

MATERIAL SAFETY DATA SHEET

Trade Name: Radiator Treatment and Water Pump Lubricant
MSDS NO. 4618
Revision Date: 04/30/2002

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Trade Name: Radiator Treatment and Water Pump Lubricant
Chemical Family: Water Soluble Oil
Synonyms: None
Emergency Telephone (24 hr.): CHEMTREC 1-800-424-9300
Supplier:
Technical Chemical Company, P.O. Box 139, Cleburne, Texas 76033

2. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient/CAS No.	wt. %	OSHA PEL TWA	OSHA PEL Ceiling Limits	ACGIH TLV TWA	ACGIH TLV STEL
Solvent refined, hydrotreated mineral oil distillate NA	20-25	5 Mg/M3 (Oil Mist, Mineral)	None Established	5 Mg/M3 (Oil Mist, Mineral)	10 Mg/M3 (Oil Mist, Mineral)
Sodium Sulfonate-Soap Emulsifier base NA	2-5	Not Known	Not Known	Not Known	Not Known
Glycerol Trioleate derived stabilizer NA	1-3	Not Known	Not Known	Not Known	Not Known

3. HAZARDS IDENTIFICATION

Emergency Overview: May cause severe eye irritation. Inhalation of vapor (generated at high temperatures only) or oil mist from this product may result in mild irritation of the upper respiratory tract. Soluble mineral oils are generally considered no more than slightly toxic if swallowed. Preexisting skin and respiratory disorders may be aggravated by exposure to this product.

4. FIRST AID MEASURES

Eye Contact: In case of contact, or suspected contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention immediately after flushing.
Ingestion: Do Not Induce Vomiting. This material is practically non-toxic if ingested in small amounts (tablespoonful). Swallowing amounts larger may cause injury. Seek medical attention.
Inhalation: If inhaled, remove to fresh air. If not breathing give artificial respiration, preferably mouth-to-mouth. If breathing is difficult give oxygen. Get medical attention.
Skin Contact: Remove contaminated clothing and launder before reuse. Wash with soap and water. Get medical attention if irritation persists.

5. FIRE FIGHTING MEASURES

Flammable Properties
Flash Point °F(°C): >350 F
Flash Point Method: TAG Closed Cup
Flammable Limits in Air - Lower (%): Not Determined
Flammable Limits in Air - Upper (%): Not Determined
Autoignition Temperature °F(°C): Not Determined
Extinguishing Media: Water fog, carbon dioxide, foam, dry chemical DO NOT use straight water streams. Product will float and be reignited on surface of water.
Protection Of Fire-Fighters:
Special Fire-Fighting Procedures: Wear approved positive-pressure self-contained breathing apparatus and protective clothing. Water fog or spray may be used to cool exposed equipment and containers. Do not spray water directly on fire - product will float and could be reignited on surface of water. Material will not burn unless preheated.
Hazardous Combustion Products: Thermal decomposition products are highly dependent on the combustion conditions. A complex mixture of airborne solid, liquid, particulate and gases will evolve when this material undergoes pyrolysis or combustion. Carbon monoxide and other unidentified organic compounds may be formed upon combustion.
Aerosol Comments: Not Applicable

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Wear appropriate protective clothing and equipment to prevent skin and eye contact. Avoid breathing gas. When

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airborne exposure limits are exceeded use NIOSH approved respiratory protection equipment appropriate to the material and/or its components.

Spill Procedures: Contain any liquid from leaking containers. Keep away from heat sparks and flames. Wear protective equipment specified.
Absorb spills on inert material such as perlite, vermiculite, sand or dirt. Place in double polyethylene bags. Isolate from other waste materials. Wear proper protective equipment as specified in the protective equipment section. Wash walking surfaces with detergent and water to reduce slipping hazard.

Environmental Precautions: Do not allow to enter sanitary drains, sewer or surface and subsurface waters.

7. HANDLING AND STORAGE

Handling and Storage: Keep container closed when not in use. Use only in a well ventilated area. Store in a cool, dry place. Keep away from heat and open flame. Keep away from food and feed products.
Wash thoroughly after handling.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls: Eyewash stations. Showers. Use local exhaust.
Eyes: Safety glasses (with side shields)
Skin Protection: Use chemical resistant gloves for prolonged skin contact. Nitrile coated apron or clothing.
Respiratory Protection: Wear a NIOSH approved respirator appropriate for airborne exposure at the point of use. Do not breath mist.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Light yellow to amber color liquid.		
Odor:	SLIGHT HYDROCARBON	pH Value:	Not Determined
Vapor Pressure:	Not Determined	Vapor Density (Air=1):	Not Determined
Boiling Point (°F):	>212 F	Melting/Freezing Point:	Not determined.
Solubility in Water:	SOLUBLE	Bulk Density at 20°C:	7.6 lb/gal
Molecular Weight:	Mixture	Evaporation Rate:	Not Determined
Viscosity:	Not Determined.	Specific Gravity (H2O=1):	.91 @ 60 F
VOC Content(%):	Not determined.	Decomposition Temperature:	Not Known

10. STABILITY AND REACTIVITY

Chemical Stability: STABLE.
Conditions to Avoid: Excessive heat.
Materials to Avoid: Heat, sparks, flames and other sources of ignition. Contact with oxidizing agents.
Hazardous Decomposition Products: Thermal decomposition products are highly dependent on the combustion conditions. A complex mixture of airborne solid, liquid, particulate and gases will evolve when this material undergoes pyrolysis or combustion. Carbon monoxide and other unidentified organic compounds may be formed upon combustion.
Hazardous Polymerization: WILL NOT OCCUR

11. TOXICOLOGICAL INFORMATION

Toxicological Data:

Ingredient/CAS No.	wt. %	Route	Species	Dose
Solvent refined, hydrotreated mineral oil distillate NA	20-25	NA	NA	Not known.
Sodium Sulfonate-Soap Emulsifier base NA	2-5	NA	NA	Not known.
Glycerol Trioleate derived stabilizer NA	1-3	NA	NA	Not Known

Carcinogenicity:

Ingredient/CAS No.	wt. %	IARC	NTP	OSHA
Solvent refined, hydrotreated mineral oil distillate NA	20-25	Not Known	Not Known	Not Known
Sodium Sulfonate-Soap Emulsifier base NA	2-5	Not Known	Not Known	Not Known

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Glycerol Trioleate derived stabilizer NA	1-3	Not Known	Not Known	Not Listed
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The International agency for research on cancer has determined there is sufficient evidence for the carcinogenicity in experimental animals of used motor (crankcase) oil. Handling procedures and safety precautions in the MSDS should be followed to minimize employee's exposure to the product if used as a lubricating oil in a gasoline internal combustion engine.

12. ECOLOGICAL INFORMATION

Ecological testing has not been conducted on this product.

13. DISPOSAL CONSIDERATION

Waste Classification: This product is classified as an oil under section 311 of the Clean Water Act. Spills entering (A) surface waters of (B) any water courses or sewers entering/leading to surface waters that cause a sheen must be reported to the nearest Local Environmental Protection Agency Office.

Waste Management: Not determined.

Disposal should be made in accordance with federal, state and local regulations.

14. TRANSPORTATION INFORMATION

U.S. DOT:

Proper Shipping Name: Not Regulated
Hazard Class: Not Applicable
UN/NA Number: Not Applicable
DOT Packing Group: Not Applicable

IMDG:

Proper Shipping Name: Not Regulated
Hazard Class: Not determined.
Hazard Subclass: Not Applicable
UN No.: Not Applicable
Packing Group: Not Applicable
Marine Pollutant: No

15. REGULATORY INFORMATION

US Federal Regulations:

Ingredient/CAS No.	wt. %	SARA 313	SARA 302	RQ	TPQ
Solvent refined, hydrotreated mineral oil distillate NA	20-25	Not Known	Not Known	Not Known	Not Known
Sodium Sulfonate-Soap Emulsifier base NA	2-5	Not Known	Not Known	Not Applicable	Not Applicable
Glycerol Trioleate derived stabilizer NA	1-3	Not Known	Not Known	Not Applicable	Not Applicable

SARA 311/312 Hazard Categories: Not Determined.

State Regulations:

Ingredient/CAS No.	wt. %	California Prop. 65 Cancer list	California Prop. 65 Developmental Toxicity	California Prop. 65 Reproductive Female	California Prop. 65 Reproductive Male

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Solvent refined, hydrotreated mineral oil distillate NA	20-25	Not Known	Not Known	Not Known	Not Known
Sodium Sulfonate-Soap Emulsifier base NA	2-5	Not Known	Not Known	Not Known	Not Known
Glycerol Trioleate derived stabilizer NA	1-3	Not Known	Not Known	Not Known	Not Known

U.S. TSCA: The components of this product are listed on the TSCA Inventory.

16. OTHER INFORMATION

General Notes: Do not allow undiluted material or large quantities to reach groundwater, bodies of water or sewer system.

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