

MATERIAL SAFETY DATA SHEET

Trade Name: Johnsen's Premium PAG 150
MSDS NO. 6823-6
Revision Date: 12/04/2008
Date Printed: 12/30/2008

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Trade Name: Johnsen's Premium PAG 150
Chemical Family: Refrigeration 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

Component	Weight %	OSHA TWA	OSHA STEL	OSHA SKIN
PAG Proprietary Base Stock Mixture	20-80	Not Listed	Not Listed	Not Listed
PAG Proprietary Inhibitor Package Mixture	0-20	Not Listed	Not Listed	Not Listed

Component	Weight %	OSHA Z PEL	OSHA Z TWA	OSHA Z Ceiling
PAG Proprietary Base Stock Mixture	20-80	Not Listed	Not Listed	Not Listed
PAG Proprietary Inhibitor Package Mixture	0-20	Not Listed	Not Listed	Not Listed

Component	ACGIH TLV TWA	ACGIH TLV STEL	ACGIH TLV Ceiling
PAG Proprietary Base Stock Mixture	Not Listed	Not Listed	Not Listed
PAG Proprietary Inhibitor Package Mixture	Not Listed	Not Listed	Not Listed

3. HAZARDS IDENTIFICATION

Emergency Overview: Causes eye irritation. Vapor, aerosol or mist of the product and thermal degradation products generated at high temperatures can be irritating and harmful if inhaled. Aspiration may cause lung damage. Repeated inhalation of aerosol by rats produced lung damage.

HMIS Classification: Health: 2* Flammability: 1 Reactivity: 0
NFPA Rating: Health: 1 Flammability: 1 Reactivity: 0

4. FIRST AID MEASURES

Eye Contact: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower lids. Seek medical attention if irritation persists.

Ingestion: DO NOT induce vomiting. Wash out mouth with water and give 1 or 2 glasses of water to drink. If gastrointestinal symptoms develop, consult medical personnel. Never give anything by mouth to an unconscious person.

Inhalation: If inhaled, remove from area to fresh air. Get medical attention if respiratory irritation develops or if breathing becomes difficult.

Skin Contact: Wash with soap and water. Remove contaminated clothing and shoes, and launder before reuse. Get medical attention if irritation persists.

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5. FIRE FIGHTING MEASURES

Flammable Properties

Flash Point °F(°C): 400 F. (204 C.)
Flash Point Method: PMCC
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.

Protection Of Fire-Fighters:

Special Fire-Fighting Procedures: Wear approved positive-pressure self-contained breathing apparatus and protective clothing. Do not direct a solid stream of water or foam into hot, burning pools; this may cause frothing and increase fire intensity.

Hazardous Combustion Products: Oxides of carbon, nitrogen and phosphorus.

Aerosol Comments: Not Applicable

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Wear appropriate protective clothing and equipment to prevent skin and eye contact.
Spill Procedures: Wear protective equipment specified. Contain any liquid from leaking containers.
Action to be taken if material is released or spilled: Absorb spill with inert material. 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: Avoid contact with eyes. Avoid breathing vapors or spray mists. Use only in a well ventilated area. Keep containers tightly closed when not in use. Wash thoroughly after handling. Do Not Swallow.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls: Eyewash stations. Showers. Sudden release of hot organic chemical vapors or mists from process equipment operating at elevated temperature or pressure, or sudden ingress of air into hot equipment operating under a vacuum, may result in ignitions without the presence of obvious ignition sources. Any use of this product in elevated-temperature processes should be thoroughly evaluated to establish and maintain safe operating conditions. Published autoignition values cannot be taken as safe operating temperatures.

Eyes: Wear safety glasses or goggles to protect against exposure.

Skin Protection: Not normally necessary. Wash hands and other exposed areas with mild soap and water before eating, drinking, smoking and when leaving work.

Respiratory Protection: None required for use at low temperatures. At high temperatures, local ventilation is recommended at points where vapors can be expected to escape to the workplace air.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Clear to light yellow liquid
Odor: MILD
pH Value: Not Determined
Vapor Pressure: <.01 mm Hg @ 20 C.
Vapor Density (Air=1): 51.83
Boiling Point (°F): >482 F.
Melting/Freezing Point: -47F
Solubility in Water: 100%
Bulk Density at 20°C: Not Determined
Molecular Weight: Mixture
Specific Gravity (H2O=1): 1.051
Viscosity: Not Available
Evaporation Rate: <.01
VOC Content(%): 1.99 g/l
Decomposition Temperature: Not Known

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10. STABILITY AND REACTIVITY

Chemical Stability: STABLE.
Conditions to Avoid: None anticipated
Materials to Avoid: Strong oxidizing agents. Materials reactive with hydroxyl compounds. Strong acids and bases
Hazardous Decomposition Products: Oxides of nitrogen. Oxides of carbon. Oxides of phosphorus.
Hazardous Polymerization: WILL NOT OCCUR

11. TOXICOLOGICAL INFORMATION

Toxicological Data:

Component	Route	Species	Dose
PAG Proprietary Base Stock Mixture	Inhalation	Rats	Not known.
PAG Proprietary Inhibitor Package Mixture	Inhalation	Rats	Not known.

Carcinogenicity:

Component	IARC	NTP	OSHA
PAG Proprietary Base Stock Mixture	Not Listed	Not Listed	Not Listed
PAG Proprietary Inhibitor Package Mixture	Not Listed	Not Listed	Not Listed

Comments: No component known to be present in this product at >.1% is presently listed as a carcinogen by IARC, NTP or OSHA.

12. ECOLOGICAL INFORMATION

Remarks: Micro-Organisms: >5000 mg/l, Aquatic Invertebrates: >10000 mg/l, Fathead Minnow: >10000 mg/l.

13. DISPOSAL CONSIDERATION

Waste Classification: This product as purchased does not fall under current U.S. EPA RCRA definitions of hazardous waste. Under RCRA it is the generator's responsibility to determine the status of the waste at the time of its disposal. This product does not contain any CERCLA regulated materials.
Waste Management: Recovery and reuse, rather than disposal, should be the ultimate goal of handling efforts.
Disposal Method: Disposal of this material to the land may be banned by federal law (40 CFR 268).

14. TRANSPORTATION INFORMATION

U.S. DOT:

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

IMDG:

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

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15. REGULATORY INFORMATION

US Federal Regulations:

Component	SARA 313	SARA 302	TPQ	RQ
PAG Proprietary Base Stock Mixture	Not Listed	Not Listed	Not Listed	Not Listed
PAG Proprietary Inhibitor Package Mixture	Not Listed	Not Listed	Not Listed	Not Listed

US OSHA HEALTH CLASSIFICATION: Hazardous per OSHA 29 CFR 1910.1200
SARA 311/312 Hazard Categories: Immediate Health: Yes, Delayed Health: Yes, Fire: No, Reactive: No, Pressure: No.

State Regulations:

Component	California Prop. 65 Cancer list	California - Prop 65 Developmental Toxicity	California Prop. 65 Reproductive Female	California Prop. 65 Reproductive Male
PAG Proprietary Base Stock Mixture	Not Listed	Not Listed	Not Listed	Not Listed
PAG Proprietary Inhibitor Package Mixture	Not Listed	Not Listed	Not Listed	Not Listed

U.S. TSCA: One or more components of this product is not listed on the TSCA Inventory.
Canadian Inventory: One or more components of this product is not listed on the Canadian DSL or NDSL Inventory.

Consumer Product Safety Improvement Act of 2008 General Conformity Certification

The Supplier identified in Section 1 of this MSDS has evaluated this product and certifies it to be labeled and packaged in compliance with the applicable provisions of the Federal Hazardous Substance Act as stated in 16 CFR 1500 and enforced by the Consumer Product Safety Commission, and where applicable the products that require Child Resistant Closures are packaged in accordance with the Poison Prevention Packaging Act as stated in 16 CFR 1700 and enforced by the Consumer Product Safety Commission. All closures have been tested in accordance with the latest protocols. No other testing is required to certify compliance with the above. The date of manufacture is stamped on the product container.

16. OTHER INFORMATION

General Notes: Disclaimer:

Do not allow undiluted material or large quantities to reach groundwater, bodies of water or sewer system. The information and recommendations contained herein are based upon tests believed to be reliable. However, the manufacturer/distributor of this product does not guarantee their accuracy or completeness NOR SHALL ANY OF THIS INFORMATION CONSTITUTE A WARRANTY, WHETHER EXPRESSED OR IMPLIED, AS TO THE SAFETY OF THE GOODS, THE MERCHANTABILITY OF THE GOODS, OR THE FITNESS OF THE GOODS FOR A PARTICULAR PURPOSE. Adjustment to conform to actual conditions of usage may be required. The manufacturer/distributor assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied.