



SAFETY DATA SHEET

REFRIGERATION OIL LM 46

Section 1. Identification

Material name:	REFRIGERATION OIL LM 46
Product Code	5471
SDS no.	SDS 5471-1
<u>Relevant identified uses of the substance or mixture and uses advised against</u>	
Use of the substance/ mixture	Refrigeration compressor lubricant. For specific application advice see appropriate Technical Data Sheet or consult our company representative
Manufacturer Supplier	Petromin Corporation P.O.BOX: 1432, Jeddah 21431 Prince Sultan Road, Ayah Mall www.petromin.com Tel: +966 12 60 8300 Fax: +966 12 608 2545
Emergency Telephone Number	Technical Services Department Telephone: +966 12 215 7000

Section 2. Hazard(s) identification

Classification of the substance or mixture Not classified

GHS label elements:

Hazard Pictograms: No hazard pictogram is used

Signal word: No signal word is used

Hazard statement: Not applicable

Precautionary statement:

Prevention: Not applicable

Response: Not applicable

Storage: Not applicable

Disposal: Not applicable

Other hazards which do not result in classification Not applicable



SAFETY DATA SHEET

Section 3. Composition and ingredient information

Substance/ mixture Mixture

Components	CAS No.	Percent
Hydrotreated heavy paraffinic	64742-54-7	96-99%
Performance Additives	Mixture	1-4%

Section 4. First aid measures

Description of necessary first aid measures

Eye contact	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Check and remove any contact lenses. Get medical attention
Skin contact	No specific first aid measures are required. As a precaution, remove clothing and shoes if contaminated. To remove the material from skin, use soap and water.
Inhalation	If inhaled, remove the person to fresh air. Get medical attention if symptoms
Ingestion	Do not induce vomiting. As a precaution, get medical advice.
Symptoms caused by exposure	Not available
Special Treatment	No special treatment

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media: In case of fire, use Foams, dry chemicals, CO₂, nylons and powders

unsuitable extinguishing media Do not use water

Protection Equipment Heat resistant suit and gloves, Self-contained breathing apparatus

Special Risks None

Special Measures Not required

Combustion Products CO₂, H₂O, CO (in defect of air), nitrogen, sulfur and phosphorus oxides

Section 6. Accidental release measure

Precautions for the Environment	Hazard of physical fouling to coasts, soils, etc. due to low solubility and high viscosity of the oils. Avoid the material entering water intakes
Clean-up Method	Treat as an accidental oil spill or leak; avoid dispersion of the material with mechanical barriers. Remove with physical or chemical treatment
Personal Precautions	Avoid prolonged contact with contaminated clothes or with the product
Personal Protection	Gloves and goggles or face shield

Section 7. Handling and storage

Precautions for safe handling

General Precautions Avoid prolonged contact and inhalation of mists and vapors

Specific conditions Safety goggles and gloves should be used

Precautions for safe storage

Storage condition Containers properly labeled and sealed, placed in cool and

Incompatible materials Strong oxidants

Dangerous practices Not available

Section 8. Exposure control/ Personal protection

Control parameters:

Exposure Level Not available

Inhalation Low vapor pressures: The product is slightly volatile at room temperature and does not present special risks. In presence of heated oils, wear protective masks to avoid vapor inhalation

Skin Gloves

Eye Safety goggles



Other Showers and eye-washers in the working area

Specific Hygiene measure Good work practices to minimize exposure and adoption of good Personal hygiene

Exposure Level TLV (typical base oil) = 0.016 PPM at 20°C (saturated vapor Concentration);
TLV/TWA (ACGIH) = 5mg/m³ (oil mist); TLV/STEL (ACGIH) = 10mg/m³ (oil mist)

Section 9. Physical and chemical properties

Information on basic physical and chemical properties:

Appearance:

Physical state: Liquid
Color: Light Amber
Specific Gravity (at 15°C): 0.886 (typical)
Flash point: 188 °C
Explosive Properties: Not available
Oxidizing Properties: Not available
Water Solubility: Insoluble (100 PPM max. H₂O)
Solubility: Organic solvents
Vapor Density: 17.7 (air=1)
Vapor Pressure: Not available
Viscosity at 100°C: 6.1 cSt (typical)
Pour Point: -36 °C (typical)
Boiling Point: Not available



SAFETY DATA SHEET

Section 10. Stability and reactivity

Reactivity	Stable under recommended transport storage conditions
Chemical stability	Stable under normal temperature pressures
Polymerization Risk	Not available
Materials to Avoid	Strong oxidants react with oils and organic materials
Hazardous Decomposition products	Not available
Condition to Avoid	Exposure to open flames

Section 11. Toxicological information

Routes of Exposure	Contact with skin, eyes and inhalation. Ingestion is not frequent.
Acute and chronic Effects	No malignant acute effects are known. Chronic effects due to repeated exposures are irritation, dermatitis and acne
Carcinogenicity	Not available
Reproductive Toxicity	No evidences
Medical Conditions which increase Hazard to Exposure	Respiratory tract deficiencies and dermatological problems

Section 12. Ecological information

Pollutant Potential:

Persistence and Degradability the material is oily and viscous and floats on water. It presents a high physical fouling potential, mainly in sea-spills; by contact, destroys small aquatic organisms and makes living difficult for upper organisms, not allowing the sunlight to reach underlying marine ecosystems, affecting its normal development.

Mobility/Bioaccumulative Potential it does not present bioaccumulative problems in living organisms or incidence in the tropic food chain, although it may cause long-term adverse effects in the aquatic environment, due to its high physical fouling potential

Eco toxicological Effect: Dangerous for aquatic life in high concentrations (spills).

Section 13. Disposal consideration

Disposal Methods (surplus) Recycling and recovery of base oils when possible

Disposal (waste) Only in specific prepared and controlled areas. Avoid releasing oils to sewers because they can destroy water treatment plant Microorganisms. Do not attempt to clean containers since residue is difficult to remove; dispose in a safe way.

Handling (waste) Labeled and sealed containers. Avoid direct contact with waste oils.



SAFETY DATA SHEET

Section 14. Transport information

Special Precautions	Stable at room temperature and during transport. Store in cool well ventilated areas.
UN Number	Not regulated
Road (ADR)/ Rail (RID) /River (ADNR)	Not regulated
Airline (IATA-ACAO)	Not regulated
Marine (IMO-IMDG)	Not regulated
Special precautions for user	Not available

Section 15. Regulatory information

Regulation	CERCLA/SARA - Section 302 Extremely Hazardous Substances and TPQs (in pounds) This material does not contain any chemicals subject to the reporting requirements of SARA 302 and 40 CFR 372.
CERCLA/SARA - Section 311/312 (Title III Hazard Categories)	Acute Health: No Chronic Health: No Fire Hazard: No Pressure Hazard: No Reactive Hazard: No
CERCLA/SARA - Section 313 and 40 CFR 372	This material does not contain any chemicals subject to the reporting requirements of SARA 313 and 40 CFR 372
EPA (CERCLA) Reportable Quantity (in pounds)	This material does not contain any chemicals with CERCLA Reportable Quantities
California Proposition 65	This material does not contain any chemicals which are known to the State of California to cause cancer, birth defects or other reproductive harm at concentrations that trigger the warning requirements of California Proposition 65
Canadian	This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the Regulations. WHMIS Hazard Class: None
National Chemical Inventories	All components are either listed on the US TSCA Inventory, or are not regulated under TSCA. All components are either on the DSL, or are exempt from DSL listing requirements
U.S. Export Control Classification Number	EAR99



SAFETY DATA SHEET

Section 16. Other information

History:

Date of Issue 10/29/2018
Revision Version Version 2.0
Status: Final
Previous Issue Date

Guide to Abbreviations	CAS	Chemical Abstracts Service
	ACGIH	American Conference of Governmental Industrial Hygienists
	CASRN	Chemical Abstracts Service Registry Number
	CEILING	Ceiling Limit (15 minutes)
	CERCLA	The Comprehensive Environmental Response, Compensation, and Liability Act
	EPA	Environmental Protection Agency
	IARC	International Agency for Research on Cancer
	LEL	Lower Explosive Limit
	NE	Not Established
	NFPA	National Fire Protection Association
	NTP	National Toxicology Program
	OSHA	Occupational Safety and Health Administration
	PEL	Permissible Exposure Limit (OSHA)
	SARA	Superfund Amendments and Reauthorization Act
	STEL	Short Term Exposure Limit (15 minutes)
	TLV	Threshold Limit Value (ACGIH)
	TWA	Time Weighted Average (8 hours)
	UEL	Upper Explosive Limit
	WHMIS	Worker Hazardous Materials Information System (Canada)

Disclaimer of Expressed and implied Warranties

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is to the best of our knowledge and belief, accurate and reliable as of the date indicated. However no representation, warranty or guarantee is made as to its accuracy, reliability or completeness.

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