

SAFETY DATA SHEET

(in accordance with Regulation (EU) 2015/830)

ML333 REFRIGERATION COMPRESSOR OIL



Date of Issue: 10/06/20

Page 1 of 5
Revision Date: 10/06/2020

SECTION 1: IDENTIFICATION OF THE MIXTURE AND OF THE COMPANY/UNDERTAKING.

1.1 Product identifier.

Product Name: **ML333 Refrigeration Compressor Oil**
Product Code: **ML333**
Recommended Use of Product: Mineral Lubricating Oil: Lubrication of Refrigeration Compressors
Uses Advised Against: No Additional Information Available

1.2 Details of the supplier of the safety data sheet.

Company: **MAK LUBES INTERNATIONAL LTD**
Address: The Old Brewery, 2 Brewery Court, High Street
City: Theale, Reading RG7 5AH
Province: Berkshire, United Kingdom
Telephone: +44 (0) 7464 325169
E-mail: sales@mak-global.org
Web: www.mak-global.org

1.3 Emergency telephone no: **Toxicology Centre:** +54 11 4 962 2247 / 6666
(UK: during office hours only; Monday-Friday; 08:00-17:00) Tel: +44 (0) 7464 325169

SECTION 2: HAZARDS IDENTIFICATION.

Classification of the substance or mixture: Not classified.

GHS label elements:
Hazard pictograms: none.
Signal word: none.
Hazard statements: no known significant effects or critical hazards.
Precautionary statements:
Prevention: not applicable.
Response: not applicable.
Storage: store in a well-ventilated place.
Disposal: Dispose of contents and container in accordance with all local, regional, national and international regulations.

Other hazards that do not lead to a classification: none known.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS.

Substance / mixture: mixture.
Other means of identification: not available.

The declaration of Hazardous Substance (s) or Complex Substance (s) is not required.

SECTION 4: FIRST AID MEASURES.

Description of necessary first aid measures:

Eye contact: wash immediately with plenty of water, at least 15 minutes. If eye irritation occurs, get medical attention.

Skin contact: wash with plenty of soap and water. Remove contaminated clothes and wash them before reusing them. If irritation occurs or persists, obtain medical attention.

Inhalation: transfer the affected person to fresh air. If not breathing, perform artificial respiration. If breathing is difficult, supply oxygen. Get medical attention if symptoms appear.

Ingestion: wash out mouth with water. If material has been ingested and the exposed person is conscious, provide small amounts of water to drink. Do not induce vomiting unless expressly indicated by medical personnel.

SAFETY DATA SHEET

(in accordance with Regulation (EU) 2015/830)

ML333 REFRIGERATION COMPRESSOR OIL



Page 2 of 5

Revision Date: 10/06/2020

Date of Issue: 10/06/20

Most important symptoms / effects, acute or delayed:

Potential acute health effects:

Eye contact: no significant effects or critical hazards.

Skin contact: no significant effects or critical hazards. Prolonged contact can cause degreasing.

Inhalation: inhalation of mists or vapors of mineral oil at elevated temperatures may cause respiratory irritation.

Ingestion: no significant effects or critical hazards.

Over-exposure signs / symptoms:

Eye contact: no specific data.

Skin contact: no specific data.

Inhalation: no specific data.

Ingestion: no specific data.

Indication of immediate medical attention and special treatment needed, if necessary:

Notes to physician: treat symptomatically. Contact a poison treatment specialist immediately if a large amount has been swallowed or inhaled.

Specific treatments: there is no specific treatment.

Protection of first-aid personnel: no action shall be taken involving any personal risk or without adequate training.

SECTION 5: FIREFIGHTING MEASURES.

Suitable extinguishing media: dry chemical powder, chemical foam or carbon dioxide to extinguish the flames. Use water spray to cool the containers exposed to the fire.

Unsuitable extinguishing media: do not use water jet.

Specific hazards arising from the chemical: the pressure may rise and the container may explode in case of heating or fire.

Hazardous thermal decomposition products: carbon dioxide, carbon monoxide, sulfur oxides.

Special measures to be taken by firefighting teams: quickly isolate the area, evacuate all persons in the vicinity of the incident. No action should be taken that involves a personal risk or without proper training.

Special protective equipment for fire-fighters: Fire fighters should wear appropriate protective equipment and self-contained breathing apparatus with full face-piece operating in positive pressure mode.

SECTION 6: ACCIDENTAL RELEASE MEASURES.

Personal precautions, protective equipment and emergency procedures:

For personnel who are not part of the emergency services: no action should be taken that involves a personal risk or without adequate training. Evacuate the surroundings. Do not allow the entry of unnecessary and unprotected personnel. Do not touch or walk through spilled material. Wear appropriate personal protective equipment.

For emergency personnel: if special elements are needed to manage the spill, take into account the information indicated in Section 8.

Environmental precautions: avoid dispersion of spilled material, its contact with soil, drains, surface water and groundwater. Inform the relevant authorities if the product has caused environmental contamination.

Methods and material for containment and cleaning:

Small spill: stop the leak if this does not represent any risk. Remove the containers from the spill area. Absorb with a dry inert material and place in appropriate containers for special waste. Dispose by an authorized special waste operator.

Large spill: stop the leak if this does not represent any risk. Remove the containers from the spill area. Prevent the product from entering sewers, water courses, basements or small areas. Wash spills to an effluent treatment plant or proceed as indicated below. Stop and collect spills with non-combustible absorbent materials, such as sand, earth, vermiculite or diatomaceous earth, and place in appropriate containers for special waste. Dispose by an authorized special waste operator.

SECTION 7: HANDLING AND STORAGE.

Precautions for safe handling:

Protective measures: use appropriate personal protective equipment (see Section 8). The material can accumulate static charges that can cause an electrical spark (source of ignition).

Information regarding occupational hygiene: eating, drinking or smoking should be prohibited in the places where this product is handled, stored or treated. Workers should wash their hands and face before eating, drinking or smoking. Remove protective equipment and contaminated clothing before entering areas where you eat.

SAFETY DATA SHEET

(in accordance with Regulation (EU) 2015/830)



ML333 REFRIGERATION COMPRESSOR OIL

Page 3 of 5

Date of Issue: 10/06/20

Revision Date: 10/06/2020

Conditions for safe storage, including possible incompatibilities: keep in accordance with current regulations. Store in the original, tightly closed container, protected from direct sunlight in a dry, cool and well-ventilated area, separated from incompatible materials (see Section 10) and food and drink. Open containers should be closed perfectly and kept in an upright position.

Do NOT store in un-labelled containers.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION.

Control parameters:

Occupational exposure limits:

Component	Exposure limit
Mineral Oil	ACGIH (USA) – TWA: 5 mg/m ³ (mist)

Appropriate engineering controls: general ventilation should be sufficient to control worker exposure to airborne contaminants. Environmental exposure controls: Emissions from ventilation equipment or work processes must be checked to verify that they meet the requirements of environmental legislation.

Individual protection measures:

Hygiene measures: wash hands, forearms and face completely after handling chemical products, before eating, smoking and using the sink and at the end of the work day. Use appropriate techniques to remove contaminated clothing. Wash contaminated clothing before reuse. Verify that the eyewash stations and safety showers are near the work stations.

Eye / face protection: safety eyewear complying with approved standards should be worn when a risk assessment indicates that this is necessary. If contact is possible, safety glasses with side protection should be used, unless the rating indicates a higher degree of protection.

Skin protection:

Hand protection: If a risk assessment indicates that it is necessary, chemically resistant and impenetrable gloves that meet approved standards should be worn whenever chemical products are handled.

Body protection: before using this product personal protective equipment for the body should be selected based on the task to be performed and the risks involved and should be approved by a specialist.

Another type of skin protection: you must choose the right footwear and any other necessary skin protection measure depending on the task carried out and the risks involved. Such measures must be approved by a specialist before handling this product.

Respiratory protection: If a risk assessment indicates that it is necessary, use an air-purifying respirator or an air supply that meets approved standards. The respirator must be selected based on the actual or anticipated exposure levels, the hazards of the product and the degree of operational safety of the chosen respirator.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES.

Physical state: liquid.

Color: light yellow

Odor: soft, characteristic.

Odor threshold: not available.

pH: not applicable.

Melting point / freezing point: - 30 °C.

Boiling point and boiling range: not available.

Flash point: greater than 190 °C (COC)

Evaporation rate: not available.

Flammability (solid, gas): not applicable.

Flammability or explosive limits: not available.

Vapor pressure: not available.

Vapor density: not available.

Relative density: 0.91

Solubility: soluble in hydrocarbon solvents; insoluble in water.

Partition coefficient n-octanol / water: not available.

Autoignition temperature: not available.

Decomposition temperature: not available.

Viscosity: 64 cSt at 40 °C

SAFETY DATA SHEET

(in accordance with Regulation (EU) 2015/830)

ML333 REFRIGERATION COMPRESSOR OIL



Date of Issue: 10/06/20

Page 4 of 5
Revision Date: 10/06/2020

SECTION 10: STABILITY AND REACTIVITY.

Reactivity: there is no available test data on the reactivity of this product or its components.
Chemical stability: under normal conditions of storage and use, the product is stable.
Possibility of hazardous reactions: under normal conditions of storage and use, no hazardous reactions occur.
Conditions to avoid: no specific data.
Incompatible materials: strong oxidizing agents.
Hazardous decomposition products: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: TOXICOLOGICAL INFORMATION.

Acute toxicity: minimal toxicity. Based on the evaluation of the components.
Skin corrosion / irritation: insignificant irritation of the skin at room temperature. Based on the evaluation of the components.
Serious eye damage / eye irritation: may cause slight discomfort of short duration to the eyes. Based on the evaluation of the components.
Respiratory or skin sensitization: It is not expected to be respiratory or skin sensitizer. Based on the evaluation of the components.
Mutagenicity: Not expected to be mutagenic in germ cells. Based on the evaluation of the components.
Carcinogenicity: Not expected to cause cancer. Based on the evaluation of the components.
Reproductive toxicity: Not expected to be toxic for reproduction. Based on the evaluation of the components.
Specific target organ toxicity - Single exposure: not available.
Specific target organ toxicity - Repeated exposure: not available.
Aspiration hazard: Not expected to be an aspiration hazard. Data based on the physicochemical properties of the material.

Information on the likely routes of exposure: not available.
Potential acute health effects:
Eye contact: no significant effects or critical hazards.
Skin contact: no significant effects or critical hazards.
Inhalation: inhalation of mists or vapors of mineral oil at elevated temperatures may cause respiratory irritation.
Ingestion: no significant effects or critical hazards.

Symptoms related to physical, chemical and toxicological characteristics:
Eye contact: no specific data.
Skin contact: no specific data.
Inhalation: no specific data.
Ingestion: no specific data.

Immediate and delayed effects, as well as chronic effects produced by a short and long term exposure:

Short-term exposure:
Possible immediate effects: not available.
Possible delayed effects: not available.
Long-term exposure:
Possible immediate effects: not available.
Possible delayed effects: not available.

Potential chronic health effects:
General: no significant effects or critical hazards.
Carcinogenicity: no significant effects or critical hazards.
Mutagenesis: no significant effects or critical hazards.
Teratogenicity: no significant effects or critical hazards.

Developmental effects: no significant effects or critical hazards.
Fertility effects: no significant effects or critical hazards.
Numerical measures of toxicity: not available.

Interactive effects: not available.

SAFETY DATA SHEET

(in accordance with Regulation (EU) 2015/830)

ML333 REFRIGERATION COMPRESSOR OIL



Date of Issue: 10/06/20

Page 5 of 5
Revision Date: 10/06/2020

SECTION 12: ECOLOGICAL INFORMATION.

Toxicity: not available.
Persistence / degradability: not available.
Bioaccumulative potential: not available.
Mobility in the soil: not available.
Other adverse effects: not available.

SECTION 13 DISPOSAL CONSIDERATIONS.

The generation of waste should be avoided or minimized wherever possible.
Waste:
Dispose safely, in accordance with current legislation (Law 24,051).
Contaminated packaging:
Dispose in a safe manner, in accordance with current legislation (Law 24,051).

SECTION 14: TRANSPORT INFORMATION.

National and International Regulations:
Land (DOT): Not regulated for land transport.
Sea (IMDG): Not regulated for maritime transport.
Air (IATA): Not regulated for air transport.

SECTION 15: REGULATORY INFORMATION.

Law 19,587 and Regulatory Decrees; current provincial and / or municipal legislation.
Law 24,051 and Regulatory Decrees; current provincial and / or municipal legislation.
Law 24,449 and Regulatory Decrees; current provincial and / or municipal legislation.

SECTION 16: OTHER INFORMATION.

Classification of the degree of risk according to NFPA 704:

Health: 1
Flammability: 1
Reactivity: 0
Special: -

The information given in this Safety Data Sheet has been drafted in accordance with COMMISSION REGULATION (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC.

The information in this Safety Data Sheet on the Preparation is based on current knowledge and on current EC and national laws, as far as the working conditions of the users is beyond our knowledge and control. The product must not be used for purposes other than those that are specified without first having written instructions on how to handle. It is always the responsibility of the user to take the appropriate measures in order to comply with the requirements established by current legislation. The information contained in this Safety Sheet only states a description of the safety requirements for the preparation, and it must not be considered as a guarantee of its properties.