



# SPECIALIZED LUBRICANTS

## 1. Substance/Product Identification

Product Name: 239S Super Lube Supreme Arctic SAE 0W-20

Company/Address: Schaeffer Mfg

**102 Barton Street** 

Saint Louis, Missouri 63104

**USA** 

Preparation/Revision Date: 07/15/2014

Product Use/Type: Drive-train lubricant for construction equipment 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: 239S 0W-20 Version 1.0

# 2. Hazards Identification

Appearance: Blue green color

**Odor: Petroleum Odor** 



**Hazard Symbols:** 

Hazard Statements: Warning! This product may irritate eyes and skin upon contact. Inhalation of mist or spray may cause irritation of the upper respiratory tract if inhaled.

See Section 11 for complete health hazard information

# 3. Composition and Information on Ingredients

**Hazardous Ingredients** 

Ingredient Name	CAS No.	EU Number	Percentage (by wt.)
Complex Mixture of	The synthetic base oils	The synthetic base oils	
Synthetic Base Oils	may be a mixture of the	may be a mixture of the	10 – 90
	following CAS #'s	following EC #'s	
	68037-01-4	500-183-1	
	72623-86-0	276-737-9	
	72623-87-1	276-738-4	
	64742-54-7	265-157-1	
Proprietary Additives -	Complex Mixture of	Complex Mixture of	
Specific Chemical Identity	Chemicals	Chemicals	<20
withheld (trade secret)	Trade Secret	Trade Secret	
Zinc alkyldithiophosphate	68649-42-3	272-028-3	
			1-2
Mixture of branched	74499-35-7		
alkylphenol and calcium	And		<1
branched alkylphenols	132752-19-3		
Antimony	15890-25-2	240-028-2	<1
dialkyldithiocarbamate			
Molybdenum di(2-	72030-25-2	273-381-6	<1
Ethylhexyl			
phosphorodithiolate)			

The base oils contained in this product have been highly refined or synthetized by various processes including severe hydrotreating to reduce their aromatic content and to improve performance properties. The highly refined petroleum base oils contain <3% w/w DMSO extracts according to the IP 346 Test method and are not considered to be carcinogenic.

#### 4. First Aid Measures

**Ingestion**: If swallowed, do not induce vomiting. Give the person a glass of water or milk to drink and get immediate medical attention. Never give anything by mouth to an unconscious person.

**Eyes**: Flush eyes with running water immediately while holding the eyelids open. Remove contact lenses, if worn, after initial flushing, and continue flushing for at least 15 minutes. Get immediate medical attention. **Inhalation**: Move the exposed person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention if breathing difficulties continue.

**Skin:** To remove the material from skin, use soap and water. Discard contaminated clothing and shoes or thoroughly clean before reuse. Get medical attention if any irritation or redness develops.

**Additional Information**: Ingestion of this product or subsequent vomiting may result in aspiration of petroleum hydrocarbon liquid, which may cause pneumonitis.

## 5. Fire Fighting Measures:

Flash Point: 410°F (210°C)

**Extinguishing Media:** Use water fog, foam, dry chemical or carbon dioxide (CO2) to extinguish flames

and fire.

**Firefighting Procedures:** This material will burn although it is not easily ignited. For fires involving this material, do not enter any enclosed or confined fire space without proper protective equipment, including self-contained breathing apparatus

**Unusual Fire & Explosion:** Highly dependent on combustion conditions. A complex mixture of airborne solids, liquids, and gases including carbon monoxide, carbon dioxide, and unidentified organic compounds will be evolved when this material undergoes combustion.

## 6. Accidental Release Measures

**Spill Procedures and Clean-up methods:** Eliminate all sources of ignition in vicinity of spilled material. Stop the source of the release if you can do it without risk. Contain release to prevent further contamination of soil, surface water or groundwater. Clean up spill as soon as possible, observing precautions in Exposure Controls/Personal Protection. Use appropriate techniques such as applying non-combustible sorbent materials or pumping. Where feasible and appropriate, remove contaminated soil. Place contaminated materials in disposable containers and dispose of in a manner consistent with applicable regulations.

**Personal Precautions**: Wear appropriate personal protective equipment when cleaning up spills. **Environmental Precautions**: U.S.A. regulations may require reporting spills of this material that could reach any surface waters. Report spills to all applicable Federal, State, Provincial and local authorities and/or the United States National Response Center at (800) 424-8802 as appropriate or required

# 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.

**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.

#### 8. Exposure Controls and Personal Protection

**Occupational Exposure Limits** 

Ingredient	OSHA TWA	OSHA STEL	ACGIH TWA	ACGIH STEL
Complex Mixture of Synthetic Base				
Oils	5 mg/m <sup>3</sup>		5 mg/m <sup>3</sup>	
Proprietary Additives - Specific			NE	
Chemical Identity withheld (trade	NE			
secret)				
Zinc alkyldithiophosphate	NE		NE	
Mixture of branched alkylphenol and				
calcium branched alkylphenols	NE		NE	
Antimony dialkyldithiocarbamate				
	0.5 mg/m <sup>3</sup> as		0.5 mg/m <sup>3</sup> as	
	antimony		antimony	
Molybdenum di(2- Ethylhexyl				
phosphorodithiolate)	15 mg/m <sup>3</sup>		5 mg/m <sup>3</sup>	

(s)-Skin exposure

(p) proposed limit

(c) - Ceiling limit

(I) Recommended exposure limit

(u) supplier limit

(N/E) - not established

**Engineering Controls:** If user operations generate an oil mist, determine if airborne concentrations are below the OSHA Permissible Limit (PEL) of 5 mg/m3 for mineral oil mist. If not, wear a NIOSH approved respirator that provides adequate protection from the measured concentrations of this material. For airpurifying respirators use a particulate cartridge

## 8. Exposure Controls and Personal Protection continued

## **Personal Protective Equipment**

**Gloves:** Nitrile or oil resistant gloves

**Protective Clothing:** Wear impervious protective clothing to prevent skin contact. Selection of protective clothing may include gloves, apron, boots, and complete facial protection depending on operations conducted. Users should determine acceptable performance characteristics of protective clothing. Consider physical requirements and other substances present when selecting protective clothing.

**Eye Protection:** Wear eye protection such as safety glasses, chemical goggles, or face shields if engineering controls or work practices are not adequate to prevent eye contact.

**Skin Protection:** Wear impervious protective clothing to prevent skin contact

# 9. Physical and Chemical Properties

Flash Point: 410° (210°C) ASTM D-92 Cleveland Open Cup

Specific Gravity: 0.8511at 60°F

Upper Flammable Limit (UEL): Not Determined Lower Flammable Limit (LEL): Not Determined

Vapor Pressure: Not determined Vapor Density (air =1): >1

Percent Volatile: Negligible
Evaporation Rate: Not Determined

**pH:** Not applicable

Boiling Point: >600°F (>300°C) Melting Point: Not applicable Appearance: Blue green 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 specified

## 10. Stability and Reactivity

**Stability:** This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

Materials to Avoid: Strong acids, bases and oxidizers

**Polymerization:** Not expected to occur during conditions of normal use.

Thermal Decomposition: Not determined

Conditions to Avoid: May react with oxygen and strong oxidizing agents, such as chlorates, nitrates,

peroxides, etc,

#### 11. Toxicological Information:

Routes of Exposure: Skin, eyes, ingestion and inhalation

Target Organs: Skin, eyes, upper respiratory tract

#### **Acute Exposure**

**Ingestion:** Ingestion may cause a laxative effect. This material can directly enter the lungs, if swallowed, or if subsequently vomited. Once in the lungs it is very difficult to remove and can cause severe injury or death.

Eye Contact: Slight irritation and redness to eyes

**Skin Contact:** Contact with skin is not expected to cause prolonged or significant irritation

# 11. Toxicological Information continued:

**Inhalation:** Contains petroleum hydrocarbon base oils. May cause respiratory irritation or other pulmonary effects following prolonged or repeated inhalation of oil mist at airborne levels above the recommended mineral oil mist exposure

limit.

**Dermal Sensitization:** Product may be a dermal sensitizer

**Inhalation Sensitization:** Not expected to be a inhalation sensitizer.

**Carcinogenicity:** This product does not contain any of the chemicals listed on the United States National Toxicology Program Annual Reports on Carcinogens, The International Agency for Cancer Research Monographs and United States' Occupational Safety and Health Administrations 29CFR 1910.10 Subpart

Z List.

Ames Test: Negative

Additional Toxicological Information: Complex Mixture of Synthetic 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)

Molybdenum di(2-ethylhexyl)phosphorodithioate CAS 72303-25-2

Acute Oral Toxicity: LD50 / rat / > 5000 mg/kg

Acute Dermal Toxicity: LD50 / rabbit / > 10800 mg/kg

Acute Inhalation Toxicity: LC50 / not known

# 12. Environmental and Ecological Information

#### **Ecotoxcity**

#### **Synthetic Base Oils**

# This material is not expected to be harmful to aquatic organisms.

- 96 hour(s) / LC50 / fathead minnow (Pimephales promelas) / >750 mg/l
- 48 hour(s) / EC50 / water flea (Daphnia magna) / 190 mg/l
- 96 hour(s) / LC50 / Rainbow trout (Salmo gairdneri) / >1000 mg/l

#### **Environmental Fate**

**Biodegradation:** This material is not expected to be readily biodegradable

Bioaccumulation: Not established

Water Class Hazard (Germany): Water Hazard Class 2 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 United States Federal Regulations 40CFR 261.4 (b)(4). Dispose of product in accordance with all applicable Federal, State and local laws and regulations. Under RCRA, it is the responsibility of the user of this product to determine at the time of disposal, whether the product meets RCRA criteria for hazardous waste. Do not re-use empty containers

### 14. Transport Information

**US DOT Classification Non-Bulk/Bulk:** Not regulated as a hazardous material or dangerous good for transportation.

**IATA/ICAO and IMDG Classification:** Not regulated as a hazardous material or dangerous good for transportation.

### 15. Regulatory Information

### **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 chemical listed on the State of California's Proposition 65 List for chemicals classified as potential reproductive or cancer causing agents.

# **US EPA SARA Title III and CERCLA Listings and Reportable Quantities**

This product contains 1 to 2% of Zinc alkyl dithiophosphate which listed on the US EPA's Section 313 List as Zinc and Zinc

#### **US EPA Section 311/313 Classifications**

None

#### **US EPA Section 313 Chemicals**

This product contains 1 to 2% of Zinc alkyl dithiophosphate which listed on the US EPA's Section 313 List as Zinc and Zinc

**US Tariff Heading Number: 3403.19.0000** 

**Schedule B Number:** 3403.19.0000

#### 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 a WHMIS hazardous material

**EEC:** All components are in compliance with the EC Seventh Amendment Directive 92/32/EEC. This material is not classified as hazardous under EU Criteria.

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

# 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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