

JET-LUBE, INC.

MATERIAL SAFETY DATA SHEET

Product Name: MOLY-MIST™
Chemical Family: Paints and coatings
Use: Protective moly anti-gall & lubricant coating

Manufacturer/Supplier: JET-LUBE, INC.
Address: 4849 Homestead Rd., Ste. #200
 Houston, TX, 77028 USA **Phone:** 713-674-7617
Emergency Phone: 713-674-7617 **Fax:** 713-678-4604
Chemtrec 24 hours (USA): 800-424-9300

Hazardous Components	CAS No.	Wt%	OSHA PEL	ACGIH TLV	Other Limits of Exposure
Ketones	67641/78933	55 min.	>200	>200	STEL: N/A
Aromatic Solvents	1330207/108883	20 max.	>100	>100	STEL: N/A
Hydrocarbon Propellant	68476857	25 max.	1000 ppm	1000 ppm	

Main Hazards–Health Effects

Eyes: May cause irritation. **Inhalation:** Viscous nature may block breathing passages if inhaled.
Ingestion: May cause diarrhea. **Skin:** For hypersensitive persons, may irritate the skin after prolonged periods of contact.

Eyes: Flush with water until all residual material is gone. If irritation persists, seek medical help. **Inhalation:** Clear air passage. If respiratory difficulty continues, seek medical help. **Ingestion:** Wash out mouth immediately. Consult physician. **Skin:** Wash thoroughly with hand cleanser, followed by soap & water. Contaminated clothing should be dry cleaned before reuse.

Extinguishing Media: Foam, dry powder, Halon®, carbon dioxide, sand, earth & water mist.
Unsuitable Extinguishing Media: Water jet. **Protective Equipment for Fire fighting:** Self-contained breathing apparatus.

Personal Precautions: Wear gloves & protective overalls. **Environmental Precautions:** Do not allow it to enter drains. **Spillage:** Scrape up bulk, then wipe up remainder with cloth. To prevent walking hazard, pick up remaining residue with diatomaceous earth.

Handling: No special handling precautions necessary. **Storage:** Do not store at elevated temperatures.

Respiratory Protection: None needed. **Hand Protection:** Protective gloves for hypersensitive persons.
Eye Protection: Glasses, if applied to parts in motion. **Body Protection:** Overalls.

Physical State: Metallic-containing fluid **Color:** Black **Odor:** Ketone Type **pH:** Neutral **Boiling Range/Point °F (°C):** >600 (316)
Melting Point °F (°C): N/A **Flash Point (COC) °F (°C):** -4 (-20) **Propellant Flash Point:** -76 (-60) **OAR Value:** 1
Autoignition Temp °F (°C): >500 (260) **Explosive Properties:** LEL: 2.6% UEL: 12.8% **Evaporation Rate (Butyl Acetate):** >4.6
Partition Coefficient (Log Pow): N/A **Vapor Pressure (kPa):** <185 % **Volatiles:** 75% typ. incl. propellant **Density (g/cm³):** 0.92
Flammability: Flammable at ambient temp. **Oxidizing Properties:** None **Water Solubility:** Solvent <7% soluble **Vapor Density:** >2.93

Stability: Chemically stable under normal conditions. No photoreactive agents. **Conditions to Avoid:** Powerful sources of ignition & extreme temps. **Materials to Avoid:** Strong inorganic & organic acids, oxidizing agents. **Hazardous Decomposition Products:** Burning generates smoke, airborne soot, hydrocarbons & oxides of carbon & sulfur. Residue mainly comprised of soot & mineral oxides.

Acute Toxicity: Not known **Irritancy–Skin:** Very mild **Skin Sensitization:** Not known **Subacute/Sub-chronic Toxicity:** Not known
Genotoxicity: None known **Chronic Toxicity:** None known **California Prop 65:** N/A **Carcinogen:** NTP: No IARC: No **OSHA:** No
EC Class (67/548/EEC): No **Allergens:** None known **LC-50:** UN **LD-50:** N/A

Possible Effects: Solubility of solvent fraction in water could act as a marine pollutant. **Behavior:** UN **Mobility:** UN
KOC: UN **Environmental Fate:** Unlikely to cause contamination or concern beyond flammability.

Product Disposal: Do not incinerate. Contact waste disposal company or local authority for advice.

Container Disposal: Pails without liner–see Product Disposal section above. Pails with plastic liner–pail may only be disposed of via standard waste disposal services, recycled or reused. Liner–see Product Disposal section above.

D.O.T.: Flammable liquid N.O.S. **UN No.:** Bulk 1268 Aero 1950 Class 2.1

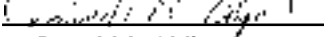
Sea Transport (IMO & IMDG): Bulk 1268 Aero 1950, Class 2 **Road & Rail Transport (ADR/RID):** Bulk 1268 Aero 1950, Class 2

Labeling Information: Flammable Liquid N.O.S. **EC Annex 1 Class:** N/A **R Phrases:** R22 Harmful if swallowed; R12 Extremely flammable
S Phrases: S3 Keep cool; S16 Keep away from ignition sources; S23 Do not breath vapors/spray; S38 Wear Suitable respiratory equipment. **Ozone Depleting Chemicals:** N/A **TSCA:** All components are listed.

CERCLA: Nonhazardous **WHMIS (Canada):** Bulk Class B Div. 2 Aero Class A, B-5 **Canadian DSL:** All components listed.

RCRA Hazard Class: Nonhazardous **40 CFR Part 372 (SARA Section 313):** This product contains in part raw material components subject to reporting.
SARA 311/312: None **TSCA 12B Components:** Acetone

SDS first issued. SDS data revised. **New Jersey Right To Know:** See Section II

Signature: 
Prepared by: Donald A. Oldiges
Date Issued: February 16, 2001

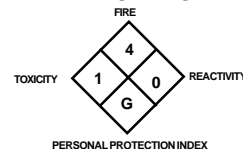
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LEGEND	
I.	IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY
II.	COMPOSITION INFORMATION ON INGREDIENTS
III.	HAZARDS IDENTIFICATION
IV.	FIRST AID MEASURES
V.	FIRE FIGHTING MEASURES
VI.	ACCIDENTAL RELEASE MEASURES
VII.	HANDLING AND STORAGE
VIII.	EXPOSURE CONTROL/PERSONAL PROTECTION
IX.	PHYSICAL AND CHEMICAL PROPERTIES
X.	STABILITY AND REACTIVITY
XI.	TOXICOLOGICAL INFORMATION
XII.	ECOLOGICAL INFORMATION
XIII.	WASTE DISPOSAL
XIV.	TRANSPORT INFORMATION
XV.	REGULATORY INFORMATION
XVI.	OTHER INFORMATION

HMIS SYMBOL-Aerosol

HEALTH	1
FLAMMABILITY	4
REACTIVITY	0
PPI	G

NFPA SYMBOL



HMIS SYMBOL-Bulk

HEALTH	1
FLAMMABILITY	3
REACTIVITY	0
PPI	G

NFPA SYMBOL



MOLY-MIST™

MoS₂ DRY FILM LUBRICANT

DESCRIPTION

MOLY-MIST™ consists of a high percentage of micro-fine MoS₂ suspended in a unique liquid, quick drying vehicle, it bonds dry-form MoS₂ powder to surfaces without heating or baking. When sprayed on any surface it "touches dry" quickly and cures to an even, tenacious coating in a matter of minutes. Molybdenum Disulfide (MoS₂) is a solid, dry-form lubricant with a coefficient of friction of only 0.03. Under sliding pressure, it will bond to ferrous and nonferrous metals, plastics, glass, rubber, wood, etc. It has high chemical and thermal stability; is inert to water, oil, alkalis, many acids and solvents.

MOLY-MIST lowers friction, prevents galling, seizure, stick-slip, fretting, corrosion and metal-to-metal contact; reduces torque and power consumption. It can be applied while equipment is in motion, deposits a coating of MoS₂ on hard to reach surfaces of fixed, moving or irregular parts. **MOLY-MIST** is used wherever a dry lubricant is needed, particularly where temperatures are extreme, where environments are hostile, and where friction must be kept to a minimum. For high temperature applications the equipment must be cool prior to application due to propellant flammability.

- Lead Free
- Quick dry bonding
- Enhances machines surfaces
- Noncorrosive
- Highly tenacious
- Bonds to both ferrous and nonferrous metals

APPLICATIONS

MOLY-MIST provides the initial lubrication protection that is needed where conventional lubrication in most cases cannot. Its low coefficient of friction, bonding tenacity, and ability to sustain lubrication make **MOLY-MIST** a pre-assembly necessity.

Lubrication - or lack of lubrication - on the first pass or revolution of a wearing surface to a large extent determines the life of a component. New parts contain rough surfaces in the form of microscopic imperfections. Use of **MOLY-MIST** during initial "running in" period will provide extended service life.

GENERAL: For threads, gears, dies, taps, chains, packings, sprockets, cables, pulleys, power screws, chucks, steady rests, swivels, sleeve bearings, wrist pins, pistons, cylinder walls, valve stems, cam shafts, bolts and screws, jigs and fixtures, plungers, polished rods, conveyors, acme screws, lathe beds, ways, valve plugs and seats.

Apply to truck shackles, brake anchor pins and busings, piston rods, rings, sleeves, trunnion U-bolts, open chains and rollers, adjustment bolts, all parts subject to dirt and corrosion.

PRODUCT CHARACTERISTICS

Spray Pattern (from 12" distance)	2" to 4" Cone
Propellant	Hydrocarbon
Solvent Type	Aromatic/Ketone
Resin	Thermal Silicone
Molybdenum Disulfide	
Purity	99%
Particle Size (% < 5 microns)	100
Film Appearance	Black Opaque
Dry Time	15 Minutes
Cure Time	72 hrs or 1 hr @ 350°F (177°C)
Typical Film Thickness	1.0 mil
Density (lb/gal)	7.52
Specific Gravity	0.90
Flash Point	-4°F (-20°C)
Service Rating	-300°F (-184°C) to 750°F (399°C)
VOC Content, g/liter	380 (excludes exempt)

NOTE: Not for use on oxygen lines.

PACKAGING

Code No.	Container Size	Container
16041	12 Oz.	Aerosol
16015	5 Gal.	Pail
16025	110 lb.	Drum

LIMITED WARRANTY

Jet-Lube, Inc. makes the Limited Express Warranty that at the date of delivery, this product shall be free from defects in Jet-Lube, Inc. materials and workmanship.

This Limited Express Warranty is expressly in lieu of any other express or implied warranties, including any implied warranty of merchantability or fitness for a particular purpose, and of any other obligation on the part of Jet-Lube, Inc.

The sole remedy for breach of the Limited Express Warranty shall be the refund of the purchase price. All other liability is negated and disclaimed, and Jet-Lube, Inc. shall not be liable for incidental or consequential damages.

CORPORATE LOCATIONS

Houston, Texas—World Headquarters

Maidenhead, England

Edmonton, Canada

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