ADR/RID: - IMDG: - IATA: -

### 14.4. Packaging group

ADR/RID: - IMDG: - IATA: -

### 14.5. Environmental hazards

ADR/RID: no IMDG Marine pollutant: no IATA: no

### 14.6. Special precautions for user

No data available

## SECTION 15: REGULATORY INFORMATION

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Ensure all local, regional, national and/or international regulations are observed.

### 15.2 Chemical safety Assessment

For this product a chemical safety assessment was not carried out.

## SECTION 16: OTHER INFORMATION

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