

FOUR SEASONS PN 59000

LFK INDUSTRIES, INC. - WAX-FREE MINERAL REFRIGERANT OIL

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MATERIAL SAFETY DATA SHEET

Revised: 12/01/99

MSDS ID: 59000

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Section 1 - PRODUCT AND COMPANY IDENTIFICATION

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Product Name: 59000 Wax-Free Mineral Refrigerant Oil

MANUFACTURER:

LFK Industries, Inc.

519 Gibson St

Seagoville, TX 76016

Telephone Number:

972-287-1200

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Section 2 - HAZARDOUS INGREDIENTS

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Case Number: 64742-52-5

Ingredient Name: Severely Hydrotreated Heavy Naphthenic Petroleum Oil

Exposure Limit: Oil Mist

OSHA PEL MIST 5 MG/M3 8 HRS

ACGIH TLV MIST 5 MG/M3 8 HRS

Concentration Percent by Volume: 100%

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Section 3 - HAZARDS IDENTIFICATION

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EMERGENCY OVERVIEW:

*** Not expected to cause a severe emergency hazard.

Potential Health Effects

Primary route(s) of entry: Skin

Eyes: Tests on similar materials suggest that no eye effect be expected.

Skin: Test on similar materials indicate that no significant adverse health effects are expected to occur upon short-term exposure.

Ingestion: Test on similar materials indicate that no significant adverse effects expected. Practically non-toxic.

Inhalation: Test on similar materials indicate that no significant adverse effects expected.

Chronic (Cancer Information): Prolonged and/or repeated contact with this material may produce skin irritation and inflammation.

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Carcinogen listed by: National Toxicology Program (No)

I.A.R.C. (No)

OSHA (No)

ACGIH (No)

This product does not require a cancer hazard warning in accordance with the OSHA Hazard Comm. Std.

Medical Conditions Aggravated By Exposure: Personnel with pre-existing skin disorders should avoid contact with this product.

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Section 4 - FIRST AID MEASURES

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Eyes: Flush eyes immediately with water for at least 15 minutes or until irritation subsides. If irritation persists, consult a physician.

Skin: Wash thoroughly with soap and water. Remove contaminated clothing and wash before reuse. If irritation or rash develops, obtain medical assistance. Immediately remove soaked clothing.

Ingestion: Product is practically non-toxic. Do not induce vomiting. Obtain emergency medical attention.

Inhalation: Not likely to occur except a mist. Remove patient to fresh air and consult a physician. If breathing is difficult, give oxygen. If not breathing give artificial respiration.

Section 5 - FIRE FIGHTING MEASURES

Flammable Properties:

Flash Point: >400 degrees F >204 degrees C COC ASTM D92

Autoignition: >650 degrees F >343 degrees C

Flammability Class: IIIB

Explosive Power: None.

Lower Exposure Limit (%): Not determined.

Upper Exposure Limit (%): Not determined.

Fire and Explosion Hazards: Slightly combustible. OSH/NFPA Class IIIB Combustible Liquid. If heated above its flash point will release flammable vapors which can burn in the open or be explosive in confined spaces if exposed to ignition source. Mist or sprays may be flammable below oil's normal flash point. Keep away from extreme heat or open flame.

Extinguishing Media: Dry chemical, Carbon Dioxide, water fog and foam.

Note: Water, for and foam may cause frothing and spattering.

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Fire Fighting Instructions: Use water to cool containers exposed to flames. Do not enter enclosed or a confined work space without proper protection equipment. Fire fighting personnel should wear respiratory protection (positive pressure if available). Products of combustion includes fumes, smoke and carbon monoxide.

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Section 6 - ACCIDENTAL RELEASE MEASURES

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Shut off ignition source. Contain spill and keep from entering waterways or sewers. Use personal protective equipment. Advise EPA; state agency if required. Absorb on inert material. Shovel, sweep or vacuum spill.

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Section 7 - HANDLING AND STORAGE

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Handling and storage precautions: Keep away from flames, sparks or hot services. Never use a torch to cut or weld on or near container. Empty oil containers can contain explosive vapors. NFPA Class IIIIB storage. Wash thoroughly after handling.

Work/Hygienic Practices: Wash hands with soap and water before eating, drinking, smoking or use of toilet facilities. Do not use gasoline, solvents, kerosene, or harsh abrasive skin cleaners for washing exposed skin areas. Take a shower after work if general contact occurs. Remove oil-soaked clothing and launder before reuse. Launder or discard contaminated shoes and leather gloves.

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Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

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Engineering Controls: Use adequate ventilation to keep oil mists of this material below applicable standard(s). See Section on occupational exposure limits.

Eye/Face Protection: Safety glasses or splash goggles. Have suitable eye wash water available.

Skin Protection: Avoid prolong and/or repeated skin contact. If prolonged contact cannot be avoided, wear protection impervious gloves and clothing. Acceptable materials for gloves are polyvinyl chloride; neoprene; nitrile; polyvinyl alcohol; viton.

Respiratory Protection: Normally not required if adequate ventilation. If occupational exposure limits are exceeded wear NIOSH/MSHA apparatus.

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Other/General Protection: If there is a likelihood of splashing, an oil resistant clothing should be worn. Never wear oil soaked clothing. Launder or dry clean before wearing. Discard oil soaked shoes. Affix warning labels on containers in accordance with 29 CFR 1910.1200 (Hazard Communication Standard).

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Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

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Appearance: Clear, pale straw to water white, colored, viscous liquid

Odor: Light bland petroleum.

Odor Threshold: N.D.

Basic Physical Properties:

Physical State: Liquid

Boiling Point: .630 degrees F IBP .332 degrees C

Melting Point: N/A degrees F N/A degrees C

Vapor Pressure: <0.001 mm Hg @ 20 degrees C

Vapor Density: (Air=1): >5 Air=1

Specific Gravity: 0/91 Water=1

Molecular Weight: 420.00

Packing Density: N/A

Solubility (H2O): negligible in water

Percent Volatile: nil

Volatile Organic compounds (VOC) Content: 2.5%

Evaporation Rate: 1000X slower than ethyl ether

pH: essentially neutral

Viscosity: 517 SUC at 100 degrees F

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Section 10 - STABILITY AND REACTIVITY

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Stability: Stable.

Condition to Avoid (stability): Sources of ignition

Incompatible Materials: Strong oxidizers.

Hazardous decomposition Products: Combustion may produce carbon monoxide and other asphyxiants.

Hazardous polymerization: Will not occur.

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Section 11 - TOXICOLOGICAL INFORMATION

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Acute Studies: Test on similar materials show a low order of acute oral and dermal toxicity.

Eye Effects: Minimal irritation on contact.

Skin Effects: Practically non-toxic if absorbed. May cause mild irritation with prolonged and repeated contact.

Acute Oral Effects: Test on similar materials indicate low order of acute oral toxicity.

Acute Inhalation Effects: Low acute toxicity expected on inhalation.

This product is severely hydrotreated. Severely hydrotreated naphthenis petroleum oil has not been found to be carcinogenic or a potential carcinogen. This product is not listed as carcinogenic or a potential carcinogen by the National Toxicology Program, by the I.A.R.C. monographs or by OSHA.

Section 12 - ECOLOGICAL INFORMATION

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No Data Given.

Section 13 - DISPOSAL CONSIDERATIONS

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Follow federal, state and local regulation. Not a RCRA hazardous waste if uncontaminated. If "used", RCRA Criteria must be determined. Do not flush to drain/storm sewer. Contract to authorized disposal service. If permitted incineration may be practical. Recommend recycling.

RCRA Information: Not a RCRA hazardous waste if uncontaminated.

Section 14 - TRANSPORT INFORMATION

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Proper Shipping Name: Not regulated by DOT.

Hazard Class: Not applicable.

DOT Identification Number: N/A

DOT Shipping Label: Not regulated by DOT.

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Section 15 - REGULATORY INFORMATION

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U.S. Federal Regulatory Information:

SARA 302 Threshold planning Quality: Not applicable

SARA 304 Reportable Quality: Not applicable

SARA 311 Categories: Immediate (Acute) Health Effects -N
 Delayed (Chronic) Health Effects -N
 Fire Hazard -N
 Sudden Release of Pressure Hazard -N
 Reactivity Hazard -N

EPA/TSCA Inventory: The components of this product are listed on the EPA/TSCA inventory chemicals.

EPA Hazard Classification Code: Not Applicable.

Comprehensive Environmental Response, Compensation and Liability Act (CERCLA): No chemicals in this product are subject to the reporting requirements of CERCLA.

SARA Title III - Section 313 Supplier Notification: No chemicals in this product exceed the DeMinimus reporting level established by SARA Title III, Sec. 313 and 40 CFR 372.

WHMIS Classification: Not Controlled.

Section 16 - OTHER INFORMATION

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NFPA Hazard Rating - Health 0 Negligible
 - Fire 1 Slight
 - Reactivity 0 Negligible

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