SAFETY DATA SHEET

POLYSI® G-Man® Lubricants Issued 07/09/2015

PST-9941 Revision 4 06/27/2019

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name:	**PST-9941**
Recommended Use:	Lubricant (not for incidental food contact or medical purposes)
Company:	Fuchs Lubricants Co. 17050 Lathrop Avenue Harvey, Illinois 60426
Telephone:	708-333-8900
Emergency Telephone:	800-255-3924 (24 hrs)

2. HAZARDS IDENTIFICATION

Classification: May cause cancer by inhalation. Causes Damage to organs through prolonged and repeated exposure.

Labeling: Symbol:

Signal Word: Danger

Hazard statements:
Do not inhale dusts, mists, vapors or aerosols.
May be harmful if swallowed
May cause eye irritation
May cause skin irritation
Non flammable or combustible, but may burn if involved in a fire

Precautionary Statements:

Use personal protective equipment as required. Wear safety glasses and gloves.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Identity:	**Silica quartz; < 0.8%**
Common Name:	Silica quartz
CAS Number:	14808-60-7
Impurities:	No Information available

Chemical Identity:	**Molybdenum disulfide; 1-5%**
Common Names:	Moly
CAS Number:	1317-33-5
Impurities:	No information available

This product contains no other hazardous components above reportable concentrations.

4. FIRST AID MEASURES

Eye Contact: Flush eyes with large amounts of water. If signs/symptoms persist, get medical attention. Obtain medical attention.

Skin Contact: Wash affected area with soap and water. If signs/symptoms persist, get medical attention. No need for first aid is anticipated.

Inhalation: If signs/symptoms develop, remove person to fresh air. If signs/symptoms persist, get medical attention.

Ingestion: If swallowed, do not induce vomiting. If irritation or discomfort occurs, obtain medical assistance.

5. FIRE FIGHTING MEASURES

Autoignition Temperature: >200°C
Flash point: >200°C
Flammable Limits (LEL) Not determined
Flammable Limits(UEL) Not determined
Suitable Extinguishing Media: On large fires used dry chemical, foam, or water spray. On small fires use carbon dioxide, dry chemical, or water spray. Water can be used to cool fire exposed containers.
Unsuitable Extinguishing Media: None.
Specific hazards in case of fire: Decomposes on heating and produces toxic fumes of sulfur oxides, molybdenum trioxide, and incompletely burned carbon compounds. Molybdenum disulfide will react violently with hydrogen peroxide. Avoid reaction with hydrogen peroxide, potassium nitrate, and oxidizers.

Special protective equipment and precautions for fire fighters:

No acute hazard. Move container from fire area, if possible. Avoid breathing vapors or dusts. Keep upwind. Use full firefighting gear (bunker gear). Any supplied-air respirator with full face piece and operated in a pressure-demand or other positive pressure mode in combination with a separate escape air supply. Use any self-contained breathing apparatus with a full face piece.

Alert fire brigade and indicate hazard location. Wear breathing apparatus plus protective clothing. Cool fire exposed containers with water spray from a protected location. Do not approach containers suspected to be hot. If safe to do so, remove containers from path of fire.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Use appropriate personal protection. (See section 8.)

Environmental precautions: For larger spills, cover drains and build dikes to prevents entry into sewer systems or bodies of water. Collect the resulting residue containing solution. Place in a metal container approved for transportation by appropriate authorities. Dispose of collected material as soon as possible.

Methods for material containment and cleaning up: Observe precautions from other sections. Contain spill. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Collect as much of the spilled material as possible. Clean up residue with an appropriate solvent. Seal the container.

7. HANDLING AND STORAGE

Precautions for safe handling: Avoid contact with skin, inhalation of mist, or ingestion. See section 8 for personal protection equipment. Practice good personal hygiene to prevent accidental ingestion after handling. Properly dispose of clothing that cannot be decontaminated.

Conditions for safe storage, including any incompatibilities: Store away from oxidizing materials. Store product in a closed container located in a dry area. Do not store

in open, inadequate, or mislabeled packaging. Check that containers are clearly labeled. Use metal cans, metal drums, plastic, or lined fiber containers. Keep away from heat and flame.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters: Under most handling conditions, this product will not generate mist or dust. US OSHA PEL control parameter for insoluble molybdenum compounds is an 8 hour TWA of 15.0 mg/m^3. This is only one of many country controls that are in use worldwide for insoluble molybdenum compounds but not the most restrictive. The most restrictive known is 0.5 mg Mo/m^3 respirable (Belgium). It is recommended that you consider as a control measure the OEL used in your locality.

Engineering Controls: In most conditions, no special local ventilation is needed. General ventilation recommended. If the product is atomized ventilation should be used.

Personal Protective Equipment (PPE):

Eyes: Safety glasses recommended.

Skin: Impermeable gloves should be worn. Product is compatible with most elastomers.

Inhalation: No respiratory protection required under most conditions. If concentrations exceed exposure limits, approved respiratory equipment must be used.

9. CHEMICAL AND PHYSICAL PROPERTIES

Physical state:	Solid. Liquid may separate from product.
Color:	Grayish black
Odor:	Mild petroleum
Odor Threshold:	Not available
pH Value:	Not applicable
Melting Point:	210C
Freezing Point:	Becomes very stiff with decreasing temperature around -30°C
Initial Boiling Point:	>200°C
Flash Point:	>200°C COC (Base oil)
Evaporation rate:	Not available
Flammability (solid, gas):	Not applicable
Explosion limits:	Not available
Vapor pressure:	Negligible at 20°C
Vapor density:	Not available
Solubility:	Insoluble in water at 20°C
Partition coefficient:	Not available
Auto-ignition temperature:	Not available
Decomposition temperature:	Begins to decompose at 150°C

10. STABILITY AND REACTIVITY

Chemical stability: Stable under ambient temperatures and pressures

Possibility of hazardous reactions: Avoid strong oxidizers. Otherwise will not react or polymerize.

Conditions to avoid: No specific conditions to avoid have been identified.

Materials to avoid: Oxidizers, hydrogen peroxide, and potassium nitrate.

Hazardous decomposition products: Decomposes on heating and produces toxic fumes of sulfur oxides, and incompletely burned carbon compounds.

11. TOXICOLOGICAL INFORMATION

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Information on likely routes of exposure

Ingestion May cause gastrointestinal discomfort if swallowed. Do not induce vomiting. Vomiting may increase risk of product aspiration.

Inhalation May be harmful if inhaled.

Skin contact Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.

Eye contact May be irritating to eyes.

Symptoms Not available.

Information on toxicological effects

Acute toxicity Not classified.

Skin corrosion/irritation May cause skin irritation.

Serious eye damage/eye May cause eye irritation.

Respiratory sensitization Not classified.

Skin sensitization Not classified.

Germ cell mutagenicity Non-mutagenic based on Modified Ames Assay.

Carcinogenicity This product contains one or more substances which are classified by IARC as carcinogenic to humans (Group I), probably carcinogenic to humans (Group 2A) or possibly carcinogenic to humans (Group 2B)

Reproductive toxicity Contains no ingredient listed as toxic to reproduction

Aspiration hazard Not classified.

Mixture versus substance information: Not available

Other information Not available.

12. ECOLOGICAL INFORMATION

Toxicity Not expected to be harmful to aquatic organisms.

Persistence and
degradability
Not inherently biodegradable.

Bioaccumulative
potential
Bioaccumulation is unlikely to be significant because of the low water solubility of this product.

Partition coefficient
n-octanol/water (log Kow)
Not established.

Bioconcentration factor (BCF) Not available.

Mobility in soil Not available.

Results of PBT and vPvB assessment Not applicable.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. DISPOSAL PROCEDURES

Waste treatment methods: Waste (substance and container material) shall be recycled/recovered or disposed of as applicable and in accordance with community (EU) and local legislation. Recycle wherever possible. Consult state land waste management authority for disposal. Bury at an approved site. Recycle containers if possible, or dispose of in an authorized landfill.

According to the European Waste Catalogue, Waste Codes are not product specific but application specific. Waste Codes should be assigned by the user based on the application in which the product is used.

For USA Disposal: Waste must be disposed of in accordance with federal, state, and local environmental control regulations.

14. TRANSPORT INFORMATION

Class or Type: US DOT, IMO, ADR, RID, ADN, IMDG, and IATA: Non-hazardous

15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the mixture:

Worldwide Chemical Inventories and lists: MoS_2 is not a SEVESO substance, not an ozone-depleting substance and not a persistent organic pollutant.

Other regulatory information: Germany (base on read across) Water Hazard class, WGK = 1 (low hazard to water)

Chemical safety assessment: MoS_2 is REACH exempt as per Annex V and registration is not required.

Other Information:

U. S. Regulatory information

TSCA Inventory Status:	Y
TSCA 12 (b) Export Notification:	Not listed
CERCLA Section 103 (40 CFR 302.4):	N
SARA Section 302 (40 CFR 355.30):	N
SARA Section 304 (40 CFR 355.40):	N
SARA Section 313 (40 CFR 372.65):	N
OSHA Process Safety (29 CFR 1910.119):	N
SARA Hazard Categories, SARA Sections 311/312 (40 CFR 370.21) -	
Acute Hazard:	Y
Chronic Hazard:	Y
Fire Hazard:	N
Reactivity Hazard:	N
Sudden Release Hazard:	N

State Regulations: California Proposition 65 list. This material contains chemical(s) known to the state of California to cause cancer: silica.

Note – There are no known safety, health or environmental restrictions or prohibitions in any country where this product is produced, imported or marketed.

16. OTHER INFORMATION

NFPA Hazard Classification:

Health:	1
Flammability:	1
Reactivity:	0
Special Hazards:	None

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency personnel to address the hazards that are presented by short-term, acute exposure to material

under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

HMIS Hazard Classification:

Health:	1
Flammability:	1
Reactivity:	0
Protection:	B (See PPE section)

Hazardous Material Identification System (HMIS) hazard ratings are designed to inform employees of chemical hazards in the workplace. The ratings are based on inherent properties of the material under expected conditions of normal use and are not intended for use in emergency situations.

These data are offered in good faith as typical values and not as product specifications. No warranty, either expressed or implied, is hereby made. The recommended industrial hygiene and safe handling procedures are believed to be generally applicable. However, each user should review these recommendations in the specific context of the intended use and determine whether they are appropriate.