ChemicalBook

# Chemical Safety Data Sheet MSDS / SDS

# BISMUTH MOLYBDATE

Revision Date:2026-05-31 Revision Number:1

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### Product identifier

| | |
|---|---|
| Product name | : BISMUTH MOLYBDATE |
| CBnumber | : CB0201919 |
| CAS | : 13565-96-3 |
| EINECS Number | : 236-955-7 |
| Synonyms | : Bismuth Molybdate,BISMUTH MOLYBDENUM OXIDE |

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

| | |
|---|---|
| Relevant identified uses | : For R&D use only. Not for medicinal, household or other use. |
| Uses advised against | : none |

### Company Identification

| | |
|---|---|
| Company | : Chemicalbook |
| Address | : Building 1, Huihuang International, Shangdi 10th Street, Haidian District, Beijing |
| Telephone | : 010-86108875 |

## SECTION 2: Hazards identification

### GHS Label elements, including precautionary statements

Symbol(GHS)



Signal word Warning

**Precautionary statements**

P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

**Hazard statements**

H315 Causes skin irritation

H319 Causes serious eye irritation

H335 May cause respiratory irritation

H373 May cause damage to organs through prolonged or repeated exposure

## SECTION 3: Composition/information on ingredients

### Substance

| | |
|---|---|
| Product name | : BISMUTH MOLYBDATE |
| Synonyms | : Bismuth Molybdate,BISMUTH MOLYBDENUM OXIDE |
| CAS | : 13565-96-3 |
| EC number | : 236-955-7 |

| | |
|---|---|
| MF | : Bi2MoO6 |
| MW | : 609.9 |

## SECTION 4: First aid measures

### First Aid Measures

**General advice**

Consult a physician if necessary. Remove to fresh air.

**Eye contact**

Wash with plenty of water.

**Skin Contact**

Wash skin with soap and water.

**Inhalation**

Remove to fresh air If breathing is difficult, give oxygen If not breathing, give artificial respiration

**Ingestion**

Never give anything by mouth to an unconscious person. Clean mouth with water.

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

**Symptoms**

No information available.

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

**Note to physicians**

Treat symptomatically.

## SECTION 5: Firefighting measures

### Suitable Extinguishing Media

**Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable Extinguishing Media**

No information available.

### Specific hazards arising from the chemical

**Specific hazards arising from the chemical**

No information available.

**Hazardous combustion products**

No information available.

### Explosion data

**Sensitivity to Mechanical Impact**

No information available.

**Sensitivity to Static Discharge**

No information available.

### Protective equipment and precautions for firefighters

**Protective equipment and precautions for firefighters**

As in any fire, wear self contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## SECTION 6: Accidental release measures

### Personal precautions, protective equipment and emergency procedures

**Personal precautions**

Ensure adequate ventilation, especially in confined areas.

### Environmental precautions

**Environmental precautions**

See Section 12 for additional Ecological Information.

### Methods and material for containment and cleaning up

**Methods for containment**

Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up**

Use personal protective equipment as required. Cover powder spill with plastic sheet or tarp to minimize spreading and keep powder dry. Take up mechanically, placing in appropriate containers for disposal. Avoid creating dust. Clean contaminated surface thoroughly.

## SECTION 7: Handling and storage

### Precautions for safe handling

**Advice on safe handling**

Handle in accordance with good industrial hygiene and safety practice.

### Conditions for safe storage, including any incompatibilities

**Storage Conditions**

Keep containers tightly closed in a dry, cool and well-ventilated place. Store at room temperature.

**Incompatible materials**

None known based on information supplied.

## SECTION 8: Exposure controls/personal protection

### Control parameters

**Exposure Guidelines**

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**Other Information**

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

| Column 1 | Column 2 | Column 3 | Column 4 |
|---|---|---|---|
| Bismuth Molybdenum Oxide | TWA: 0.5 mg/m3 Mo respirable | TWA: 5 mg/m3 Mo TWA: 15 | IDLH: 1000 mg/m3 Mo IDLH: |
| 13565-96-3 | particulate matter TWA: 10 mg/m3 Mo inhalable particulate matter TWA: 3 mg/m3 Mo respirable particulate matter | mg/m3 total dust (vacated) TWA: 5 mg/m3 Mo (vacated) TWA: 10 mg/m3 Mo | 5000 mg/m3 Mo |

NIOSH IDLH Immediately Dangerous to Life or Health

### Appropriate engineering controls

**Engineering Controls**

Showers

Eyewash stations

Ventilation systems

### Individual protection measures, such as personal protective equipment

**Eye/face protection**

Wear safety glasses with side shields (or goggles).

**Skin and Body Protection**

Wear protective gloves and protective clothing.

**Respiratory protection**

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**General Hygiene Considerations**

Handle in accordance with good industrial hygiene and safety practice.

## SECTION 9: Physical and chemical properties

### Information on basic physicochemical properties

| | |
|---|---|
| Physical State | Solid |
| Appearance | No information available |
| Odor | No information available |
| pH | No information available |
| Melting point/freezing point | No information available |
| Boiling point | No information available |
| Flash point | No information available |
| Liquid Density | No information available |
| Evaporation rate | No information available |
| Upper flammability limits | No information available |
| Lower flammability limit | No information available |
| Vapor pressure | No information available |
| Vapor density | No information available |
| Specific gravity | No information available |
| Water solubility | No information available |
| Solubility in other solvents | No information available |
| Partition coefficient | No information available |
| Autoignition temperature | No information available |
| Decomposition temperature | No information available |
| Kinematic viscosity | No information available |
| Explosive properties | No information available |
| Oxidizing properties | No information available |
| Density and/or relative density | 9.320 |
| Colour | yellow |

## SECTION 10: Stability and reactivity

### Reactivity

Not applicable

### Chemical stability

Stable under recommended storage conditions.

### Possibility of Hazardous Reactions

None under normal processing.

### Hazardous polymerization

No information available.

### Conditions to avoid

Extremes of temperature and direct sunlight.

### Incompatible materials

Strong oxidizing agents.

### Hazardous Decomposition Products

None known based on information supplied.

## SECTION 11: Toxicological information

### Information on likely routes of exposure

**Inhalation**

Classified based on available data. For more details, see section 2.

**Eye contact**

Classified based on available data. For more details, see section 2.

**Skin Contact**

Classified based on available data. For more details, see section 2.

**Ingestion**

Classified based on available data. For more details, see section 2.

### Information on toxicological effects

**Symptoms**

Classified based on available data. For more details, see section 2.

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

**Chronic Toxicity**

May cause adverse effects on the bone marrow and blood-forming system. Target Organ Effects Blood, Eyes, Respiratory system, Kidney.

### Chemical name ACGIH IARC NTP OSHA

Bismuth Molybdenum Oxide A3 - - - 13565-96-3

### Numerical measures of toxicity - Product Information

**Unknown acute toxicity**

100% of the mixture consists of ingredient(s) of unknown toxicity

## SECTION 12: Ecological information

### Ecotoxicity

May cause long lasting harmful effects to aquatic life

100% of the mixture consists of components(s) of unknown hazards to the aquatic environment.

### Persistence and degradability

No information available.

### Bioaccumulation

No information available.

### Mobility

No information available.

## SECTION 13: Disposal considerations

### Disposal of wastes

Disposal should be in accordance with applicable regional, national and local laws and regulations.

### Contaminated packaging

Do not reuse container.

## SECTION 14: Transport information

### DOT

Not regulated

### IMDG

Not regulated

### IATA

Not regulated

## SECTION 15: Regulatory information

### International Inventories

All of the components in the product are on the following Inventory lists

TSCA (United States): Canada (DSL/NDSL) Europe (EINECS/ELINCS/NLP) Australia (AICS) South Korea (KECL): China (IECSC)

X - Listed

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

| Chemical name | TSCA | DSL | NDSL | EINECS | ELINCS | ENCS | IECSC | KECL | PICCS | AICS |
|---|---|---|---|---|---|---|---|---|---|---|
| Bismuth Molybdenum Oxide | X | X | - | X | - | - | X | X | - | X |

### US Federal Regulations

### SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

### SARA 311/312 Hazard Categories

**Acute health hazard**

Yes

**Chronic Health Hazard**

Yes

**Fire hazard**

No

**Sudden release of pressure hazard**

No

**Reactive hazard**

No

### CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

### US State Regulations

### California Proposition 65

This product does not contain any Proposition 65 chemicals.

### U.S. State Right-to-Know Regulations

This product does not contain any substances regulated by state right-to-know regulations

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## SECTION 16: Other information

### Abbreviations and acronyms

CAS: Chemical Abstracts Service

TWA: Time-Weighted Average

STEL: Short-Term Exposure Limit

LD50: Lethal Dose 50%

LC50: Lethal Concentration 50%

EC50: Effective Concentration 50%

PEL: Permissible Exposure Limit

TLV: Threshold Limit Value

IMDG: International Maritime Dangerous Goods Code

IATA: International Air Transport Association

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

DOT: US Department of Transportation

NFPA: National Fire Protection Association

NIOSH: National Institute for Occupational Safety and Health

OSHA: Occupational Safety and Health Administration

**Disclaimer:**
The information in this MSDS is only applicable to the specified product, unless otherwise specified, it is not applicable to the mixture of this product and other substances. This MSDS only provides information on the safety of the product for those who have received the appropriate professional training for the user of the product. Users of this MSDS must make independent judgments on the applicability of this SDS. The authors of this MSDS will not be held responsible for any harm caused by the use of this MSDS.