

Safety Data Sheet

Issue Date: 20-Apr-2012

Revision Date: 19-May-2015

Version 1

1. IDENTIFICATION

Product Identifier

Product Name

PURUS TO-4 Drive Train Oil SAE 10W, SAE 30W, SAE 50W

Other means of identification

SDS

PUR-002, 17175, PIN17175, PIN27175, PIN37175, PIN57175; 17176,
PIN17176, PIN27176, PIN37176, PIN57176; 17177, PIN17177, PIN27177,
PIN37177, PIN57177

Recommended use of the chemical and restrictions on use

Recommended Use

Transmission fluid.

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 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	85-90

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

General Advice	Provide this SDS to medical personnel for treatment. If exposed or concerned: Get medical advice/attention.
Eye Contact	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
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 to fresh air.
Ingestion	Clean mouth with water and drink afterwards plenty of water. DO NOT induce vomiting because of danger of aspirating liquid into lungs.

Most important symptoms and effects

Symptoms	Irritating to eyes. May be irritating to skin. Ingestion may cause symptoms of gastrointestinal irritation including abdominal discomfort, nausea, vomiting, and diarrhea.
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Indication of any immediate medical attention and special treatment needed

Notes to Physician	Treat symptomatically.
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5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Dry chemical. Foam. Carbon dioxide (CO₂). Water fog.

Unsuitable Extinguishing Media	A solid stream of water directed into hot, burning liquid would cause frothing and scattering of burning material.
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Specific Hazards Arising from the Chemical

Product is a non-flammable hydrocarbon mixture. Liquid can burn upon heating to temperatures at or above the flash point. Mist or sprays may be flammable below the products normal flash point.

Hazardous Combustion Products Upon decomposition this product may yield oxides of boron, calcium, magnesium, phosphorous, zinc, sulfur including hydrogen sulfide and nitrogen as well as carbon monoxide, carbon dioxide and/or other low molecular weight hydrocarbons.

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.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions	Persons not wearing proper personal protective equipment should be excluded from area of spill. Use personal protective equipment as required. Avoid contact with skin, eyes or clothing. Remove all sources of ignition. Spilled material is slippery.
Environmental Precautions	See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

Methods for Containment	Prevent further leakage or spillage if safe to do so.
Methods for Clean-Up	Absorb with non-flammable suitable absorbent such as sand or earth. Scoop up used absorbent into drums or other appropriate container.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling	Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Use personal protective equipment as required. Wash face, hands, and any exposed skin thoroughly after handling. Wash contaminated clothing before reuse.
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Conditions for safe storage, including any incompatibilities

Storage Conditions	Keep container tightly closed and store in a cool, dry and well-ventilated place. Do not store near heat, sparks, open flame or strong oxidizing agents. Do not store this material in open or unlabeled containers. "Empty" containers retain product residue (liquid and/or vapor) and can be dangerous. 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.
Incompatible Materials	Strong oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

<u>Exposure Guidelines</u>	This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies
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Appropriate engineering controls

Engineering Controls	Apply technical measures to comply with the occupational exposure limits. Showers. Eyewash stations. Ventilation systems.
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Individual protection measures, such as personal protective equipment

Eye/Face Protection	Wear safety glasses with side shields (or goggles).
Skin and Body Protection	Wear protective gloves and protective clothing.
Respiratory Protection	If mist is generated (heating, spraying) and engineering controls are not sufficient, wear approved organic vapor respirator suitable for oil mist.
General Hygiene Considerations	Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Wash contaminated clothing before reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State	Liquid	Odor	Petroleum
Appearance	Amber liquid	Odor Threshold	Not determined
Color	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	> 204 °C / 400 °F		
Evaporation Rate	Not determined		
Flammability (Solid, Gas)	Liquid- Not applicable		
Upper Flammability Limits	Not determined		
<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>	
Lower Flammability Limit	Not determined		
Vapor Pressure	Not determined		
Vapor Density	Not determined		
Specific Gravity	Typical 0.86	@ 60°F	
Water Solubility	Negligible		
Solubility in other solvents	Not determined		
Partition Coefficient	Not determined		
Auto-ignition Temperature	Not determined		
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.

Possibility of Hazardous Reactions

None under normal processing.

Hazardous Polymerization Hazardous polymerization does not occur.

Conditions to Avoid

Avoid formation of mists.

Incompatible Materials

Strong oxidizing agents.

Hazardous Decomposition Products

Decomposition of this product may yield oxides of boron, calcium, magnesium, nitrogen, phosphorus, sulfur including hydrogen sulfide and zinc as well as carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

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
Phenol, dodecyl, sulfurized, calcium salts 68855-45-8	= 10000 mg/kg (Rat)	> 5000 mg/kg (Rabbit)	-
Phosphorodithioic acid, -alkyl esters, zinc salts 68457-79-4	= 1830 mg/kg (Rat)	> 3160 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 The component below belongs to the petroleum family, which has been shown to contain carcinogenic substances depending on the level of refinement. The carcinogen classification need not apply if it can be shown that the substance contains less than 3% dimethyl sulfoxide extract.

Chemical Name	ACGIH	IARC	NTP	OSHA
Petroleum distillates, hydrotreated heavy paraffinic 64742-54-7	A2	Group 1		X

Legend

ACGIH (American Conference of Governmental Industrial Hygienists)

A2 - Suspected Human Carcinogen

IARC (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

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
Phenol, dodecyl, sulfurized, calcium salts 68855-45-8		1000: 96 h Pimephales promelas mg/L LC50 semi-static 1000: 96 h Pimephales promelas mg/L LC50 static		1000: 48 h Daphnia magna mg/L EC50

Phosphorodithioic acid, -alkyl esters, zinc salts 68457-79-4	1.0 - 5.0: 96 h Pseudokirchneriella subcapitata mg/L EC50	100: 96 h Pimephales promelas mg/L LC50 semi- static 25 - 50: 96 h Pimephales promelas mg/L LC50 static		4.0 - 6.0: 48 h Daphnia magna mg/L EC50
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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.

California Hazardous Waste Status

Chemical Name	California Hazardous Waste Status
Phosphorodithioic acid, -alkyl esters, zinc salts 68457-79-4	Toxic

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

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 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	CAS No	Weight-%	SARA 313 - Threshold Values %
Phosphorodithioic acid, -alkyl esters, zinc salts - 68457-79-4	68457-79-4	1-5	1.0

CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Phosphorodithioic acid, -alkyl esters, zinc salts		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
Phosphorodithioic acid, -alkyl esters, zinc salts 68457-79-4	X		X

16. OTHER INFORMATION

<u>NFPA</u>	Health Hazards 1	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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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