

SAFETY DATA SHEET

MOLYPOWDER

Version: 1.0	Revision Date: 11/2014	MSDS Number: GHS-15009-MPWD	Date Completed: 02/2015
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SECTION 1. IDENTIFICATION

Product Name:	Molypowder
Manufacturer or supplier's details	
Company name of supplier:	JIT Silicones Plus A division of Sensible Components, LLC
Address:	
Telephone:	
Emergency Telephone:	24 Hour Emergency Telephone: CHEMTREC: (800) 424-9300
Recommended use of the chemical and restrictions on use	
Recommended use:	Lubricants and lubricant additives

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification	
Combustible dust	
GHS Label Element	
Signal Word:	Warning Add pictogram
Hazard Statements:	May form combustible dust concentrations in air.
Other Hazards	
	Dust contact with the eyes can lead to mechanical irritation. Contact with dust can cause mechanical irritation or drying of the skin.
Hazardous Ingredients	

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SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture:	Substance		
Substance name:	Molybdenum sulfide		
CAS-No.:	1317-33-5		
Chemical nature:	Metal sulphide		
Hazardous Ingredients:			
Chemical Name	CAS-No.	Concentration (%)	
Moylbdenum sulfide	1217-33-5	>= 90 - <= 100	

SECTION 4. FIRST AID MEASURES

General advice:	In the case of accident or if you feel unwell, seek medical advice immediately. When symptoms persist or in all cases of doubt, seek medical advice.
If inhaled:	If inhaled, remove to fresh air. Get medical attention if symptoms occur.
In case of skin contact:	Wash with water and soap. Get medical attention if symptoms occur.
In case of eye contact:	If in eyes, rinse well with water. Get medical attention if irritation develops and persists.
If swallowed:	If swallowed, DO NOT induce vomiting. Get medical attention if symptoms occur. Rinse mouth thoroughly with water.
Most important symptoms and effects, both acute and delayed:	Contact with dust can cause mechanical irritation or drying of the skin. Dust contact with the eyes can lead to mechanical irritation.
Protection of first-aiders:	No special precautions are necessary for first aid responders.,
Notes to physician:	Treat symptomatically and supportively.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media:	Water spray
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	Alcohol-resistant form Dry chemical Carbon dioxide (CO ₂)
Unsuitable extinguishing media:	High volume water jet
Specific hazards during fire-fighting:	Do not use a solid water stream as it may scatter and spread fire. Exposure to combustion products may be a hazard to health.
Hazardous combustion products:	Metal oxides Sulfur oxides
Specific extinguishing methods:	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Use water spray to cool unopened containers. Remove undamaged containers from fire area if it is safe to do so. Evacuate area.
Special protective equipment for fire-fighters:	Wear self-contained breathing apparatus for firefighting if necessary. Use personal protective equipment.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:	Follow safe handling advice and personal protective equipment recommendations.
Environmental precautions:	Discharge into the environment must be avoided. Prevent further leakage or spillage if safe to do so. Retain and dispose of contaminated wash water. Local authorities should be advised if significant spillages cannot be contained.
Methods and materials for containment and cleaning up:	Sweep up or vacuum up spillage and collect in suitable container for disposal. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration. Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which regulations are applicable. Section 13 and 15 of this SDS provide information regarding certain local or national requirements.

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SECTION 7. HANDLING AND STORAGE

Technical measures:	Static electricity may accumulate and ignite suspended dust causing an explosion. Provide adequate precautions, such as electrical grounding and bonding, or inert atmospheres.
Local/Total ventilation:	Use only with adequate ventilation.
Advice on safe handling:	Do not breathe dust. Handle in accordance with good industrial hygiene and safety practice. Minimize dust generation and accumulation. Keep container closed when not in use. Keep away from heat and sources of ignition. Take care to prevent spills, waste and minimize release to the environment.
Conditions for safe storage:	Keep in properly labeled containers. Store in accordance with the particular national regulations.
Materials to avoid:	Do not store with the following product types: Strong oxidizing agents

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Ingredients	CAS-No.	Value type (Form of exposure)	Control parameters/ Permissible concentration	Basis
Molybdenum sulfide	1317-33-5	TWA (total dust)	15 mg/m ³ (Molybdenum)	ACGIH
		TWA (inhalable fraction)	10 mg/m ³ (Molybdenum)	ACGIH
		TWA (Respirable fraction)	3 mg/m ³ (Molybdenum)	ACGIH

Engineering measures:	Ensure adequate ventilation, especially in confined areas. Minimize workplace exposure concentrations. Apply measures to prevent dust explosions. Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is no leakage from the equipment).
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Personal protective equipment	
Respiratory protection:	General and local exhaust ventilation is recommended to maintain vapor exposures below recommended limits. Where concentrations are above recommended limits or are unknown, appropriate respiratory protection should be work. Follow OSHA respirator regulations (29 CFR 1910.134) and use NIOSH/MSHA approved respirators. Protection provided by air purifying respirators against exposure to any hazardous chemical is limited. Use a positive pressure air supplied respirator if there is any potential for uncontrolled release, exposure levels are unknown, or any other circumstance where air purifying respirators may not provide adequate protection.
Hand protection Material:	Impervious gloves
Remarks:	For prolonged or repeated contact, use protective gloves. Wash hands before breaks and at the end of workday.
Eye protection:	Wear the following personal protective equipment: Safety goggles
Skin and body protection:	Skin should be washed after contact.
Hygiene measures:	Ensure that eye flushing systems and safety showers are located closed to the working place. When using, do not eat, drink or smoke. Wash contaminated clothing before re-use. These precautions are for room temperature handling. Use at elevated temperature or aerosol/spray applications may require added precautions.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Fine powder
Color:	Dark gray
Odor:	None
Odor Threshold:	No data available
pH:	No data available
Melting point/freezing point:	No data available
Initial boiling point and boiling range:	Not applicable

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Flash point:	Not applicable
Evaporation rate:	Not applicable
Flammability (solid, gas):	Not classified as a flammability hazard
Upper explosion limit:	No data available
Lower explosion limit:	No data available
Vapor pressure:	Not applicable
Relative vapor density:	No data available
Relative density:	4.8
Solubility./(ies) Water solubility:	No data available
Partition coefficient: n-octanol/water:	No data available
Utoignition temperature:	No data available
Autoignition temperature:	No data available
Thermal decomposition:	No data available
Viscosity Viscosity, dynamic:	Not applicable
Explosive properties:	Not explosive
Oxidizing properties:	The substance or mixture is not classified as oxidizing.
Molecular weight:	No data available

SECTION 10. STABILITY AND REACTIVITY

:Reactivity:	Not classified as a reactivity hazard.
Chemical stability:	Stable under normal conditions.
Possibility of hazardous reactions:	Dust can form an explosive mixture in air. Can react with strong oxidizing agents.

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Conditions to avoid:	None known
Incompatible materials:	Oxidizing agents
Hazardous decomposition products:	No hazardous decomposition products are known.

SECTION 11. TOXICOLOGICAL INFORMATION

<p>Information on likely routes of exposure Inhalaion Skin contact Ingestion Eye contact</p> <p>Acute toxicity Not classified based on available information.</p>	
<p>Ingredients: Molybdenum sulfide: Acute oral toxicity:</p>	<p>LD50 (Rat): > 2k000 mg/kg Method: OECD Test Guideline 401 Assessment: The substance or mixture has no acute oral toxicity</p>
<p>Acute inhalation toxicity:</p>	<p>LC50 (Rat): > 2.82 mg/l Exposure time: 4 h Test atmosphere: dust/mist</p>
<p>Acute dermal toxicity</p>	<p>LD50 (Rat) > 2,000 mg/kg Method: OECD Test Guideline 402 Assessment: The substance or mixture has no acute dermal toxicity</p>
<p>Skin corrosion/irritation Not classified based on available information.</p> <p>Ingredients: Molybdenum sulfide: Species: Rabbit Method: OECD Test Guideline 404 Result: No skin irritation</p>	
<p>Serious eye damage/eye irritation Not classified based on available information.</p> <p>Ingredients: Molybdenum sulfide:</p>	

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Species: Rabbit
Result: No eye irritation
Method: OECD Test Guideline 405

Respiratory or skin sensitization
Skin sensitization:

SECTION 12. ECOLOGICAL INFORMATION

SECTION 13. DISPOSAL CONSIDERATIONS

SECTION 14. TRANSPORT INFORMATION

SECTION 15. REGULATORY INFORMATION

SECTION 16. OTHER INFORMATION