福建沃尔法化学科技有限公司
Fujian Wolfa Chemical Technology Co., Ltd

DESIGN REPORT OF SAFETY DATA SHEET

Revision Date: Oct. 22, 2025

Name of the sample	MOLYBDENUM(VI) DICHLORIDE DIOXIDE
Applicant	Fujian Wolfa Chemical Technology Co., Ltd.
Supplier	Fujian Wolfa Chemical Technology Co., Ltd.
Composition of the sample	MOLYBDENUM(VI) DICHLORIDE DIOXIDE: ≥99.9%
Warranty of Design	GLOBALLY HARMONIZED SYSTEM OF CLASSIFICATION AND LABELLING OF CHEMICALS (GHS) Eleventh revised edition
Design Result of SDS please see next page.	

Notes: This SDS is valid before the implementation of the Twelfth revised edition GHS.

SAFETY DATA SHEET

SDS

Section 1 Product and Company Identification

> Product Identifier

Product Name	MOLYBDENUM(VI) DICHLORIDE DIOXIDE
Synonyms	——
CAS No.	13637-68-8
EC No.	/
Molecular Formula	Cl_2MoO_2

> Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

Relevant Identified Uses	Please consult manufacturer.
Uses Advised Against	Please consult manufacturer.

> Details of the Supplier of the Safety Data Sheet

Applicant Name	Fujian Wolfa Chemical Technology Co., Ltd.
Application Address	Room 2620, Building 18, Xingguang Plaza, No.970 Anji South Road, Fengze District, Quanzhou City, Fujian Province
Applicant Post Code	362000
Applicant Telephone	+86 18050950397
Applicant Fax	——
Applicant E-mail	——
Supplier Name	Fujian Wolfa Chemical Technology Co., Ltd.
Supplier Address	Room 2620, Building 18, Xingguang Plaza, No.970 Anji South Road, Fengze District, Quanzhou City, Fujian Province
Supplier Post Code	362000
Supplier Telephone	+86 18050950397
Supplier Fax	——
Supplier E-mail	——

> Emergency Phone Number

Emergency Phone Number	+86 18050950397

Section 2 Hazards Identification

Hazard class and label elements of the product according to GHS (the Eleventh revised edition):

> GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Skin Corrosion/Irritation Category 1

> GHS Label Elements

Pictogram



Signal Word Danger

> Hazard Statements

H314 Causes severe skin burns and eye damage

> Precautionary Statements

Prevention

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P264 Wash skin thouroughly after handling.

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

Response

P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off Immediately all contaminated clothing. Rinse SKIN with water/shower.

P304+P340+P310 IF INHALED: Remove victim to fresh air and Keep at rest in a position comfortable for breathing.Immediately call a POISON CENTER or doctor/physician.

P305+P351+P338+P310 IF IN EYES: Rinse cautiously with water for several minutes. Immediately call a POISON CENTER or doctor/physician.

P363 Wash contaminated clothing before reuse.

Storage

P405 Store locked up.

Disposal

P501 Disposal of contents/containers shall comply with local, regional, national, and international regulations.

Section 3 Composition/Information on Ingredients

Component	CAS No.	EC No.	Concentration (weight percent, %)
MOLYBDENUM(VI) DICHLORIDE DIOXIDE	13637-68-8	/	≥99.9%

Section 4 First Aid Measures

> Description of First Aid Measures

General Advice	Show this safety data sheet to the doctor in attendance.Seek immediate medical advice.
Following Eye Contact	Rinse thoroughly with a large amount of water for at least 15 minutes, seek medical attention immediately. Remove the contact lenses.
Following Skin Contact	In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Call a physician immediately.
If Swallowed	Do not induce vomiting, and do not give anything by mouth to an unconscious person. Call a doctor or poison control center immediately.
If Inhalation	Move the person to an area with fresh air. If breathing stops, perform artificial respiration. If the substance has been ingested or inhaled, do not use mouth-to-mouth resuscitation; instead, use a pocket-sized respiratory mask with a one-way valve or other appropriate respiratory medical equipment. Seek immediate medical attention.
Protective Measures for First Responders	Ensure that medical personnel are aware of the product's hazardous characteristics and take appropriate protective measures to safeguard themselves and prevent the spread of contamination.

> Most Important Symptoms and Effects, both Acute and Delayed

The most important known symptoms and effects are described on the label (see section 2.2) and/or in section 11.

> Indication of Any Immediate Medical Attention and Special Treatment Needed

Provide targeted treatment based on the symptoms that appear.

Note that symptoms may be delayed.

Section 5 Fire Fighting Measures

> Extinguishing Media

Suitable extinguishing media: Based on the specific circumstances and surrounding environment, appropriate fire-fighting measures should be adopted.

> Specific Hazards Arising from the chemical

1 Hydrogen chloride gas

2 Molybdenum oxides

> Special protective actions for fire-fighters

1 Personnel without personal respiratory protection devices must not enter the hazardous area.

2 Maintain a safe distance and wear appropriate protective clothing to avoid skin contact.

3 Use water spray to suppress gas/vapor/mist.

4 Prevent firefighting water from contaminating surface and groundwater systems.

Section 6 Accidental Release Measure

> Personal Precautions, Protective Equipment and Emergency Procedures

1 Advice for non-emergency personnel: Do not breathe vapors, aerosols. Avoid substance contact. Ensure adequate ventilation. Keep away from heat and sources of ignition. Evacuate the danger area, observe emergency procedures, consult an expert.Ensure adequate ventilation.

2 For personal protection see section 8

> Environmental Precautions

1 Do not let product enter drains. Risk of explosion.

> Methods and Materials for Containment and Cleaning Up

1 Cover drains. Collect, bind, and pump off spills.

2 Observe any applicable material restrictions (see sections 7 and 10).

3 Remove dry material, dispose, clean the affected area, and avoid dust generation.

Section 7 Handling and Storage

> Precautions for Handling

1 Avoid the formation of dust and aerosols.

2 Provide appropriate exhaust ventilation in areas where dust is generated.

3 For precautions, refer to section 2.2.

> Conditions for safe storage, including any incompatibilities

1 Store in a cool place.

2 Keep container tightly closed in a dry and well-ventilated place.

Section 8 Exposure Controls/Personal Protection

> Control Parameters

Occupational Exposure Limit Values

Contains no substances with occupational exposure limit values

> Engineering Controls

1 Immediately change contaminated clothing.

2 Operate in accordance with good industrial hygiene and safety practices.

3 Wash hands and face before breaks and at the end of the workday.

> Personal Protection Equipment

Eye protection	Please use eye protection equipment that has been tested and approved according to official standards such as NIOSH (USA) or EN 166 (EU). Use close-fitting protective goggles.
Hand protection	Wear chemical protective gloves (e.g., butyl rubber gloves). It is recommended to choose protective gloves that have been tested according to EU EN 374, US F739, or S/NZS 2161.1 standards.
Skin and Body protection	Wear flame-resistant, anti-static protective clothing and anti-static protective boots.
Respiratory protection	When the concentration exceeds the exposure limit, workers must use appropriate respirators. To protect the wearer, respiratory protective equipment must be properly fitted and should be used and maintained correctly.

Section 9 Physical and Chemical Properties

Appearance: Orange-yellow solid **Odor:** No information available

Odor Threshold: No information available

pH: No information available

Melting Point/Freezing Point (℃): No information available

Initial Boiling Point and Boiling Range (℃): No information available

Flash Point (℃): No information available

Evaporation Rate: No information available

Flammability: No information available

Upper/lower explosive limits[%(v/v)]: Upper limit: No information available; Lower limit: No information available

Vapor Pressure (KPa): No information available

Relative Vapour Density(Air=1): No information available

Relative Density(Water=1): 3.31g/cm³at 25℃(lit.)

Solubility: No information available

n-Octanol/Water Partition Coefficient: No information available

Auto-Ignition Temperature(℃): No information available

Decomposition Temperature (℃): No information available

Kinematic Viscosity (mm^2/s): No information available

Particle characteristics: No information available

Critical Temperature(℃): No information available

Section 10 Stability and Reactivity

Chemical Stability	This product is chemically stable under standard ambient conditions, such as at room temperature.
Possibility of Hazardous Reactions	No data available.
Conditions to Avoid	It hydrolyzes upon contact with water to produce hydrogen chloride; contact with water, moist air, or substances containing active hydrogen should be avoided.
Incompatible Materials	Strong oxidizers.
Hazardous decomposition products	No data available.

Section 11 Toxicological Information

> Acute Toxicity

No information available

> Skin Corrosion/Irritation

No information available

> Serious Eye Damage/Irritation

No information available

> Skin Sensitization

No information available

> Respiratory sensitization

No information available

> Germ cell mutagenicity

No information available

> Carcinogenicity

No information available

> Reproductive toxicity

No information available

> Specific target organ toxicity - single exposure

No information available

> Specific target organ toxicity - repeated exposure

No information available

> Inhalation hazard

No information available

Section 12 Ecological Information

> Acute aquatic toxicity

No information available

> Chronic aquatic toxicity

No information available

> Others

Persistence and Degradability	No information available.
Bioaccumulation or Bioaccumulation Potential	No information available.
Mobility in Soil	No information available.
PBT and vPvB Assessment Results	The PBT/vPvB assessment is unavailable due to the lack of chemical safety evaluation requirements or implementation.

Section 13 Disposal Considerations

> Waste treatment methods

Waste Chemicals	Refer to national and local regulations before disposal.
Contaminated Packaging	Dispose of in accordance with local and national regulations. Before discarding used containers, thoroughly empty the contents.
Disposal Considerations	Please refer to the Waste Chemicals and Contaminated Packaging sections.

Section 14 Transport Information

Transporting Label	
Marine pollutants	No
UN Number	3260

UN Proper Shipping Name	CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S.
Transport Hazard Class	8
Transport Subsidiary Hazard Class	NONE
Packing Group	II

Section15 Regulatory Information

Component	EINECS	TSCA	DSL	IECSC	NZIoC	PICCS	KECL	AIIC	ENCS
MOLYBDENUM(VI) DICHLORIDE DIOXIDE	×	×	×	×	×	×	×	×	×

> International chemical inventory

【EINECS】	European Inventory of Existing Commercial Chemical Substances
【TSCA】	Toxic Substances Control Act Inventory (United States)
【DSL】	Domestic Substances List (Canada)
【IECSC】	Inventory of Existing Chemical Substances in China
【NZIoC】	New Zealand Inventory of Chemicals
【PICCS】	New Zealand Inventory of Chemicals
【KECL】	Korean Existing Chemicals List
【AIIC】	Australian Inventory of Industrial Chemicals
【ENCS】	Existing and New Chemical Substances (Japan)

Note

"√" Indicates that the substance included in the regulations

"×" That no data or included in the regulations

Section 16 Additional Information

Preparation Date	Dec. 1, 2022
Revision Date	Oct. 22, 2025
Revision Reason	SDS Update Section

Disclaimer

The information provided in this Safety Data Sheet is correct based on the latest knowledge, information and concepts available to us. The information provided is intended only as a guide for safe operation, use, processing, storage, transportation, disposal and discharge and is not intended as a guarantee or specification of quality. This information is only used for the specific substance specified and may not be suitable for mixing with any other substance or in all cases, unless otherwise specified in the context.

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