

<b>MATERIAL SAFETY DATA SHEET</b>
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Trade Name: Johnsen's Premium PAG 46  
 MSDS NO. 6812-6  
 Revision Date: 03/27/2007  
 Date Printed: 12/30/2008

<b>1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION</b>
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Trade Name: Johnsen's Premium PAG 46  
 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

<b>2. COMPOSITION/INFORMATION ON INGREDIENTS</b>
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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

<b>3. HAZARDS IDENTIFICATION</b>
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**Emergency Overview:** May cause allergic skin reaction. Causes eye and skin irritation. Vapor, aerosol or mist of the product and thermal degradation products generated at high temperatures can be irritating and harmful if inhaled.

**HMIS Classification:** Health: 1 Flammability: 1 Physical Hazard: 0  
**NFPA Rating:** Health: 1 Flammability: 1 Reactivity: 0

<b>4. FIRST AID MEASURES</b>
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**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. May cause mild eye irritation.  
**Ingestion:** No evidence of harmful effects from available information  
**Inhalation:** Not a hazard under normal use conditions. Remove from source of exposure. If signs of irritation or toxicity occur seek medical attention.  
**Skin Contact:** Remove contaminated clothing and shoes, and launder before reuse. Wash with soap and water.

<b>5. FIRE FIGHTING MEASURES</b>
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Flammable Properties

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## 5. FIRE FIGHTING MEASURES

Flash Point °F(°C): 340 F (171.1 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. If water is used, use with care to avoid possible violent production of steam.

### 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: Carbon Dioxide. Carbon Monoxide. 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: Contain any liquid from leaking containers. Wear protective equipment specified.  
Action to be taken if material is released or spilled: Wash walking surfaces with detergent and water to reduce slipping hazard. Absorb spill with inert material. Clean up small spills and leaks immediately.  
Environmental Precautions: Do not allow to enter sanitary drains, sewer or surface and subsurface waters.

## 7. HANDLING AND STORAGE

Handling and Storage: Use only in a well ventilated area. Keep containers tightly closed when not in use. Wash thoroughly after handling. Do Not Swallow. Avoid contact with eyes, skin and clothing. Avoid breathing vapors or spray mists.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls: Showers. Eyewash stations. Local exhaust ventilation as necessary to maintain exposures to within applicable limits.  
Eyes: Chemical goggles; also wear a face shield if splashing hazard exists.  
Skin Protection: Use chemical resistant gloves for prolonged skin contact.  
Respiratory Protection: Not normally needed, if controls are adequate. If needed, use MSHA-NIOSH approved respirator for organic vapors.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Clear to light yellow liquid  
Odor: MILD  
pH Value: 5.6  
Vapor Pressure: <0.01 mm Hg @ 20 C.  
Vapor Density (Air=1): >10  
Boiling Point (°F): >200 C  
Melting/Freezing Point: -45C  
Solubility in Water: <0.5%  
Bulk Density at 20°C: Not Determined  
Molecular Weight: Mixture  
Specific Gravity (H2O=1): .99-1  
Viscosity: Not Determined  
Evaporation Rate: (Butyl Acetate = 1): <0.01  
VOC Content(%): Not determined.  
Decomposition Temperature: Not Known

## 10. STABILITY AND REACTIVITY

Chemical Stability: Stable at normal conditions  
Conditions to Avoid: None anticipated

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## 10. STABILITY AND REACTIVITY

**Materials to Avoid:** Alkali metals. Strong oxidizing agents.  
**Hazardous Decomposition Products:** Carbon monoxide. Carbon dioxide. 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:** Ecological testing has not been conducted on this product.

## 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:** Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines are found in 40 CFR 261.3. Additionally, state and local rules may apply.  
**Disposal Method:** 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 Applicable  
**Hazard Subclass:** Not Applicable  
**UN No.:** Not Applicable  
**Packing Group:** Not Applicable  
**Marine Pollutant:** No

## 15. REGULATORY INFORMATION

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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.