1. IDENTIFICATION

Product Identifier
Product Name  PURUS Way Oil 32, 68, and 220
Other means of identification SDS #  
PUR-016, 17183, PIN17183, PIN27183, PIN37183, PIN57183; 17184, PIN17184, PIN27184, PIN37184, PIN57184; 17185, PIN17185, PIN27185, PIN37185, PIN57185

Recommended use of the chemical and restrictions on use
Recommended Use  Lubricant.

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

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  Clear amber liquid  
Physical State  Liquid  
Odor  Petroleum

Classification
This chemical does not meet the hazardous criteria set forth by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200). However, this Safety Data Sheet (SDS) contains valuable information critical to the safe handling and proper use of this product. This SDS should be retained and available for employees and other users of this product.

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No</th>
<th>Weight-%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Petroleum distillates, hydrotreated heavy paraffinic</td>
<td>64742-54-7</td>
<td>50-60</td>
</tr>
<tr>
<td>Residual oils (petroleum), solvent refined</td>
<td>64742-01-4</td>
<td>10-20</td>
</tr>
<tr>
<td>Distillates, petroleum, solvent refined heavy paraffinic</td>
<td>64741-88-4</td>
<td>10-20</td>
</tr>
</tbody>
</table>

**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

**Eye Contact**
Flush eyes with large amounts of water until irritation subsides. If irritation persists, get medical attention.

**Skin Contact**
No treatment is necessary under ordinary circumstances. Remove contaminated clothing. Wash contaminated area thoroughly with soap and water. If redness or irritation occurs and persists, seek medical attention.

**Inhalation**
Remove victim to fresh air and keep at rest in a position comfortable for breathing. If breathing is difficult, give oxygen. If not breathing give artificial respiration, preferably mouth-to-mouth. Call a POISON CENTER or doctor/physician.

**Ingestion**
If swallowed, do not induce vomiting. If victim exhibits signs of lung aspiration such as coughing or choking, seek immediate medical attention.

**Most important symptoms and effects**

**Symptoms**
Expected to be a minor eye irritant. Repeated or prolonged skin contact may cause dermatitis.

**Indication of any immediate medical attention and special treatment needed**

**Notes to Physician**
Treat symptomatically.

5. FIRE-FIGHTING MEASURES

**Suitable Extinguishing Media**
Dry chemical. Foam. Carbon dioxide (CO2).

**Unsuitable Extinguishing Media**
Not determined.

**Specific Hazards Arising from the Chemical**
Dense smoke may be generated while burning.

**Hazardous Combustion Products**
Carbon monoxide. Carbon dioxide (CO2). Other oxides.

**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. Avoid breathing smoke and vapor. Water may be used to cool containers exposed to heat or flame.

6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures**

**Personal Precautions**
Use personal protective equipment as required.

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

**Methods for Containment**
Remove sources of ignition. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

**Methods for Clean-Up**
Take up small spills with absorbent pads. Large spills may be taken up with pump or vacuum.
7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling
Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Storage Conditions
Keep containers tightly closed in a dry, cool and well-ventilated place.

Incompatible Materials
Strong oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines
This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies

Appropriate engineering controls

Engineering Controls
Ensure adequate ventilation, especially in confined areas. Showers. Eyewash stations.

Individual protection measures, such as personal protective equipment

Eye/Face Protection
Avoid contact with eyes.

Skin and Body Protection
Wear suitable protective clothing.

Respiratory Protection
Respiratory protection is not required under conditions of normal use. If vapor or mist is generated when the material is heated or handled, use organic vapor respirator with a dust or mist filter.

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

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks • Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State</td>
<td>Liquid</td>
<td></td>
</tr>
<tr>
<td>Appearance</td>
<td>Clear amber liquid</td>
<td></td>
</tr>
<tr>
<td>Color</td>
<td>Clear amber</td>
<td></td>
</tr>
<tr>
<td>Odor</td>
<td>Petroleum</td>
<td></td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>pH</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Melting Point/Freezing Point</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Boiling Point/Boiling Range</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Flash Point</td>
<td>218.3 °C / 425 °F</td>
<td>ASTM D-92</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Flammability (Solid, Gas)</td>
<td>Liquid-Not applicable</td>
<td></td>
</tr>
<tr>
<td>Upper Flammability Limits</td>
<td>Not established</td>
<td></td>
</tr>
<tr>
<td>Lower Flammability Limit</td>
<td>Not established</td>
<td></td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Vapor Density</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>0.90</td>
<td></td>
</tr>
<tr>
<td>Water Solubility</td>
<td>insoluble</td>
<td></td>
</tr>
<tr>
<td>Solubility in other solvents</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Partition Coefficient</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Auto-ignition Temperature</td>
<td>No data available</td>
<td></td>
</tr>
</tbody>
</table>
Decomposition Temperature  Not determined  
Kinematic Viscosity  Not determined  
Dynamic Viscosity  Not determined  
Explosive Properties  Not determined  
Oxidizing Properties  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.

**Conditions to Avoid**  
Incompatible Materials.

**Incompatible Materials**  
Strong oxidizing agents.

**Hazardous Decomposition Products**  
Carbon monoxide. Carbon dioxide (CO2). Other oxides.

### 11. TOXICOLOGICAL INFORMATION

**Information on likely routes of exposure**

**Product Information**

**Eye Contact**  
Avoid contact with eyes.

**Skin Contact**  
Avoid contact with skin.

**Inhalation**  
Do not inhale.

**Ingestion**  
Do not ingest.

**Component Information**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distillates, petroleum, solvent refined heavy paraffinic 64741-88-4</td>
<td>&gt; 5000 mg/kg (Rat)</td>
<td>&gt; 2000 mg/kg (Rabbit)</td>
<td>2.18 mg/L (Rat) 4 h</td>
</tr>
<tr>
<td>Residual oils (petroleum), solvent refined 64742-01-4</td>
<td>&gt; 5000 mg/kg (Rat)</td>
<td>&gt; 2000 mg/kg (Rabbit)</td>
<td>2.18 mg/L (Rat) 4 h</td>
</tr>
</tbody>
</table>

**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**  
This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.
12. ECOLOGICAL INFORMATION

Ecotoxicity
The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Component Information

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Algae/aquatic plants</th>
<th>Fish</th>
<th>Toxicity to microorganisms</th>
<th>Crustacea</th>
</tr>
</thead>
<tbody>
<tr>
<td>Petroleum distillates, hydrotreated heavy paraffinic</td>
<td></td>
<td>5000: 96 h Oncorhynchus mykiss mg/L LC50</td>
<td></td>
<td>1000: 48 h Daphnia magna mg/L EC50</td>
</tr>
<tr>
<td>64742-54-7</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Distillates, petroleum, solvent refined heavy paraffinic</td>
<td></td>
<td>5000: 96 h Oncorhynchus mykiss mg/L LC50</td>
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<td>64742-01-4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Persistence/Degradability
Not determined.

Bioaccumulation
Not determined.

Mobility
Not determined

Other Adverse Effects
Not determined

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Disposal of Wastes
Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated Packaging
Disposal should be in accordance with applicable regional, national and local laws and regulations.

14. TRANSPORT INFORMATION

Note
Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

DOT
Not regulated
15. REGULATORY INFORMATION

International Inventories

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>TSCA</th>
<th>DSL</th>
<th>NDSL</th>
<th>EINECS</th>
<th>ELINCS</th>
<th>ENCS</th>
<th>IECSC</th>
<th>KECL</th>
<th>PICCS</th>
<th>AICS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Petroleum distillates, hydrotreated heavy paraffinic</td>
<td>Present</td>
<td>X</td>
<td>Present</td>
<td>Present</td>
<td>X</td>
<td>Present</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residual oils (petroleum), solvent refined</td>
<td>Present</td>
<td>X</td>
<td>Present</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
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<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Distillates, petroleum, solvent refined heavy paraffinic</td>
<td>Present</td>
<td>X</td>
<td>Present</td>
<td>Present</td>
<td>X</td>
<td>Present</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Legend:
- **TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory
- **DSL/NDSL** - 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
- **AICS** - 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 311/312 Hazard Categories**
- Acute Health Hazard: No
- Chronic Health Hazard: No
- Fire Hazard: No
- Sudden Release of Pressure Hazard: No
- Reactive Hazard: No

**SARA 313**
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

**CWA (Clean Water Act)**
This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

US State Regulations

**California Proposition 65**
This product does not contain any Proposition 65 chemicals.

**U.S. State Right-to-Know Regulations**
This product does not contain any substances regulated under applicable state right-to-know regulations
### 16. OTHER INFORMATION

<table>
<thead>
<tr>
<th>NFPA</th>
<th>Health Hazards</th>
<th>Flammability</th>
<th>Instability</th>
<th>Special Hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>0</td>
<td></td>
<td>Not determined</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HMIS</th>
<th>Health Hazards</th>
<th>Flammability</th>
<th>Physical Hazards</th>
<th>Personal Protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>0</td>
<td></td>
<td>Not determined</td>
</tr>
</tbody>
</table>

**Issue Date:** 29-Oct-2013  
**Revision Date:** 23-April-2015  
**Revision Note:** New format

**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