

SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of: US - OSHA Hazard Communication Standard (29 CFR 1910.1200)

Issuing Date 16-Jun-2022 Revision Date 06-Jun-2023 Revision Number 2

1. Identification

Product identifier

Product Name Molybdenum Disulfide Petrolatum

Other means of identification

Product Code(s) 08-00B, 08-00H, 08-02, 08-03, 08-06, 08-07

Synonyms Conforms to MIL-PRF-83483E

Recommended use of the chemical and restrictions on use

Recommended use Anti-seize

Lubricant

Restrictions on use Induces hot corrosion at >1000F

Details of the supplier of the safety data sheet

Manufacturer Address

Armite Laboratories Inc. dba Armite Lubricants 1218 Commerce Court Suite B Lafayette CO 80026 USA 720-262-5480

E-mail sales@armite.com

Emergency telephone number

24 Hour Emergency Phone Number 888-255-3924

Emergency telephone 888-255-3924

2. Hazard(s) identification

Classification

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Hazards not otherwise classified (HNOC)

Not applicable.

Label elements

Hazard statements

Not classified.

·

Other information

May be harmful in contact with skin.

3. Composition/information on ingredients

Substance

Not applicable.

<u>Mixture</u>

Synonyms Conforms to MIL-PRF-83483

Chemical name	CAS No	Weight-%	Trade secret
Petrolatum	8009-03-8	48-52	*
Molybdenum (IV) sulfide	1317-33-5	48-52	*

^{*}The exact percentage (concentration) of composition has been withheld as a trade secret.

4. First-aid measures

Description of first aid measures

Inhalation Remove to fresh air.

Eye contact Rinse thoroughly with plenty of water, also under the eyelids.

Skin contact Wash skin with soap and water.

Ingestion Rinse mouth.

Most important symptoms and effects, both acute and delayed

Symptoms No information available.

Indication of any immediate medical attention and special treatment needed

5. Fire-fighting measures

surrounding environment.

Unsuitable extinguishing media No information available.

Specific hazards arising from the No i

chemical

No information available.

Explosion data

Sensitivity to mechanical impact None. Sensitivity to static discharge None.

Special protective equipment and precautions for fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

Revision Date: 06-Jun-2023

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation.

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 Pick up and transfer to properly labeled containers.

7. Handling and storage

Precautions for safe handling

Advice on safe handling Wash hands thoroughly after handling.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep at temperatures between 26.6667 and 15.556 °C (60 and 80 °F).

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children.

8. Exposure controls/personal protection

Control parameters

Exposure Limits The following ingredients are the only ingredients of the product above the cut-off level (or

level that contributes to the hazard classification of the mixture) which have an exposure limit applicable in the region for which this safety data sheet is intended or other

recommended limit. At this time, the other relevant constituents have no known exposure

limits from the sources listed here.

Chemical name	ACGIH TLV	OSHA PEL	NIOSH
Molybdenum (IV) sulfide	TWA: 10 mg/m ³ Mo inhalable	TWA: 15 mg/m ³ total dust	IDLH: 5000 mg/m ³ Mo
1317-33-5	particulate matter	(vacated) TWA: 10 mg/m ³ Mo	
	TWA: 3 mg/m ³ Mo respirable	-	
	particulate matter		

Appropriate engineering controls

Engineering controls Showers

Eyewash stations Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection No special protective equipment required.

Hand protection No special protective equipment required.

Skin and body protection No special protective equipment required.

Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are

exceeded or irritation is experienced, ventilation and evacuation may be required.

Revision Date: 06-Jun-2023

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance Dark gray Paste Physical state Solid

Color Dark gray Odor Mild Petroleum **Odor threshold** No data available

Remarks • Method **Property** Values Neutral

Melting point / freezing point 55 °C / > 131 No data available Initial boiling point and boiling range 316 °C / > 600.8 °F No data available Flash point °C / > 428 °F No data available 220

Evaporation rate No data available **Flammability** No data available

Flammability Limit in Air

Upper flammability or explosive limits No data available Lower flammability or explosive limits No data available Vapor pressure No data available No data available

Vapor density Relative density 1.44 No data available Water solubility Insoluble Insoluble

Solubility(ies) No data available Partition coefficient No data available

Autoignition temperature > 260 °C / > 500 °F No data available **Decomposition temperature** No data available

Kinematic viscosity No data available Dynamic viscosity No data available

Other information

Explosive properties No information available **Oxidizing properties** No information available Softening point No information available Molecular weight No information available

VOC Content (%)

Liquid Density No information available **Bulk density** No information available

10. Stability and reactivity

Reactivity None under normal use conditions.

Chemical stability Stable under normal conditions.

Possibility of hazardous reactions None under normal processing.

Conditions to avoid Extreme heat.

Incompatible materialsNone known based on information supplied.

Hazardous decomposition products Carbon oxides. Sulfur oxides. Hydrocarbons.

11. Toxicological information

Information on likely routes of exposure

Inhalation Specific test data for the substance or mixture is not available.

Eye contact Specific test data for the substance or mixture is not available.

Skin contact May be harmful in contact with skin.

Ingestion Specific test data for the substance or mixture is not available.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms No information available.

Acute toxicity

Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document:

ATEmix (dermal) 3,600.00 mg/kg

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50			
Petrolatum 8009-03-8	-	= 3600 mg/kg (Rabbit)	-			
Molybdenum (IV) sulfide 1317-33-5	-	-	> 2820 mg/m ³ (Rat)4 h			

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

Skin corrosion/irritation No information available.

Serious eye damage/eye irritation No information available.

Respiratory or skin sensitization No information available.

Germ cell mutagenicity No information available.

Carcinogenicity No information available.

Reproductive toxicity No information available.

STOT - single exposure No information available.

STOT - repeated exposureNo information available.

Aspiration hazard No information available.

·

Other adverse effects No information available.

Interactive effects No information available.

12. Ecological information

EcotoxicityThe environmental impact of this product has not been fully investigated.

Persistence and degradability No information available.

Bioaccumulation No information available.

Other adverse effects No information available.

13. Disposal considerations

Waste treatment methods

Waste from residues/unused products

Dispose of in accordance with local regulations. Dispose of waste in accordance with

environmental legislation.

Contaminated packaging Do not reuse empty containers.

14. Transport information

DOT Not regulated

IATA Not regulated

IMDG Not regulated

15. Regulatory information

International Inventories

Contact supplier for inventory compliance status

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

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

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).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Molybdenum (IV) sulfide	-	X	-
1317-33-5			

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. Other information

<u>NFPA</u>	Health hazards	0 Flammabilit	ty 1	Instability 0	Special hazards -
HMIS	Health hazards	1* Flammabilit	ty 1	Physical hazards (Personal protection X
Chronic Hazard Star Legend	* = C	hronic Health Hazard	-	•	•

Key or legend to abbreviations and acronyms used in the safety data sheet

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA TWA (time-weighted average) STEL STEL (Short Term Exposure Limit)

Ceiling Maximum limit value Skin designation

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)

U.S. Environmental Protection Agency ChemView Database

European Food Safety Authority (EFSA) EPA (Environmental Protection Agency)

Acute Exposure Guideline Level(s) (AEGL(s))

U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act

U.S. Environmental Protection Agency High Production Volume Chemicals

Food Research Journal

Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)

Japan GHS Classification

Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)

NIOSH (National Institute for Occupational Safety and Health)

National Library of Medicine's ChemID Plus (NLM CIP)

National Library of Medicine's PubMed database (NLM PUBMED)

National Toxicology Program (NTP)

New Zealand's Chemical Classification and Information Database (CCID)

Organization for Economic Co-operation and Development Environment, Health, and Safety Publications

Organization for Economic Co-operation and Development High Production Volume Chemicals Program

Organization for Economic Co-operation and Development Screening Information Data Set

World Health Organization

Issuing Date 16-Jun-2022

Revision Date 06-Jun-2023

Revision Note Initial Release.

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet