



Material Safety Data Sheet

Motorvac ATF Protectant

Emergency Telephone #: CHEMTREC (24 hours) 1-800-424-9300 (US only) or (703) 527-3877 outside US

1. Motorvac Universal ATF Protectant

Product Name Universal Automatic Transmission Fluid Protectant
Part Number: 4001030AS
Product Use: Lubricant.
Manufacturer/Supplier: Motorvac Technologies Inc.
Phone Number: (905) 615-8620 for inquires only
Emergency Phone: CHEMTREC TEL1- (800) 424-9300 (US only) or 1-(703)-527-3877 outside US
Date of Preparation: Mar 09, 2010

2. HAZARDS IDENTIFICATION

WARNING:
MAY CAUSE EYE IRRITATION. MAY CAUSE SKIN IRRITATION. HARMFUL OR FATAL IF SWALLOWED.

WHMIS Classification (D2B Chemical)
NFPA & HMIS Rating
Health=1, Fire =1, Reactivity=0

Potential Health Effects: See Section 11 for more information.
Likely Routes of Exposure: Skin contact, skin absorption, eye contact, inhalation and ingestion.
Eye: May irritate eyes.
Skin: May irritate skin.
Ingestion: May cause stomach distress, nausea or vomiting. Harmful or fatal if swallowed.
Inhalation: Excessive intentional inhalation may cause respiratory tract irritation and central nervous system effects (headache, dizziness).
Aspiration of material into lungs can cause chemical pneumonitis.
Chronic Effects: Prolonged or repeated exposure can cause drying, de-fatting and dermatitis.
Signs and Symptoms: Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva. Symptoms may include redness, edema, drying, de-fatting and cracking of the skin.
Medical Conditions Aggravated By Exposure: Certain pre-existing conditions may make workers particularly susceptible to the effects of this chemical: asthma, allergies, impaired pulmonary function.

Target Organs: Not available.
This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Chronic Effect:
This product may contain ingredients that are listed as potential carcinogens in N.T.P. Annual Report on Carcinogens, I.A.R.C Monographs, or by O.S.H.A. HCS (g) (2) (vii).

TLV : This product does not contain any components which have recognized , exposure limits. However a TLV of 5.0 mg/cubic meter for oil mist.

Potential Environmental Effects: May cause long-term adverse effects in the aquatic environment. See Section 12 for more information.

Note: Petroleum lubricating oils with a flashpoint above 200°F, are not regulated by D.O.T standards.

3. COMPOSITION / INFORMATION ON

INGREDIENTS

Components	CAS	% Concentration
Antiwear Additive	Confidential	<2
Alkyl acid phosphate	68307-94-8	<2
Zinc dialkyl dithiophosphate	68649-42-3	<0.6
Amines, Soya alkyl, Ethoxylated	61791-240	10-15
Branched Alkanes	68649-11-6	10-15
Nonylated diphenylamine derivatives	Confidential	20-30
Benzotriazole derivatives	Confidential	<0.5
Polyalphaolefins	Mixture	40-50
Viscosity Modifier PPD	Mixture	3-5
C.I. Solvent Red 164	See Below**	<0.05
Petroleum distillates	64742-54-7	30-40

**2-Naphthalenol (Phenylazo) Phenyl Azo Alkyl Derivatives. TSCA Accession #35371

Note that the chemical identity of some or all of the above components is considered confidential business information and is being withheld as permitted by 29CFR 1910.1200 and various State Right-To-Know Laws



4. FIRST AID MEASURES

Eye Contact: Do not rub eyes, In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. If easy to do, remove contact lenses, if worn. Get medical attention immediately.

Skin Contact: In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Call a physician if irritation develops and persists.

Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

Ingestion: If swallowed, do NOT induce vomiting personnel. Never give anything by mouth to an unconscious person. Seek medical attention immediately

General Advice: In case of accident or if you feel unwell, seek medical advice immediately (Show the label or MSDS where possible).

Note to Physicians: Symptoms may not appear immediately.

5. FIRE FIGHTING MEASURES

Flammability: Not flammable by WHMIS/OSHA criteria.

Means of Extinction:

Suitable Extinguishing Media: Powder, water spray, foam, carbon dioxide.

Unsuitable Extinguishing Media: Not available.

Products of Combustion: Oxides of carbon.

Explosion Data:

Sensitivity to Mechanical Impact: Not available.

Sensitivity to Static Discharge: Not available.

Protection of Firefighters: In case of fire and/or explosion do not breathe fumes. Firefighters should wear full protective clothing including self contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Use personal protection recommended in Section 8. Isolate area. Keep unnecessary personnel away.

Environmental Precautions: Prevent entry into waterways, sewers, basements or confined areas.

Methods for Containment: Prevent further leakage or spillage if safe to do so. Use sand, perlite or vermiculite as an absorbent for large spills of this material.

Methods for Clean -Up: Sweep up or gather material and place in appropriate container for disposal.

Waste Disposal: Assure conformity with applicable disposal regulations. Dispose of absorbed material at approved waste site.

7. HANDLING AND STORAGE

Handling:

Avoid contact with eyes. Avoid contact with skin. Do not swallow. Do not breathe vapor. Use only in a well-ventilated area. Handle and open container with care. When using do not eat or drink.

Wash hands before breaks and immediately after handling the product.

Storage:

Keep out of the reach of children. Store in a closed container away from incompatible materials.

Store in a cool, dry, well-ventilated area. Keep container tightly closed. Keep away from food, drink and animal feedingstuffs.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Components	Regulatory Agency	Exposure limits
Antiwear Additive	OSHA	5mg/m ³
Alkyl acid phosphate	OSHA	5mg/m ³
Zinc dialkyl dithiophosphate	OSHA	5mg/m ³
Amines, Soya alkyl, Ethoxylated	OSHA	5mg/m ³
Branched Alkanes	OSHA	5mg/m ³
Nonylated diphenylamine derivatives	OSHA	5mg/m ³
Benzotriazole derivatives	OSHA	5mg/m ³
Polyalphaolefins	OSHA	5mg/m ³
Viscosity Modifier PPD	OSHA	5mg/m ³
C.I. Solvent Red 164	OSHA	5mg/m ³
Petroleum distillates	OSHA	5mg/m ³

Exposure Guidelines

Ventilation Procedure: Ventilate as needed to comply with exposure limit,

Gloves Protection: Use impervious gloves to avoid repeated/prolonged skin contact

Eye protection : Use goggles/face shield to avoid eye contact

Work/ Hygiene Practice : If clothing becomes contaminated, change to fresh clean clothing. Do not wear until thoroughly laundered

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Clear.

Color: Red /Mild, bland petroleum odor

Odour: Mild. Characteristic odor.

Odour Threshold: Not available.

Physical State: Liquid.

pH: Not applicable.



Viscosity @ 100 °C: 8.70 cSt
Freezing Point: Not available.
Boiling Point: Not available.
Flash Point: 280 °F COC
Evaporation Rate: Negligible.
Lower Flammability Limit: Not available.
Upper Flammability Limit: Not available.
Vapor Pressure : Less than 0.01 mm Hg @ 20°C
Vapor Density: Greater than 5 (air=1)
Specific Gravity: 0.8763 @60 °F
Solubility in Water: Negligible.

Coefficient of Water/Oil Distribution: Not available.
Auto-ignition Temperature: Not available.
Percent Volatile, wt. %: Not available.
VOC content, wt. %: Not available.

Section 10: STABILITY AND REACTIVITY

Stability: Stable under recommended storage conditions.
Conditions of Reactivity: No dangerous reaction known under conditions of normal use.
Incompatible Materials: avoid strong Oxidizers.
Hazardous Decomposition Products: Oxides of carbon ,sulfur . Phosphorus, Methacrylate Monomers.
Polymerization : will not occur
Possibility of Hazardous Reactions: No dangerous reaction known under conditions of normal use.

Section 11: TOXICOLOGY INFORMATION

Distillates (petroleum), hydrotreated light
ORAL (LD50): Acute: >5000 mg/kg [Rat].
DERMAL (LD50): Acute: >2000 mg/kg [Rabbit].
Studies on laboratory animals have associated similar materials with eye and respiratory tract irritation. Repeated exposure to elevated concentrations of hydrocarbon solvents can produce a variety of transient CNS effects (e.g., dizziness, headache, narcosis, etc). Studies on laboratory animals have shown similar materials to cause skin irritation after repeated or prolonged contact. Repeated direct application of similar materials to the skin can produce defatting dermatitis and kidney damage in laboratory animals. The most common effects observed in repeated dose animal studies with mineral spirits are kidney changes that are consistent with an alpha 2u-globulin- mediated process that is not regarded as relevant to humans. Certain studies have reported effects in the liver as well as hematological or urine chemistry changes. In general, these effects have not to been shown to be dose-related.
Highly-refined petroleum lubricant oils:
ORAL (LD50): Acute: >5000 mg/kg [Rat].
DERMAL (LD50): Acute: >2000 mg/kg [Rabbit].
Mineral oil mists derived from highly refined oils are reported to have low acute and sub-acute toxicities in animals. Effects from single and short-term repeated exposures to high concentrations of mineral oil mists well above applicable

workplace exposure levels include lung inflammatory reaction, lipid granuloma formation and lipid pneumonia. In acute and sub-acute studies involving exposures to lower concentrations of mineral oil mists at or near current work place exposure levels produced no significant toxicological effects. In long term studies (up to two years) no carcinogenic effects have been reported in any animal species tested.

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity:

An environmental fate analysis is not available for this specific product. Plants and animals may experience harmful or fatal effects when coated with petroleum products. Petroleum-based (mineral) lubricating oils normally will float on water. In stagnant or slow-flowing waterways, an oil layer can cover a large surface area. As a result, this oil layer might limit or eliminate natural atmospheric oxygen transport into the water. With time, if not removed, oxygen depletion in the waterway may be sufficient to cause a fish kill or create an anaerobic environment.

Environmental Fate:

Analysis for ecological effects has not been conducted on this product. However, if spilled, this product and any contaminated soil or water may be harmful to human, animal, and aquatic life. Also, the coating action associated with petroleum and petroleum products can be harmful or fatal to aquatic life and waterfowl.

Section 13: DISPOSAL CONSIDERATIONS

Waste Disposal:

Assure conformity with applicable disposal regulations. Dispose of absorbed material at approved waste site.

Section 14: TRANSPORTATION INFORMATION

DOT Classification:

Not regulated.

TDG Classification:

Not regulated.

Section 15: REGULATORY INFORMATION

TSCA Inventory : This product and/or its components are listed on the Toxic Substances Control Act (TSCA) inventory
DSL Inventory : All components are listed or exempted

SARA 313 Toxic:



Chemical notification

CAS Number	Wt %	Component Name
68649-42-3	1.0	Zinc dialkyldithiophosphate

Clean water Act:

This material is classified as an oil under Section 311 of the Clean Water Act (CWA) and the Oil Pollution Act of 1990 (OPA). Discharges or spills which produce a visible sheen on waters of the United States, their adjoining shorelines, or into conduits leading to surface waters must be reported to the EPA's National Response Center at (800) 424-8802.

California Prop 65:

This product contains the following chemical(s) known to the state of California to cause cancer and/or birth defects based on maximum impurity levels of components: 0.00006% Toluene
CAS no 108-88-3

New Jersey RTK Label : Petroleum oil

NFPA/ HMIS Rating:

Health - 1 Fire - 1 Reactivity - 0

Hazard Rating: 0 = minimal, 1 = slight, 2 = moderate, 3 = severe, 4 = extreme

WHMIS Classification:

Class D2B - Skin/Eye Irritant

Section 16: OTHER INFORMATION

Disclaimer:

The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials.

It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for the user's own particular use.