

Safety Data Sheet

Issue Date: 22-Dec-2014

Revision Date: 23-April-2015

Version 1

1. IDENTIFICATION

Product Identifier

Product Name

PURUS Rock Drill Oil 32, 68, 100, 150, 220 and 460

Other means of identification

SDS

PUR-018,17232,PIN17232,PIN27232, PIN57232,17191,PIN17191,PIN27191,PIN37191,PIN57191
PIN77191;17192,PIN17192, PIN27192, PIN37192, PIN57192; 17193, PIN17193, PIN27193,
PIN37193,PIN57193;17194, PIN17194, PIN27194,PIN37194, PIN57194,17227, PIN17227,
PIN27227, PIN37227,PIN57227

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

| Chemical Name | CAS No | Weight-% |
|--|------------|----------|
| Petroleum distillates, hydrotreated heavy paraffinic | 64742-54-7 | 50-60 |
| Residual oils (petroleum), solvent refined | 64742-01-4 | 10-20 |
| Distillates, petroleum, solvent refined heavy paraffinic | 64741-88-4 | 10-20 |

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**

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|-----------------------------|--|
| 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

| | | | |
|-----------------------|--------------------|-----------------------|----------------|
| Physical State | Liquid | Odor | Petroleum |
| Appearance | Clear amber liquid | Odor Threshold | Not determined |
| Color | Clear amber | | |

| <u>Property</u> | <u>Values</u> | <u>Remarks • Method</u> |
|-------------------------------------|-----------------------|--------------------------------|
| pH | Not determined | |
| Melting Point/Freezing Point | Not determined | |
| Boiling Point/Boiling Range | Not determined | |
| Flash Point | 218.3 °C / 425 °F | ASTM D-92 |
| Evaporation Rate | Not determined | |
| Flammability (Solid, Gas) | Liquid-Not applicable | |
| Upper Flammability Limits | Not established | |
| Lower Flammability Limit | Not established | |
| Vapor Pressure | Not determined | |
| Vapor Density | No data available | |
| Specific Gravity | 0.90 | |
| Water Solubility | insoluble | |
| Solubility in other solvents | Not determined | |
| Partition Coefficient | Not determined | |
| Auto-ignition Temperature | No data available | |

| | |
|----------------------------------|----------------|
| 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

| Chemical Name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|--|----------------------|-------------------------|-------------------------|
| Distillates, petroleum, solvent refined heavy paraffinic 64741-88-4 | > 5000 mg/kg (Rat) | > 2000 mg/kg (Rabbit) | = 2.18 mg/L (Rat) 4 h |
| Residual oils (petroleum), solvent refined 64742-01-4 | > 5000 mg/kg (Rat) | > 2000 mg/kg (Rabbit) | = 2.18 mg/L (Rat) 4 h |

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. |
|------------------------|--|

Numerical measures of toxicity

Not determined

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

| Chemical Name | Algae/aquatic plants | Fish | Toxicity to microorganisms | Crustacea |
|--|----------------------|--|----------------------------|------------------------------------|
| Petroleum distillates, hydrotreated heavy paraffinic 64742-54-7 | | 5000: 96 h Oncorhynchus mykiss mg/L LC50 | | 1000: 48 h Daphnia magna mg/L EC50 |
| Distillates, petroleum, solvent refined heavy paraffinic 64741-88-4 | | 5000: 96 h Oncorhynchus mykiss mg/L LC50 | | 1000: 48 h Daphnia magna mg/L EC50 |
| Residual oils (petroleum), solvent refined 64742-01-4 | | 5000: 96 h Oncorhynchus mykiss mg/L LC50 | | 1000: 48 h Daphnia magna mg/L EC50 |

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

IATA Not regulated

IMDG Not regulated

15. REGULATORY INFORMATION

International Inventories

| Chemical Name | TSCA | DSL | NDSL | EINECS | ELINCS | ENCS | IECSC | KECL | PICCS | AICS |
|--|---------|-----|------|---------|--------|---------|-------|---------|-------|------|
| Petroleum distillates, hydrotreated heavy paraffinic | Present | X | | Present | | Present | X | Present | X | X |
| Residual oils (petroleum), solvent refined | Present | X | | Present | | | X | Present | X | X |
| Distillates, petroleum, solvent refined heavy paraffinic | Present | X | | Present | | Present | X | Present | X | X |

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

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

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 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