

# Safety Data Sheet

Issue Date: 02-Sept-2014

Revision Date: 13-Aug-2015

Version 1

## 1. IDENTIFICATION

### Product Identifier

**Product Name** Purus Alleter Premium EP2 Lithium Grease

**Product Codes** 17333, PIN17333, PIN27333, PIN37333

### Other means of identification

**SDS #** PUR-0049

### Recommended use of the chemical and restrictions on use

**Recommended Use** Lubricating grease

### Details of the supplier of the safety data sheet

#### **Supplier Address**

Warren Oil Company  
915 E. Jefferson Ave.  
West Memphis, AR 72301

#### **Manufactured for:**

AIOD  
P.O. BOX 1861  
Montrose, CO 81402-1861  
970-249-6336 [www.purusproducts.com](http://www.purusproducts.com)

### Emergency Telephone Number

**Company Phone Number** 1-800-428-9284

**Emergency Telephone (24 hr)** CHEMTREC 1-800-424-9300 (North America) 1-703-527-3887 (International)

## 2. HAZARDS IDENTIFICATION

**Appearance** Dark Amber

**Physical State** Semi-solid to solid

**Odor** Mild petroleum

### Classification

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2

### Signal Word

**Warning**

### Hazard Statements

Causes skin irritation  
Causes serious eye irritation



**Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling  
Wear protective gloves/protective clothing/eye protection/face protection

**Precautionary Statements - Response**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
If eye irritation persists: Get medical advice/attention.  
IF ON SKIN: Wash with plenty of soap and water.  
Take off contaminated clothing and wash it before reuse.  
If skin irritation occurs: Get medical advice/attention.

**Other Hazards**

Harmful to aquatic life with long lasting effects

**Unknown Acute Toxicity**

2.25% of the mixture consists of ingredient(s) of unknown toxicity

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Severely Hydrotreated Heavy Naphthenic Petroleum Oil	64742-52-5	70-80
Residual oils (petroleum), hydrotreated	64742-57-0	1-10
Zinc Alkyl Dithiophosphate	68649-42-3	<5
Lithium Hydroxide Solution	1310-66-3	<5
Petroleum Asphalt	8052-42-4	<1

\*\*If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.\*\*

### 4. FIRST-AID MEASURES

**First Aid Measures**

<b>Eye Contact</b>	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
<b>Skin Contact</b>	Wash with plenty of soap and water. Take off contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical advice/attention.
<b>Inhalation</b>	Vaporization is not expected at ambient temperatures. This material is not expected to cause inhalation-related disorders under anticipated conditions of use. In case of overexposure, move the person to fresh air.
<b>Ingestion</b>	DO NOT induce vomiting unless directed to by a physician. Rinse out mouth with water. Never give anything by mouth to a person who is not fully conscious. Allow small quantities to pass through the digestive system. If large amounts are swallowed or irritation of discomfort, seek medical attention immediately.

**Most important symptoms and effects**

<b>Symptoms</b>	Causes skin irritation. Causes serious eye irritation. No significant adverse health effects are expected to occur upon short term exposure at ambient temperatures. At elevated temperatures, product vapor may cause respiratory tract irritation. Repeated or prolonged overexposure to product mists can result in respiratory tract inflammation and an increased risk of infection. This material can cause a laxative effect. If swallowed in large quantities, this material can obstruct the intestine.
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**Indication of any immediate medical attention and special treatment needed****Notes to Physician**

Skin: In the event of injection in underlying tissue, immediate treatment should include extensive incision, debridement and saline irrigation. Inadequate treatment can result in ischemia and gangrene. Early symptoms may be minimal. Ingestion: Check for possible bowel obstruction with ingestion of large quantities of material.

**5. FIRE-FIGHTING MEASURES****Suitable Extinguishing Media**

Use dry chemical, foam, carbon dioxide or water fog.

**Unsuitable Extinguishing Media** Not determined.

**Specific Hazards Arising from the Chemical**

Water or foam may cause frothing. Carbon dioxide and inert gas can displace oxygen. Use caution when applying carbon dioxide or inert gas in confined spaces.

**Hazardous Combustion Products** Carbon dioxide, carbon monoxide, smoke, fumes, unburned hydrocarbons and oxides of sulfur, phosphorus, zinc and/ or nitrogen.

**Protective equipment and precautions for firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Fight the fire from a safe distance in a protected location. Open any masses with a water stream to prevent re-ignition due to smoldering. Cool surface with water fog. Molten material can form flaming droplets if ignited. Use of water on product above 100°C (212°F) can cause product to expand with explosive force. Do not allow liquid runoff to enter sewers or public waters.

**6. ACCIDENTAL RELEASE MEASURES****Personal precautions, protective equipment and emergency procedures****Personal Precautions**

Do not touch damaged containers or spilled material unless wearing appropriate protective equipment. Slipping hazard; do not walk through spilled material.

**Environmental Precautions**

See Section 12 for additional Ecological Information. Prevent entry into waterways or sewers.

**Methods and material for containment and cleaning up****Methods for Containment**

Stop leak if you can do it without risk.

**Methods for Clean-Up**

For small spills, absorb or cover with dry earth, sand or other inert non-combustible absorbent material and place into waste containers for lateral disposal. Contain large spills to maximize product recovery or disposal. In urban areas, clean up spill as soon as possible. In natural environments, seek clean up advice from specialists to minimize physical habitat damage. This material will float on water. Absorbent pads and similar materials can be used.

**7. HANDLING AND STORAGE****Precautions for safe handling****Advice on Safe Handling**

Handle in accordance with good industrial hygiene and safety practice. Wash face, hands, and any exposed skin thoroughly after handling. Wear protective gloves/protective clothing and eye/face protection.

**Conditions for safe storage, including any incompatibilities**

<b>Storage Conditions</b>	Avoid water contamination and elevated temperatures to minimize product degradation. Empty containers may contain product residue that can ignite with explosive force. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition; they may explode. Keep container tightly closed. Store in a cool, dry, well-ventilated area. Store only in approved containers. Do not store with strong oxidizing agents. Do not store at elevated temperatures. Avoid storing product in direct sunlight for extended periods of time.
<b>Incompatible Materials</b>	Strong oxidizing agents.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Exposure Guidelines**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Severely Hydrotreated Heavy Naphthenic Petroleum Oil 64742-52-5	TWA: 5 mg/m <sup>3</sup> (oil mist) STEL: 10 mg/m <sup>3</sup> (oil mist)	TWA: 5mg/m <sup>3</sup> (oil mist) STEL: none estab.	TWA: none estab. STEL: none estab.
Petroleum Asphalt 8052-42-4	TWA: 0.5 mg/m <sup>3</sup> benzene soluble aerosol fume, inhalable fraction	-	Ceiling: 5 mg/m <sup>3</sup> fume 15 min

**Appropriate engineering controls**

<b>Engineering Controls</b>	Ventilation controls are not normally required under anticipated conditions of use. Provide exhaust ventilation or other engineering controls if airborne mists or vapor concentrations exceed recommended occupational exposure limits listed. An eyewash station and safety shower should be located near work station.
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**Individual protection measures, such as personal protective equipment**

<b>Eye/Face Protection</b>	Safety glasses equipped with side shields are recommended as a minimum protection in industrial settings. Wear goggles if splashing or spraying is anticipated. Wear goggles and face shield if material is heated above 125°F (51°C). Have suitable eye wash water available.
<b>Skin and Body Protection</b>	Use gloves constructed of chemical resistant materials such as heavy nitrile rubber if frequent or prolonged contact is expected. Use heat-protective gloves when handling product at elevated temperatures. Use clean protective clothing if splashing or spraying conditions are present. Protective clothing may include long-sleeve outer garment, apron, or lab coat. If significant contact occurs, remove oil-contaminated clothing as soon as possible and promptly shower. Launder contaminated clothing before reuse or discard. Wear heat protective boots and protective clothing when handling material at elevated temperatures.
<b>Respiratory Protection</b>	The need for respiratory protection is not anticipated under normal use conditions and with adequate ventilation. If elevated airborne concentrations above applicable workplace exposure levels are anticipated, a NIOSH-approved organic vapor respirator equipped with a dust/mist pre-filter should be used.

**General Hygiene Considerations** Handle in accordance with good industrial hygiene and safety practice.

**9. PHYSICAL AND CHEMICAL PROPERTIES****Information on basic physical and chemical properties**

<b>Physical State</b>	Semi-solid to solid	<b>Odor</b>	Mild petroleum
<b>Appearance</b>	Dark Amber	<b>Odor Threshold</b>	Not determined
<b>Color</b>	Dark Amber		
<b>Property</b>	<b>Values</b>	<b>Remarks • Method</b>	
<b>pH</b>	Not available		
<b>Melting Point/Freezing Point</b>	Not available		
<b>Boiling Point/Boiling Range</b>	Not available		
<b>Flash Point</b>	238 °C / 460 °F		
<b>Evaporation Rate</b>	Not determined		
<b>Flammability (Solid, Gas)</b>	Not determined		
<b>Upper Flammability Limits</b>	Not available	@ 20°C (68°F)	
<b>Lower Flammability Limit</b>	Not available	(Air = 1)	
<b>Vapor Pressure</b>	<0.001 kPa (,0.01 mmHg)	(Water = 1)	
<b>Vapor Density</b>	>10		
<b>Specific Gravity</b>	<1		
<b>Water Solubility</b>	Negligible solubility in cold water		
<b>Solubility in other solvents</b>	Not determined		
<b>Partition Coefficient</b>	Not determined		
<b>Auto-ignition Temperature</b>	Not available		
<b>Decomposition Temperature</b>	Not determined		
<b>Kinematic Viscosity</b>	187 cSt	@ 40°C (104°F)	
<b>Dynamic Viscosity</b>	Not determined		
<b>Explosive Properties</b>	Not determined		
<b>Oxidizing Properties</b>	Not determined		

## 10. STABILITY AND REACTIVITY

### Reactivity

Not reactive under normal conditions.

### Chemical Stability

Stable under recommended storage conditions.

### Possibility of Hazardous Reactions

None under normal processing.

**Hazardous Polymerization** Not expected to occur.

### Incompatible Materials

Strong oxidizing agents.

### Hazardous Decomposition Products

Carbon dioxide, carbon monoxide, smoke, fumes, unburned hydrocarbons and oxides of sulfur, phosphorus, zinc and/ or nitrogen.

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

#### Product Information

**Eye Contact** Causes serious eye irritation.

**Skin Contact** Causes skin irritation.

**Inhalation** Do not inhale.

**Ingestion** Do not ingest.

**Component Information**

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Hydrotreated Castor Oil (flake or solid) 8001-78-3	> 10 g/kg ( Rat )	-	-
Lithium Hydroxide Solution 1310-66-3	= 120 mg/kg ( Rat )	-	= 0.96 mg/L ( Rat ) 4 h
Petroleum Asphalt 8052-42-44	> 5000 mg/kg ( Rat )	> 2000 mg/kg ( Rabbit )	-

**Information on physical, chemical and toxicological effects****Symptoms**

Please see Section 4 of this SDS for symptoms.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure****Carcinogenicity**

Based on information provided, this product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.

**Numerical measures of toxicity**

Not determined

**Unknown Acute Toxicity**

2.25% of the mixture consists of ingredient(s) of unknown toxicity.

**12. ECOLOGICAL INFORMATION****Ecotoxicity**

Harmful to aquatic life with long lasting effects.

**Component Information**

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Severely Hydrotreated Heavy Naphthenic Petroleum Oil 64742-52-5		5000: 96 h Oncorhynchus mykiss mg/L LC50		1000: 48 h Daphnia magna mg/L EC50
Hydrotreated Castor Oil – (flake or solid) 8001-78-3		10000: 96 h Bracydanio rerio mg/L LC50		
Zinc Alkyl Dithiophosphate 68649-42-3		1.0 – 5.0: 96 h Pimepphales promelas mg/L LC50 static 1.0 – 35.0: 96 h Pimepphales promelas mg/L LC50 semi-static		1 – 1.5: 48 h Daphnia magna mg/L EC50

**Persistence/Degradability**

Not determined.

**Bioaccumulation**

Not determined.

**Mobility**

Chemical Name	Partition Coefficient
Petroleum Asphalt 8052-42-4	>6

**Other Adverse Effects**

Not determined

### 13. DISPOSAL CONSIDERATIONS

#### Waste Treatment Methods

<b>Disposal of Wastes</b>	Disposal should be in accordance with applicable regional, national and local laws and regulations.
<b>Contaminated Packaging</b>	Disposal should be in accordance with applicable regional, national and local laws and regulations.

#### California Hazardous Waste Status

Chemical Name	California Hazardous Waste Status
Zinc Alkyl Dithiophosphate 68649-42-3	Toxic

### 14. TRANSPORT INFORMATION

<b>Note</b>	Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.
<b>DOT</b>	Not regulated
<b>IATA</b>	Not regulated
<b>IMDG</b>	Not regulated

### 15. REGULATORY INFORMATION

Chemical Name	TSCA	DSL	NDSL	EINECS	ELINCS	ENCS	IECSC	KECL	PICCS	AICS
Severely Hydrotreated Heavy Naphthenic Petroleum Oil	Present	X		Present		Present	X	Present	X	X
Residual oils (petroleum), hydrotreated	Present	X		Present		Present	X	Present	X	X
Zinc Alkyl Dithiophosphate	Present	X		Present			X	Present	X	X
Lithium Hydroxide Solution						Present	X		X	X
Petroleum Asphalt	Present	X		Present		Present	X	Present	X	X

#### Legend:

- TSCA – Unites States Toxic Substances Control Act Section 8(b) Inventory*
- DSL/NDCL – Canadian Domestic Substances List/Non-Domestic Substances List*
- EINECS/ELINCS – European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances*
- ENCS – Japan Existing and New Chemical Substances*
- IECSC – China Inventory of Existing Chemical Substances*
- KECL – Korean Existing and Evaluated Chemical Substances*
- PICCS - Philippines Inventory of Chemicals and Chemical Substances*
- AICA – Australian Inventory of Chemical Substances*

#### US Federal Regulations

##### CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA)(40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA)(40 CFR 355).

##### SARA 313

Chemical Name	CAS No	Weight-%	SARA 313 – Threshold Values %
Zinc Alkyl Dithiophosphate – 68642-3	68649-42-3	<5	1.0

**CWA (Clean Water Act)**

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Zinc Alkyl Dithiophosphate		X		

**US State Regulations****California Proposition 65**

This product does not contain any Proposition 65 chemicals.

**U.S. State Right-to-Know Regulations**

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Zinc Alkyl Dithiophosphate 68649-42-3	X		X
Lithium Hydroxide Solution 1310-66-3	X		
Petroleum Asphalt 8052-42-4	X	X	X

**16. OTHER INFORMATION**

<b>NFPA</b>	<b>Health Hazards</b>	<b>Flammability</b>	<b>Instability</b>	<b>Special Hazards</b>
	1	1	0	Not determined
<b>HMIS</b>	<b>Health Hazards</b>	<b>Flammability</b>	<b>Physical Hazards</b>	<b>Personal Protection</b>
	1	1	0	Not determined

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**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**