



# SAFETY DATA SHEET

## 1. Identification of the substance or mixture and of the supplier

### Product identifier

**Product name:** SABROE S68 REFRIGERATION OIL (DR)

### Additional identification

**Chemical name:** Mixture  
**CAS-No.:** Not applicable.

### Recommended use and restriction on use

**Recommended use:** Not determined.  
**Restrictions on use:** Not determined.

### Details of the supplier of the safety data sheet

#### Supplier

**Company Name:** LUBRIZOL LIMITED  
THE KNOWLE, NETHER LANE  
**Address:** THE KNOWLE, NETHER LANE  
HAZELWOOD, DERBYSHIRE, DE56 4AN  
GB  
**Telephone:** (44) 01332-842211

### Emergency telephone number:

FOR TRANSPORT EMERGENCY CALL CHEMTREC (+1) 703 527 3887 (LUBRIZOL)

## 2. Hazards Identification

### Classification of the substance or mixture

Prepared according to Global Harmonized System (GHS) standards.

Not classified

**Label Elements** not applicable  
**Other hazards which do not result in GHS classification:** None identified.

## 3. Composition/Information on Ingredients

### Mixtures

**General information:** No hazardous ingredients.

## 4. First aid measures

### Description of first aid measures

**Inhalation:** Remove exposed person to fresh air if adverse effects are observed.

**Eye contact:** Any material that contacts the eye should be washed out immediately with water. If easy to do, remove contact lenses.

**Skin Contact:** Wash with soap and water. Get medical attention if symptoms occur. Launder contaminated clothing before reuse.

**Ingestion:** Treat symptomatically. Get medical attention.

**Most important symptoms and effects, both acute and delayed:** See section 11.

**Indication of any immediate medical attention and special treatment needed**

**Treatment:** Treat symptomatically.

## 5. Fire-fighting measures

**General Fire Hazards:** No unusual fire or explosion hazards noted.

### Extinguishing media

**Suitable extinguishing media:** CO<sub>2</sub>, Dry chemical or Foam. Water can be used to cool and protect exposed material.

**Unsuitable extinguishing media:** Do not use water jet as an extinguisher, as this will spread the fire.

**Specific hazard arising from the chemical:** A solid stream of water will spread the burning material. Material creates a special hazard because it floats on water. See section 10 for additional information.

### Advice for firefighters

**Special fire fighting procedures:** No data available.

**Special protective equipment for fire-fighters:** Recommend wearing self-contained breathing apparatus.

## 6. Accidental Release Measures

**Personal precautions, protective equipment and emergency procedures:** Personal Protective Equipment must be worn, see Personal Protection Section for PPE recommendations.

**Environmental Precautions:** Avoid release to the environment. Do not contaminate water sources or sewer. Environmental manager must be informed of all major spillages. Prevent further leakage or spillage if safe to do so.

**Methods and material for containment and cleaning up:** Dike far ahead of larger spill for later recovery and disposal. Pick up free liquid for recycle and/or disposal. Residual liquid can be absorbed on inert material.

**Reference to other sections:** See sections 8 and 13 for additional information.

## 7. Handling and Storage:

**Precautions for safe handling:** Material can accumulate static charges which may cause an electrical spark (ignition source). Use proper bonding and/or grounding procedures. Use grounding and bonding connection when transferring material. In case of spills, beware of slippery floors and surfaces.

Observe good industrial hygiene practices. Provide adequate ventilation. Wear appropriate personal protective equipment.

**Maximum Handling Temperature:** Not determined.

**Conditions for safe storage, including any incompatibilities:** Store away from incompatible materials. See section 10 for incompatible materials.

**Maximum Storage Temperature:** Not determined.

## 8. Exposure Controls/Personal Protection

### Control Parameters:

#### Occupational Exposure Limits

| Chemical name                     | type | Exposure Limit Values | Source                                     |
|-----------------------------------|------|-----------------------|--|
| Mineral oil - Inhalable fraction. | TWA  | 5 mg/m <sup>3</sup>   | US. ACGIH Threshold Limit Values (03 2014) |
| Mineral oil - Inhalable fraction. | TWA  | 5 mg/m <sup>3</sup>   | US. ACGIH Threshold Limit Values (02 2012) |
| Mineral oil - Inhalable fraction. | TWA  | 5 mg/m <sup>3</sup>   | US. ACGIH Threshold Limit Values (03 2014) |

**Appropriate engineering controls:** No special requirements under ordinary conditions of use and with adequate ventilation.

#### Individual protection measures, such as personal protective equipment

**General information:** Use personal protective equipment as required.

**Eye/face protection:** If contact is likely, safety glasses with side shields are recommended.

#### Skin protection

**Hand Protection:** Nitrile. Use nitrile or neoprene gloves. Use good industrial hygiene practices. In case of skin contact, wash hands and arms with soap and water.

**Other:** No data available.

**Respiratory Protection:** Use disposable dust/mist mask if the recommended exposure limit is exceeded. Consult with an industrial hygienist to determine the appropriate respiratory protection for your specific use of this material. A respiratory protection program compliant with all applicable regulations must be followed whenever workplace conditions require the use of a respirator.

**Hygiene measures:** Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing to remove contaminants. Discard contaminated footwear that cannot be cleaned.

## 9. Physical and Chemical Properties

### Information on basic physical and chemical properties

#### Appearance

|                 |                     |
|-----------------|---------------------|
| Physical state: | liquid              |
| Form:           | liquid              |
| Color:          | Colorless to yellow |

#### Odor:

Mild

#### Odor Threshold:

No data available.

#### pH:

No data available.

#### Freezing point:

No data available.

#### Boiling Point:

No data available.

#### Flash Point:

226 °C (Cleveland Open Cup)

#### Evaporation Rate:

No data available.

#### Flammability (solid, gas):

No data available.

#### Upper/lower limit on flammability or explosive limits

Flammability Limit - Upper (%): No data available.

Flammability Limit - Lower (%): No data available.

#### Vapor pressure:

No data available.

#### Vapor density (air=1):

No data available.

#### Relative density:

0,867 (15,6 °C)

#### Solubility(ies)

Solubility in Water: Insoluble in water

Solubility (other): No data available.

#### Partition coefficient (n-octanol/water):

No data available.

#### Autoignition Temperature:

246 °C

#### Decomposition Temperature:

No data available.

#### Viscosity:

69 mm<sup>2</sup>/s (40 °C); 9,1 mm<sup>2</sup>/s (100 °C )

#### Explosive properties:

No data available.

#### Oxidizing properties:

No data available.

#### Pour Point Temperature

No data available.

#### Other information

Bulk density: 7,4 lb/gal (25 °C)

## 10. Stability and Reactivity

Reactivity: No data available.

Chemical Stability: Material is stable under normal conditions.

Possibility of Hazardous Reactions: Will not occur.

Conditions to Avoid: Do not expose to excessive heat, ignition sources, or oxidizing materials.

Incompatible Materials: Strong acids. Oxidizing agents.

Hazardous Decomposition Products: Thermal decomposition or combustion may generate smoke, carbon monoxide, carbon dioxide, and other products of incomplete combustion.

## 11. Toxicological Information

### Information on likely routes of exposure

|                      |                    |
|----------------------|--------------------|
| <b>Inhalation:</b>   | No data available. |
| <b>Ingestion:</b>    | No data available. |
| <b>Skin Contact:</b> | No data available. |
| <b>Eye contact:</b>  | No data available. |

### Information on toxicological effects

#### Acute toxicity

##### Oral

Product: Not classified for acute toxicity based on available data.

##### Dermal

Product: Not classified for acute toxicity based on available data.

##### Inhalation

Product: Not classified for acute toxicity based on available data.

##### Skin Corrosion/Irritation:

Product: Prolonged or repeated skin contact as from clothing wet with material may cause dermatitis. Symptoms may include redness, edema, drying, and cracking of the skin.  
Remarks: Not classified as a primary skin irritant.

##### Serious Eye Damage/Eye Irritation:

Product: Remarks: Not classified as a primary eye irritant.

##### Respiratory sensitization:

No data available

##### Skin sensitization:

No data available

##### Specific Target Organ Toxicity - Single Exposure:

No data available

##### Aspiration Hazard:

No data available

### Chronic Effects

#### Carcinogenicity:

Product: This product contains mineral oils which are severely refined and not considered carcinogenic. All of the oils in this product have been demonstrated to contain less than 3% extractables by the IP 346 test.

#### Germ Cell Mutagenicity:

No data available

#### Reproductive toxicity:

No data available

**Specific Target Organ Toxicity - Repeated Exposure:**  
No data available

## 12. Ecological Information

### Ecotoxicity

#### Fish

No data available

#### Aquatic Invertebrates

No data available

#### Toxicity to Aquatic Plants

No data available

#### Toxicity to soil dwelling organisms

No data available

#### Sediment Toxicity

No data available

#### Toxicity to Terrestrial Plants

No data available

#### Toxicity to Above-Ground Organisms

No data available

#### Toxicity to microorganisms

No data available

### Persistence and Degradability

#### Biodegradation

No data available

### Bioaccumulative Potential

#### Bioconcentration Factor (BCF)

No data available

#### Partition Coefficient n-octanol / water (log Kow)

No data available

#### Mobility:

No data available

#### Other Adverse Effects:

No data available.

## 13. Disposal Considerations

#### Disposal methods:

Treatment, storage, transportation, and disposal must be in accordance with applicable Federal, State/Provincial, and Local regulations. Since emptied containers retain product residue, follow label warnings even after container is emptied.

#### Contaminated Packaging:

Container packaging may exhibit hazards.

## 14. Transport Information

### IATA

Not regulated.

### ADR

Not regulated.

### International standards

#### IMDG

Not regulated.

#### Code of Emergency Measure:

**Domestic Standard:** In compliance with domestic law.

**Environmental hazards:** Not regulated.

**Special precautions for user:** No special precautions.

#### Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

None known.

Shipping descriptions may vary based on mode of transport, quantities, temperature of the material, package size, and/or origin and destination. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material. For transportation, steps must be taken to prevent load shifting or materials falling, and all relating legal statutes should be obeyed. Review classification requirements before shipping materials at elevated temperatures.

## 15. Regulatory Information

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

#### Inventory Status

##### Australia (AICS)

All components are in compliance with chemical notification requirements in Australia.

##### Canada (DSL/NDSL)

All components are in compliance with the Canadian Environmental Protection Act and are present on the Domestic Substances List.

##### China (IECSC)

All components of this product are listed on the Inventory of Existing Chemical Substances in China.

##### European Union (REACH)

To obtain information on the REACH compliance status of this product, please visit [Lubrizol.com/REACH](http://Lubrizol.com/REACH), or e-mail us at [REACH\\_MSDS\\_INQUIRIES@Lubrizol.com](mailto:REACH_MSDS_INQUIRIES@Lubrizol.com)

##### Japan (ENCS)

All components are in compliance with the Chemical Substances Control Law of Japan.

##### Korea (ECL)

All components are in compliance in Korea.

##### New Zealand (NZIoC)

All components are in compliance with chemical notification requirements in New Zealand.

##### Philippines (PICCS)

All components are in compliance with the Philippines Toxic Substances and Hazardous and Nuclear Wastes Control Act of 1990 (R.A. 6969).

##### Switzerland (SWISS)

All components are in compliance with the Environmentally Hazardous Substances Ordinance in Switzerland.

Taiwan (TCSCA)

All components of this product are listed on the Taiwan inventory.

United States (TSCA)

All components of this material are on the US TSCA Inventory.

*The information that was used to confirm the compliance status of this product may deviate from the chemical information shown in Section 3.*

**16. Other Information**

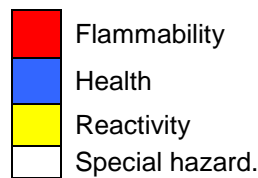
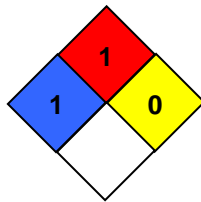
**Key literature references and sources for data:** Internal company data and other publically available resources.

**HMIS Hazard ID**

|                  |   |
|------------------|---|
| Health           | 0 |
| Flammability     | 1 |
| Physical Hazards | 0 |

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; RNP - Rating not possible; \*Chronic health effect

**NFPA Hazard ID**



Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; RNP - Rating not possible

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