
SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

Product name : Microlon Refrigeration Oil

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Refrigeration Fluid

1.3 Details of the supplier of the safety data sheet

Company : Microlon Inc
PO Box 80341
Austin, Texas 78708-0341
USA

Telephone : (512) 490-6460 (09:00 – 17:00)

E-mail address : info@microlon.com

1.4 Emergency telephone number <http://www.pers-er.com/>

Emergency Phone # : Domestic Shipments: (800) 633-8253

: International Shipments: (801) 629-0667

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]

Aspiration toxicity (Category 1)

Skin irritation (Category 2)

Eye irritation (Category 2)

Specific organ target toxicity – Single exposure (Category 3)

Aquatic chronic toxicity (Category 2)

Classification according to EU Directives 67/548/EEC or 1999/45/EC

Harmful: May cause lung damage if swallowed. Irritating to eyes, respiratory system and skin. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Classification is based upon acute toxicity data for the mixture as well as the percentage composition of the material.

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008 [CLP]

Pictogram



Signal word : Warning

Hazard statement(s)

H315

H319

Causes skin irritation

Causes serious eye irritation

Precautionary statement(s)

P280

Wear protective gloves/ protective clothing

Supplemental Hazard Statements : None

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

Component	Classification
Benzene, C14-30-alkyl derivatives	
CAS-No. 68855-24-3 EC-No. 272-472-8	Eye Irrit. 2; Skin Irrit. 2; H315,H319; Xi; R36/38

For the full text of the H-Statements and R-Phrases mentioned in this Section, see Section 16

4. FIRST AID MEASURES

4.1 Description of first aid measures

If inhaled

If vapor or mists are breathed in, move person into fresh air. If not breathing, give artificial respiration.

In case of skin contact

Wash off with soap and plenty of water. If irritation persists seek further medical attention.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and seek further medical attention.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Seek immediate medical attention.

4.2 Most important symptoms and effects, both acute and delayed

To the best of our knowledge, the chemical, physical, and toxicological properties of the mixture have not been thoroughly investigated.

4.3 Indication of any immediate medical attention and special treatment needed

No data available

5. FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media

Use water fog, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture

Highly dependent on combustion conditions. A complex mixture of airborne solids, liquids, and gases including carbon monoxide, carbon dioxide, and unidentified organic compounds will be evolved when this material undergoes combustion.

5.3 Advice for firefighters

Do not breathe decomposition products and fumes. Use approved self-contained breathing apparatus. Wear fire retardant clothing. Do not enter any enclosed or confined fire space without proper protective equipment, including self-contained breathing apparatus. Use water spray to cool containers. Use water fog to disperse vapors and leaks that have not ignited. Prevent runoff from fire control from entering waterways. Large fires should only be dealt with by trained personnel.

5.4 Further information

No data available

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Use suitable personal protective equipment (refer to Section 8 for details). Avoid breathing vapours or mists. Ensure adequate ventilation.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains or watercourses.

6.3 Methods and materials for containment and cleaning up

Place contaminated materials in disposable containers and dispose of in a manner consistent with applicable regulations.

6.4 Reference to other sections

For disposal see section 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapor or mist.

7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

7.3 Specific end use(s)

No data available

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components with workplace parameters

Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Appropriate engineering controls

Use in well ventilated areas. Use mechanical ventilation in poorly ventilated areas.

Personal protective equipment

Eye/face Protection

Use equipment for eye protection tested and approved under appropriate standards such as EN 166.

Skin Protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with good practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it. Recommended glove types include Polythene and Viton gloves.

Body Protection

Impervious clothing, the type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory Protection

Where risk assessment in accordance with the hierarchy of controls established within the Chemical Agents Directive shows a requirement for respirators as a means of control, use an organic filter type A.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

- | | |
|---|--|
| a) Appearance | Form: Clear light blue or amber liquid |
| b) Odor | no data available |
| c) Odor Threshold | no data available |
| d) pH | no data available |
| e) Melting point/freezing point | no data available |
| f) Initial boiling point and boiling range | 315°C |
| g) Flash point | 155°C |
| h) Evaporation rate | no data available |
| i) Flammability (solid, gas) | no data available |
| j) Upper/lower flammability or explosive limits | no data available or explosive limits |
| k) Vapor pressure | no data available |

- | | |
|---|---------------------|
| l) Vapor density | no data available |
| m) Relative density | 0.87 @ 25°C |
| n) Water solubility | Immiscible in water |
| o) Partition coefficient:
(n- octanol/water) | no data available |
| p) Auto-ignition temperature | no data available |
| q) Decomposition
temperature | no data available |
| r) Viscosity | no data available |
| s) Explosive properties | None |
| t) Oxidizing properties | None |

9.2 Other safety information

No data available

10. STABILITY AND REACTIVITY

10.1 Reactivity

No data available on mixture.

10.2 Chemical stability

Expected to be stable at normal temperatures and under recommended storage conditions.

10.3 Possibility of hazardous reactions

No data available.

10.4 Conditions to avoid

High temperature (>50°C), sources of ignition & direct sunlight.

10.5 Incompatible materials

Strong oxidising agents.

10.6 Hazardous decomposition products

No hazardous decomposition products when stored and handled correctly.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

LD₅₀ (Dermal) >2000 mg/kg LC₅₀

(Inhalation) >20mg/litre/4h

Skin corrosion/irritation

No data available on mixture. Primary skin irritant.

Serious eye damage/eye irritation

No data available on mixture. Primary eye irritant.

Respiratory or skin sensitisation

No data available on mixture. Not expected to have sensitisation potential.

Germ cell mutagenicity

No data available.

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity

No data available.

Specific target organ toxicity - single exposure

No data available on mixture. Irritating to respiratory system.

Specific target organ toxicity - repeated exposure

No data available.

Aspiration hazard

No data available on mixture. Danger of aspiration into lungs if swallowed.

Potential health effects

Inhalation	May be harmful if inhaled in quantity. Causes respiratory tract irritation.
Ingestion	May cause serious lung damage by aspiration if swallowed.
Skin	May be harmful if absorbed through skin. Causes skin irritation.
Eyes	Causes severe eye irritation.

Signs and Symptoms of Exposure

To the best of our knowledge, the chemical, physical, and toxicological properties of this mixture have not been thoroughly investigated.

Additional Information

Not available.

12. ECOLOGICAL INFORMATION

12.1 Toxicity

No data available on mixture. Will be toxic to aquatic life with long lasting effects.

12.2 Persistence and degradability

Expected to be biodegradable.

12.3 Bioaccumulative potential

Not expected to bioaccumulate.

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

No data available.

12.6 Other adverse effects

No data available.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product

Burn in a chemical incinerator equipped with an afterburner and scrubber. Material is classified as hazardous waste under the Hazardous Waste Regulations 2005 (as amended). Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging

Dispose of as unused product.

14. TRANSPORT INFORMATION

14.1 UN number

ADR/RID: -

IMDG: -

IATA: -

14.2 UN proper shipping name

ADR/RID: Not dangerous goods

IMDG: Not dangerous goods

IATA: Not dangerous goods

14.3 Transport hazard class(es)

ADR/RID: -

IMDG: -

IATA: -

14.4 Packaging group

ADR/RID: -

IMDG: -

IATA: -

14.5 Environmental hazards

ADR/RID: no

IMDG Marine Pollutant: no

IATA: no

14.6 Special precautions for user

No data available.

15. REGULATORY INFORMATION

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Health & Safety at Work etc. Act 1974

Control of Substances Hazardous to Health Regulations 2002 (as amended)

Chemicals (Hazard Information and Packaging for Supply) Regulations 2009

Classification, Labelling and Packaging of Substances and Mixtures Regulations 2008 (as amended)

EH40/2005 Workplace Exposure Limits (as amended)

Environmental Protection Act 1990

Hazardous Waste Regulations 2005 (as amended)

15.2 Chemical Safety Assessment

No data available.

16. OTHER INFORMATION

Further information

Text of H-code(s) and R-phrase(s) mentioned in Section 3

H315	Causes skin irritation
H319	Causes serious eye irritation

R36/37/38	Irritating to eyes, respiratory system and skin
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Recommended restrictions on use

Use in accordance with manufacturer's technical instructions.

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Use in accordance with manufacturer's technical instructions.

The information in this Safety Data Sheet should be provided to all who will use, handle, store, transport or otherwise be exposed to this product. This information has been prepared for the guidance of plant engineering, operations, management and for people working with or handling these products. This information is believed to be reliable and updated at Revision Date, and represents the best information currently available and known by Microlon Inc. However, Microlon Inc makes no guarantee or warranty, express or implied, with respect to such information and we assume no liability resulting from its use. The information related herein is based on proper handling and anticipated uses and is for the material without chemical additions or alterations. Users should make their own investigations to determine the suitability of the information for their particular purposes. It is the responsibility of the user to undertake a suitable risk assessment/COSHH assessment prior to using this material.