



SPECIALIZED LUBRICANTS



1. Substance/Product Identification

Product Name: 260 Perma Moly EP NLGI 1, 2, and 3

Company/Address: Schaeffer Mfg
102 Barton Street
Saint Louis, Missouri 63104
USA

Synonyms:

Preparation/Revision Date: 04/13/2010

Product Use/Type: Extreme Pressure Lubricating Grease

Emergency Phone Number: +1 314 865-4105 (24-hour response number)
+ 1 314 865-4100 (Business hours 8:30AM-5:00PM)
1-800-325-9962 (US & Canada)

Website: www.schaefferoil.com

MSDS Number: 260 Version 1

2. Hazards Identification

Appearance: Grey color, slightly tacky

Odor: mild petroleum odor

Principal Hazards: Eye and skin irritant

See Section 11 for complete health hazard information

3. Composition and Information on Ingredients

Hazardous Ingredients

Ingredient Name	CAS Number	EU Number	Percentage (wt.)
Mixture of petroleum base oils	64741-88-4 64742-65-0 64742-01-4 64741-88-4	265-090-8 265-169-7 256-101-6 265-090-8	80-85
Molybdenum	68412-26-0	270-180-5	1-3
Dibutylthiocarbamate			
Organophilic Clay	71011-25-1	275-125-9	4-7
Antimony diethylthiocarbamate	15890-25-2	240-28-2	1-3
Zinc diethylthiocarbamate	15337-18-5	239-370-5	0.5-2
Molybdenum Disulfide	1317-33-5	215-263-9	1-3
Titanium Dioxide	13463-6-7	236-675-5	1-3

The highly refined petroleum base oils contain <3% w/w DMSO extracts according to the IP 346 Test method

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4. First Aid Measures

Ingestion: Do not induce vomiting. Give one or two glasses of water to drink. Never give anything by mouth to an unconscious person. Seek medical attention

Eyes: Immediately flush with clean water for 15 minutes. If irritation, redness or itching persists seek medical attention.

Inhalation: Remove victim to fresh air. If breathing is difficult administer oxygen by trained personnel. If upper respiratory tract irritation, headache, nausea, or drowsiness occurs If upper respiratory tract irritation, headache, nausea, or drowsiness occurs remove to fresh air. Get immediate medical attention if breathing becomes difficult or symptoms persist.

Skin: Remove contaminated clothing and launder before reuse. Wash skin with large amounts of soap and water. Seek medical attention if irritation develops

Additional Information: None

5. Fire Fighting Measures:

Flash Point: Base Oil 510°-560°F (265°-293°C) Cleveland Open Cup ASTM D-92

Extinguishing Media: Dry chemical foam, water-fog, carbon dioxide

Firefighting Procedures: As in any fire wear a self contained breathing apparatus pressure demand, MSHA/NIOSH (Approved or Equivalent) and full protective gear

Unusual Fire & Explosion: Dense black smoke

Hazards: None

6. Accidental Release Measures

Spill Procedures and Clean up methods: Use absorbent materials to contain spill.

Collect used absorbent material and discard as dictated by Federal, State, Provincial and local laws and regulations. Keep out of sewers and watercourses

Personal Precautions: Wear appropriate personal protective equipment when cleaning up a spill

Environmental Precautions: This material is not expected to present any environmental problems other than those associated with oil spills if spilled into a watercourse or waterway. The spill must be reported to the National Response Center (U.S. Coast Guard) or the appropriate governmental authorities if the product is spilled into rivers, creeks, streams or other natural waterways or courses. The Coast Guard's Toll Free No. is 800-424-8802.

7. Handling & Storage

Handling: Avoid all contact of product with eyes and skin. Wash thoroughly after handling and before eating, smoking or using toilet facilities. Do not swallow product. Do not inhale vapors or mists. Do not eat, drink or smoke in work areas.

Storage: Do not store product at elevated temperatures. Store in a cool dry place that has adequate ventilation. Do not store near food or feed products. Keep containers closed when not in use.

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8. Exposure Controls and Personal Protection

Occupational Exposure Limits

Ingredient	OSHA TWA	OSHA STEL	ACGIH TWA	ACGIH STEL
Mixture of petroleum base oils	5 mg/m ³		5 mg/m ³	
Molybdenum	15 mg/m ³		10 mg/m ³	
Dibutylthiocarbamate				
Organophilic Clay	NE		NE	
Antimony	0.5 mg/m ³		0.5 mg/m ³	
diamylthiocarbamate				
Zinc diamylthiocarbamate	NE		NE	
Molybdenum Disulfide	15 mg/m ³		10 mg/m ³	
Titanium Dioxide	15 mg/m ³		10 mg/m ³	

(s)-Skin exposure (p) proposed limit (c) – Ceiling limit (l) Recommended exposure limit
(u) supplier limit (N/E) – not established

Other Exposure Limits

Engineering Controls: Good general ventilation should be used. If applicable use process enclosures, local exhaust ventilation and other engineering controls to maintain airborne levels below recommended exposure limits.

Personal Protective Equipment

Gloves: Impervious oil resistant gloves such as Neoprene, Nitrile rubber

Protective Clothing: Apron and long sleeves recommended

Eye Protection: Chemical goggles or safety goggles

Respiratory Protection: None required under conditions of normal use

9. Physical and Chemical Properties

Flash Point: Base oil 510°-560°F (265°-293°C) Cleveland Open Cup ASTM D-92

Specific Gravity: 0.9 -1.02

Upper Flammable Limit (UEL): Not determined

Lower Flammable Limit (LEL): Not determined

Vapor Pressure: Not determined

Vapor Density (air =1): Heavier than air

Percent Volatile: Nil

Evaporation Rate: Not determined

pH: Not applicable

Boiling Point: Base Oils >600°F (315°C)

Melting Point: >500°F (260°F)

Appearance: Black color

Odor: Mild petroleum odor

Solubility in Water: Insoluble

The above data are typical values and do not constitute a specification. Vapor pressure data are calculated unless otherwise specific

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10. Stability and Reactivity

Stability: Stable under normal conditions

Materials to Avoid: Strong oxidizing agents

Polymerization: Will not occur

Thermal Decomposition: Carbon dioxide and carbon monoxide. Byproducts of incomplete combustion

Conditions to Avoid: Avoid breathing mists and vapors

11. Toxicological Information:

Routes of Exposure: Skin, eyes, ingestion and inhalation

Target Organs: Skin, eyes, upper respiratory tract

Acute Exposure

Ingestion: Nausea, diarrhea

Eye Contact: May cause irritation and redness to eyes

Skin Contact: Prolonged and repeated contact may cause irritation, redness and dryness to skin

Inhalation: Heating can generate vapors and mists that can cause nausea, dizziness and other upper respiratory irritation if inhaled.

Dermal Sensitization: Product is not considered to be a dermal sensitizer

Inhalation Sensitization: Product is not considered to be an inhalation sensitizer

Carcinogenicity: Product does not contain any components listed by ACGIH, IRAC, NIOSH, NTP or OSHA

Additional Toxicological Information: No data available to indicate the product or any of its components are present at greater than 0.1% are mutagenic, genotoxic or teratogenic

Acute toxicity

Petroleum base oils

Acute Inhalation Toxicity: LC50 >5,000 mg/m³ (rat)

Acute Oral Toxicity: LD50 >2,000 mg/kg (rat)

Acute Dermal Toxicity: LD50 >2,000 mg/kg (rabbit)

Zinc diamyldithiocarbamate

Acute Oral Toxicity: LD50 / rat / 14,900 mg/kg

Acute Dermal Toxicity: LD50 / rabbit / > 2,000 mg/kg

Molybdenum dibutyldithiocarbamate

Acute Oral Toxicity: LD50 / rat / >10,000 mg/kg

Acute Dermal Toxicity: LD50 / rabbit / > 10,000 mg/kg

Acute Inhalation Toxicity: LC50/rat/ >34.4 mg/l

Antimony dialkyldithiocarbamate:

Acute Oral Toxicity: LD50 / rat /16,400 mg/kg

Acute Dermal Toxicity: LD50 / rabbit / 16,000 mg/kg

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11. Toxicological Information Continued

Organophilic Clay

Acute Oral Toxicity: LD50 / rat / > 8,000 mg/kg

Titanium Dioxide

Acute Oral Toxicity: LD50 / rat / >25 g/kg

Acute Dermal Toxicity: LD50/rabbit/>10 g/kg

Acute Inhalation Toxicity: LC50/rat/ 6.82 mg/l (4 hours)

12. Environmental and Ecological Information

Ecotoxicity

Material -- Not expected to be harmful to aquatic organisms.

Environmental Fate

Biodegradation: This product is not readily biodegradable

Bioaccumulation: Product has the potential to bioaccumulate, however metabolism or physical properties may reduce the bioconcentration or limit bioavailability.

Water Class Hazard (Germany): WK-1 according to appendix 4 VwVwS dated 27.7.2005

13. Disposal Considerations

Waste Handling and Disposal: This product in its neat state when discarded or disposed of is not a hazardous waste according to Federal Regulations 40CFR 261.4 (b)(4). Dispose of product in accordance with all applicable Federal, State and local laws and regulations. Do not re-use empty containers

14. Transport Information

US DOT Classification Non-Bulk and Bulk: Not regulated

IMDG Classification: Not regulated

IATA/ICAO Classification: Not regulated

Canadian TDG: Not regulated

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15. Regulatory Information

Hazard Symbols



Xi Irritant

US Regulations

TSCA Inventory: All of the components in this material are on the US TSCA Inventory or are exempt.

State of California Proposition 65: This product does not contain any of the chemicals that are listed on the State of California's Proposition 65 List as potential cancer causing agents or reproductive toxins

US EPA SARA Title III and CERCLA Listings and Reportable Quantities

US EPA Section 311/313 Classifications

This product does not contain greater than 1% of any chemical substance listed under the SARA Title III Section 313, CERCLA's 302/304 and 102(a) Lists

Section 311/312 (40CFR 370)

Acute (Immediate) Chronic (Delayed) Fire Reactive Pressure Generating
X

15. Regulatory Information

US EPA Section 313 Chemicals Not applicable

US Tariff Heading Number: 2710.19.3750

Schedule B Number: 2710.19.3750

Other Regulations:

Canada: All of the ingredients of this product are in compliance with the Canadian Environmental Protection Act and are present on the Domestic Substance List

Canadian WHMIS Classifications and Symbols: This product is not considered to be a WHMIS Hazard

EEC: All components are in compliance with the EC Seventh Amendment Directive 92/32/EEC

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16. Other Information

**Hazardous Materials Information System
(U.S.A.)**

Health: 1
Fire: 1
Reactivity: 0

**National Fire Protection Agency System
(U.S.A.)**

Health: 1
Fire: 1
Reactivity: 0

For additional information call +1 314-865-4100 (outside the US and Canada) or 1-800-325-9962 inside the United States and Canada.

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