

# Safety Data Sheet

## 5% Moly Grease

### 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name** : 5% Moly Grease  
**Supplier** : ValPar  
 PO Box 3856, Hwy #1 East  
 Regina, SK S4P 3R8  
 CANADA  
**Telephone** : 877-685-4886  
**Product/MSDS Information** : 306-791-5911  
**Canutec (24 hr)** : 613-996-6666



### 2. COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT NAME	CAS #	WEIGHT
Lubricating Oils, Petroleum, Base Oils, Highly Refined (IP346 DMSO Extracts <3%)	Mixture**(2)	80-90%
*Lithium Complex Thickener	Proprietary	5-10%
*Molybdenum Sulfide (MoS <sub>2</sub> )	1317-33-5	3-7%
*Phosphorodithioic Acid, O,O-DI-C1-14-Alkyl Esters, Zinc Salts	68649-42-3	1-2%
*Antimony Dialkyldithiocarbamate	Proprietary	<0.3%

\* This chemical(s) is hazardous according to OSHA/WHIMIS criteria

**Composition Comments** : Refer to Section 8 for exposure limits on ingredients.  
 The identity of chemical ingredients not regulated by U.S. or Canadian Federal or Regional Regulations (e.g. regulations such as OSHA HCS, EPA (TSCA, CAA, RCRA), HC WHMIS and EC CEPA) are treated confidentially and are not disclosed above.  
 \*\*(2) The base oil for this product can be a mixture of any of the following highly refined petroleum streams:  
 CAS 64741-88-4; CAS 64741-89-5; CAS 64741-95-3; CAS 64741-96-4;  
 CAS 64741-97-5; CAS 64742-01-4; CAS 64742-52-5; CAS 64742-53-6;  
 CAS 64742-54-7; CAS 64742-55-8; CAS 64742-56-9; CAS 64742-57-0;  
 CAS 64742-62-7; CAS 64742-63-8; CAS 64742-65-0; CAS 72623-83-7;  
 CAS 72623-85-9; CAS 72623-86-0; CAS 72623-87-1. Carcinogenicity: The petroleum base oils contained in this product have been highly refined by a variety of processes including solvent extraction, solvent dewaxing and hydrotreating to remove aromatics and improve performance characteristics. All petroleum base oils contained in this product meet the IP 346 criteria of less than 3 percent DMSO extractable PAH's and are not considered carcinogens by IARC, NTP or OSHA.

### 3. HAZARDS IDENTIFICATION

#### Emergency Overview

- Health Hazards** : Exposure to vapors generated at high temperatures may cause respiratory irritation.
- Sensitization** : No known information.
- Carcinogenicity** : IARC: Not listed as a Group 1, 2A, or 2B agent. OSHA: Not regulated. NTP: Not listed.
- Teratogenicity** : No data available to indicate product or any components contained at greater than [1.1% may cause birth defects.
- Health Warnings** : INHALATION. Heating can generate vapors that may cause respiratory irritation. nausea and headaches. Inhalation hazard at room temperature is unlikely due to the low volatility of this product.  
SKIN CONTACT. Repeated or prolonged contact can result in drying of the skin.  
EYE CONTACT. Irritating.  
INGESTION. Can cause stomach ache and vomiting. Main hazard, if ingested, is aspiration into the lungs and subsequent pneumonitis.
- Route of Entry** : Inhalation. Skin and for eye Contact. Ingestion.

### 4. FIRST AID MEASURES

- Inhalation** : Vapor inhalation under ambient conditions is normally not a problem. If overcome by vapor of hot product, immediately remove from source of exposure. Move the exposed person to fresh air at once. For breathing difficulties oxygen may be necessary. Get medical attention if any discomfort continues.
- Eyes** : Rinse the eye with water immediately. Continue to rinse for at least 15 minutes. Contact physician if discomfort continues.
- Skin** : Remove contaminated clothing. Wash skin thoroughly with soap and water. Get medical attention if any discomfort continues.
- Ingestion** : **Do not induce vomiting!** Get medical attention immediately!

### 5. FIRE FIGHTING MEASURES

- Flash Point (°C)** : Prolonged or repeated skin contact may cause irritation
- Flammability Limit - Lower(%)** : N/D
- Flammability Limit - Upper(%)** : N/D
- Extinguishing Media** : Use: Carbon dioxide (CO<sub>2</sub>). Dry chemicals: sand, dolomite etc. Alcohol resistant foam. Water spray, fog or mist.
- Special Fire Fighting Procedures** : Use water to keep fire exposed containers cool and disperse vapors. Water spray may be used to flush spills away from exposures and dilute spills to non-flammable mixtures. Avoid water in straight hose stream; will scatter and spread fire. Keep run-off water out of sewers and water sources. Dike for water control.
- Unusual Fire & Explosion Hazards** : Pressure will increase in over heated, closed containers.
- Hazardous Combustion Products** : Acrid smoke/fumes. Oxides of: Carbon. Sulfur.

**Protective Measures in Case**

**of Fire** : Self-contained breathing equipment and chemical resistant clothing recommended.

**6. ACCIDENTAL RELEASE MEASURES**

- Personal Precautions** : Minimize skin contact.
- Precautions to Protect the Environment** : Keep product out of sewers and watercourses by diking or impounding. Advise authorities if product has entered or may enter sewers, watercourses or extensive land areas. Assure conformity with applicable government regulations.
- Spill Clean-Up Procedures** : Contain spill. Absorb small amounts. Collect and return large amounts to shipping container. Rinse area with water.

**7. HANDLING AND STORAGE**

- Handling Precautions** : Ventilate well, avoid breathing vapors. Use approved respirator if air contamination exceeds acceptable level.  
Do not reuse container.  
Keep lid closed when not in use.  
Do not store or mix with strong oxidizers.  
Avoid spilling, skin and eye contact.  
Eye wash and emergency shower must be available at the work place.
- Storage Precautions** : Store separate from strong acids and oxidizers.  
Keep away from heat, sparks and open flame.
- Storage Criteria** : Chemical storage.

**8. EXPOSURE CONTROLS AND PERSONAL PROTECTION**

COMPONENT	STD	TWA STEL	TWA STEL
Lubricating Oils, Petroleum, Base Oils, Highly Refined (IP346 DMSO Extracts <3%)	OSHA		5 mg/m3 as oil mist
	ACGIH		5 mg/m3 as oil mist 10 mg/m3 as oil mist
Molybdenum Sulfide (MoS2)	OSHA		N/E
	ACGIH	3 mg/m3 (resp) as Mo	10 mg/m3 (ihl) as Mo
Antimony Dialkyldithiocarbamate	OSHA		0.5 mg/m3 as Sb
	ACGIH		0.5 mg/m3 as Sb

## Protective Equipment



- Engineering Controls** : Use engineering controls to reduce air contamination to permissible exposure level.
- Ventilation** : No specific ventilation requirements noted, but forced ventilation may still be required if air contamination exceeds acceptable level.
- Respirators** : No specific recommendation made: but respiratory protection may still be required under exceptional circumstances when excessive air contamination exists.
- Protective Gloves** : Chemical resistant gloves recommended to prevent prolonged or repeated contact. Use protective gloves made of: Latex.
- Eye Protection** : Wear splash-proof eye goggles to prevent any possibility of eye contact.
- Protective Clothing** : Wear appropriate clothing to prevent repeated or prolonged skin contact.
- Hygienic Work Practices** : Wash at the end of each work shift and before eating, smoking and using the toilet.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

- Appearance/Physical State** : Grease
- Color** : Grey
- Odor** : Mild (or faint]. Petroleum.
- Solubility Description** : Insoluble in water.
- Density** : 0.90
- Temperature (°C)** : 15.6 (60°F)
- VAPOR DENSITY (air=1)** : > 5
- Vapor Pressure** : < 0.1 mmHg
- Temperature (°C)** : 20 (68°F)
- Evaporation Rate** : < 1
- Reference** : BuAc=1

## 10. STABILITY AND REACTIVITY

- Stability** : Normally stable.
- Conditions To Avoid** : Avoid contact with acids and oxidizing substances.
- Hazardous Polymerization** : Will not Occur.
- Polymerization Description** : Not applicable
- Hazardous Decomposition Products** : Oxides of: Carbon. Sulfur.

## 11. TOXICOLOGICAL INFORMATION

**Toxicological Information** : No experimental toxicological data on the preparation as such is available.

**Lubricating Oils, Petroleum, Base Oils, Highly Refined (IP346 DMSO Extracts <3%)**

**Toxicological Data** : WHMIS (Canada) = Not a controlled product.  
Carcinogenicity. IP346 = <3% DMSO Extracts.

**Toxic Dose - LD 50** : > 5000 mg/kg (oral rat)

**Toxic Dose - LD 50 Skin** : > 2000 mg/kg (skn rat)

**Toxic Conc. - LC 50** : No Information Available (NIA).

**Irritation** : Prolonged skin contact may cause irritation.

**Sensitization** : Not known to be a sensitizer.

**Lithium Complex Thickener**

**Toxic Dose - LD 50** : No Information Available (NIA).

**Toxic Conc. - LD 50** : No Information Available (NIA).

**Molybdenum Sulfide (MoS<sub>2</sub>)**

**Toxic Dose - LD 50** : > 2000 mg/kg (oral rat)

**Toxic Dose - LD 50 Skin** : > 2000 mg/kg (skn rat)

**Toxic Conc. - LC 50** : 2820 ppm/4h (inh-rat)

**Antimony Dialkyldithiocarbamate**

**Toxic Dose - LD 50** : 16,400 mg/kg (oral rat)

**Toxic Dose - LD 50 Skin** : 16,000 mg/kg (skn rat)

**Toxic Conc. - LC 50** : 100 ppm (inh-rat)

## 12. ECOLOGICAL INFORMATION

**Ecological Information** : No experimental ecological data on the product itself.

**Lubricating Oils, Petroleum, Base Oils, Highly Refined (IP346 DMSO Extracts <3%)**

**Lithium Complex Thickener**

**Molybdenum Sulfide (MoS<sub>2</sub>)**

**Antimony Dialkyldithiocarbamate**

## 13. DISPOSALS CONSIDERATIONS

**Disposal Methods** : Spilled material, unused contents and empty containers must be disposed of in accordance with local, state and federal regulations.

## 14. TRANSPORT INFORMATION

**DOT Hazard Class** : Not regulated.

**SEA Transport Notes** : Not regulated per IMDG.

**AIR Transport Notes** : Not regulated per IATA.

## 15. REGULATORY INFORMATION

### US Federal Regulations

COMPONENT	SARA 302	CERCLA	SARA 313
Lubricating Oils, Petroleum, Base Oils, Highly Refined (IP346 DMSO Extracts <3%)	No	No	No
Lithium Complex Thickener	No	No	No
Molybdenum Sulfide (MoS <sub>2</sub> )	No	No	No
Phosphorodithioic Acid, O,O-DI-C1-14-Alkyl Esters, Zinc Salts	No	***	N982 - Zn
Antimony Dialkyldithiocarbamate	No	***	N010 - Sb

**Regulatory Status** : \*\*\* Indicates that no RQ is assigned to this generic or broad class, although the class is a CERCLA hazardous substance. See 50 Federal Register 13456 (April 4, 1985). Values in Section 313 column represent Category Codes for reporting under Section 313.

### Clean Air Act

COMPONENT	CAA Accidental Release Prevention
Lubricating Oils, Petroleum, Base Oils, Highly Refined (IP346 DMSO Extracts <3%)	No
Molybdenum Sulfide (MoS <sub>2</sub> )	No
Phosphorodithioic Acid, O,O-DI-C1-14-Alkyl Esters, Zinc Salts	No
Antimony Dialkyldithiocarbamate	No

**SARA Hazard Categories** : None

### US State Regulations

COMPONENT	CA	MA	FL	MN	NJ	PA	RI
Lubricating Oils, Petroleum, Base Oils, Highly Refined (IP346 DMSO Extracts <3%)	No	No	No	No	No	No	No
Molybdenum Sulfide (MoS <sub>2</sub> )	No	No	Yes	No	No	No	No
Phosphorodithioic Acid, O,O-DI-C1-14-Alkyl Esters, Zinc Salts	No	No	Yes	Yes	Yes	EH	No
Antimony Dialkyldithiocarbamate	No	No	No	No	No	No	No

**State Regulatory Status** : Proposition 65 Reproductive Hazard: This product may contain the following chemical(s) considered by the State of California's Safe Drinking Water and Toxic Enforcement Act of 1986 as causing reproductive toxicity, and for which warnings are now required: Toluene, developmental hazard, CAS # 108-88-3. <1 ppm

### Workplace Hazardous Materials Information System - WHMIS

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

**Controlled Product Classification :** Not a controlled product.

### Global Inventories

Component	CAN	US	EU	AUS	JAP	KOR	PHLP	CHN
Lubricating Oils, Petroleum, Base Oils, Highly Refined (IP346 DMSO Extracts <3%)	DSL	Yes	EINECS	Yes	Yes	Yes	Yes	Yes
Lithium Complex Thickener	DSL	Yes	EINECS	No	Yes	Yes	No	No
Molybdenum Sulfide (MoS <sub>2</sub> )	DSL	Yes	EINECS	Yes	PRTR1	Yes	Yes	Yes
Phosphorodithioic Acid, O,O-DI-C1-14-Alkyl Esters, Zinc Salts	DSL	Yes	EINECS	Yes	Yes	Yes	Yes	Yes
Antimony Dialkyldithiocarbamate	NPRI	Yes	EINECS	Yes	Yes	Yes	Yes	Yes

- USA (TSCA)** : All components in this product are listed on the US Toxic Substances Control Act (TSCA) Inventory or are exempt from TSCA Inventory requirements.
- Canada (DSL)** : All components in this product are listed on the Canada Domestic Substances List (DSL) or are exempt from DSL requirements.
- Europe (EINECS/ELINCS/NLP)** : All components in this product are listed on the European Inventory of New and Existing Chemical Substances (EINECS), the European List of Notified Chemical Substances (ELINCS), or the No Longer Polymers (NLP) list, or are exempt from EU listing requirements.
- Japan (ENCS)** : This product contains one or more components that are NOT LISTED on the Japan Inventory of Existing and New Chemical Substances (ENCS) and are NOT EXEMPT from ENCS requirements.
- Philippines (PICCS)** : This product contains one or more components that are NOT LISTED on the Philippines Inventory of Chemicals and Chemical Substances (PICCS) and are NOT EXEMPT from PICCS requirements.
- Australia (AICS)** : This product contains one or more components that are NOT LISTED on the Australian Inventory of Chemical Substances (AICS) and are NOT EXEMPT from AICS requirements.
- Korea (ECL)** : This product contains one or more components that are NOT LISTED on the Korea Existing Chemicals List (ECL) and are NOT EXEMPT from KECL requirements.
- China (IECS)** : This product contains one or more components that are NOT LISTED on the China Inventory of Existing Chemical Substances (IECS) and are NOT EXEMPT from IECS requirements.

## 16. OTHER INFORMATION

### NFPA-HMIS Hazard Rating

- Health** : Irritation; minor residual injury (1) - HMIS/NFPA
- Flammability** : Burns only if pre-heated [1] - HMIS/NFPA
- Reactivity** : Normally Stable (U) - HMIS/NFPA

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<b>Personal Protection Index</b>	:	B - Safety Eyewear and Gloves
<b>Tariff Code (Schedule B)</b>	:	2710.19.3750 Lubricating greases, with or without additives.
<b>Revision Comments</b>	:	Section 1: Name Change Section 1: Product Number Section 1: Synonyms Section 1: Manufacturer Section 2: Percentage Composition Section 2: Composition Comments Section 11: Toxicological Information Section 12: Ecological Information Section 15: US State Regulations Section 15: WHMIS Section 15: Global Inventories Section 16: Tarrif Code (Schedule B) Section 16: Disclaimer

**The information contained herein is based on data considered accurate, however, no warranty is expressed or implied regarding the accuracy of these data or the results to be obtained from the use thereof. Vendor assumes no responsibility for injury or third person proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Additionally, vendor assumes no responsibility for injury to vendee or third persons proximately caused by abnormal use of the material even if reasonable safety procedures are followed. Furthermore, vendee assumes the risk in his use of the material.**