1. Identification of the Substance/Mixture and of the Company/Undertaking

Product name: SCHULTZ® S718

Recommended use: Heat transfer fluids

Company: Schultz Canada Chemicals Ltd

Address: 1699 Matthews Ave Vancouver BC, V6J 2T3

Telephone: 778-383-2793

E-mail address: Jillian.Jiang@shschultz.com

Emergency telephone: 778-938-5977

2. Hazards Identification

Hazard classification: The product has not been classified as hazardous according to the legislation in force.

OSHA specified hazards: Not applicable.

Hazard(s) not otherwise classified (HNOC): None known.

3. Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS No.</th>
<th>Weight (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>White mineral oil</td>
<td>8042-47-5</td>
<td>100</td>
</tr>
</tbody>
</table>

4. First-Aid Measures

General advice: In case of doubt or symptoms persist, seek medical advice. In case of
unconscious, get medical attention immediately.

**Inhalation**
Move to fresh air and keep comfortable for breathing. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

**Eye contact**
Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately if symptoms occur.

**Skin contact**
Rinse immediately contaminated clothing and skin with plenty of water before removing clothes. Wash contaminated clothing before reuse. If exposed or concerned get medical advice/attention.

**Ingestion**
If swallowed, seek medical attention. Do not induce vomiting unless directed to do so by medical personnel.

**Most important symptoms and effects, both acute and delayed**
A description of any additional main symptoms and effects Section 11: Toxicological information.

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

**Notes to physician**
Contact with hot material can cause thermal burns. No specific antidote. Persons who have inhaled vapours or smoke fumes have to be put under medical observation for at least 48 hours, due to the delayed appearance of poisoning. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

### 5. Fire-Fighting Measures

**Extinguishing media**

**Suitable extinguishing media**
Water spray, Dry powder, Carbon dioxide (CO₂). Foam, Alcohol resistant foams (ATC type) are preferred. General purpose synthetic foams (including AFFF) or protein foams may function, but will be less effective.

**Unsuitable extinguishing media**
Do not use direct water stream. May spread fire.

**Special hazards arising from the substance or mixture**
During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating. Combustion products may include and are not limited to: Hydrocarbons. Carbon monoxide. Carbon dioxide.

**Advice for firefighters**

**Fire fighting procedures**
In any fire, wear self-contained breathing apparatus (SCBA), and full protective gear. Evacuate all persons from the vicinity. Promptly isolate the
**Special protective equipment for firefighters**

In any fire, wear self-contained breathing apparatus pressure-demand, and full protective gear.

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### 6. Accidental Release Measures

**Personal precautions, protective equipment and emergency procedures**

Isolate area. Keep unnecessary and unprotected personnel from entering the area. Ventilate area of leak or spill. Avoid inhalation of vapors and spray mists. Do not touch or walk through spilled material. Avoid contact skin, eyes and clothing. Wear appropriate personal protective equipment. See Section 8 of the SDS for Personal Protective Equipment.

**Environmental precautions**

Stop leak if safe to do so. Clean up spill immediately. Prevent from entering into soil, drains or water courses.

**Methods and materials for containment and cleaning up**

Small spills: as far as possible the leaking fluid collection in airtight containers. Absorb with sand, diatomaceous earth or other inert materials. Large spills: constructing dike or have dug a pit for a large number of the leakage, and transferred to the properly labeled containers, recycling or shipped to the disposal of waste places. Do not put it into the surrounding environment. Ban into the sewer.

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### 7. Handling and Storage

**Precautions for safe handling**

Avoid contact with eyes, skin and clothing. Avoid breathing vapors or mists. Do not eat, drink or smoke when using this product. Wear personal protective equipment. Wash thoroughly after handling. Use in well ventilated areas. Keep container closed.

**Conditions for safe storage**

Store in tightly closed container. Keep containers stored in a dry, cool and well-ventilated place. Keep away from direct sunlight. Store away from incompatible materials. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Additional storage and handling information on this product may be obtained by calling your sales or customer service contact.
8. Exposure Controls/Personal Protection

Control parameters

Exposure limits

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Type</th>
<th>Exposure limit values</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>White mineral oil (petroleum)</td>
<td>TWA</td>
<td>5 mg/m³</td>
<td>US. ACGIH Threshold Limit Values (01 2010)</td>
</tr>
<tr>
<td>White mineral oil (petroleum)</td>
<td>PEL</td>
<td>5 mg/m³</td>
<td>US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)</td>
</tr>
</tbody>
</table>

Exposure controls

Engineering controls

Maintain air concentrations below occupational exposure standards. Apply technical measures to comply with the occupational exposure limits. If there are no applicable exposure limit requirements or guidelines, general ventilation should be sufficient for most operations. Local exhaust ventilation may be necessary for some operations.

Individual protection measures

Eye/face protection

Use chemical goggles.

Skin protection

Hand protection

Wear protective gloves. If necessary, wear protective clothing and rubber boots to prevent skin and body contact with liquid Material. After contamination with product change the gloves immediately and dispose of them according to relevant national and local regulations.

Other protection

When prolonged or frequently repeated contact could occur, use protective clothing chemically resistant to this material. Selection of specific items such as faceshield, boots, apron, or full-body suit will depend on the task.

Respiratory protection

Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

9. Physical and Chemical Properties

Information on basic physical and chemical properties

© Copyright 2016 By Schultz Canada Chemicals Ltd
Appearance | Clear oily liquid
---|---
Color | Colorless
Odor | Odorless
Odor threshold | No determined
pH | Not data available
Melting point/freezing point | -55°C
Boiling point/boiling range | 330°C
Flash point | 172°C (Open Cup)
Evaporation rate | No determined
Flammability (solid, gas) | Not data available
Upper flammability limit | Not data available
Lower flammability limit | Not data available
Vapor pressure | <0.007hPa (20°C)
Vapor density | No data available
Specific gravity | 0.869 (20°C)
Solubility(ies) | Negligible
Solubility in water | Negligible
Solubility (other) | No data available
Partition coefficient: n-octanol/water | log Kow: >6
Autoignition temperature | 330°C (ASTM E659)
Decomposition temperature | No data available
Dynamic viscosity | 12.99 mPa·s (40°C)
Kinematic viscosity | 15 mm²/s (40°C)
Explosive properties | No data available
Oxidizing properties | No data available

### 10. Stability and Reactivity

**Reactivity**
- Material is stable under normal conditions.

**Chemical stability**
- Material is stable under normal conditions.

**Possibility of hazardous reactions**
- None, under normal conditions.

**Conditions to avoid**
- Heating in air.

**Incompatible materials**
- Strong oxidizing agents.

**Hazardous decomposition products**
- Emits acrid smoke and fumes when heated to decomposition.

### 11. Toxicological Information

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### Information on likely routes of exposure

<table>
<thead>
<tr>
<th>Route</th>
<th>None known</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inhalation</td>
<td></td>
</tr>
<tr>
<td>Ingestion</td>
<td></td>
</tr>
<tr>
<td>Skin contact</td>
<td></td>
</tr>
<tr>
<td>Eyes contact</td>
<td></td>
</tr>
</tbody>
</table>

### Information on toxicological effects

<table>
<thead>
<tr>
<th>Category</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Acute toxicity</strong></td>
<td></td>
</tr>
<tr>
<td>Oral</td>
<td>LD50 (Rat): &gt;5000 mg/kg.</td>
</tr>
<tr>
<td>Dermal</td>
<td>LD50 (Rabbit): &gt;2000 mg/kg.</td>
</tr>
<tr>
<td>Inhalation</td>
<td>LC50 (Rat, 4hr): &gt;5 mg/l.</td>
</tr>
<tr>
<td><strong>Repeated dose toxicity</strong></td>
<td>NOAEL (Rat, Oral Study): ≥1200 mg/kg.</td>
</tr>
<tr>
<td><strong>Skin corrosion/irritation</strong></td>
<td>(Rabbit, 24h): none</td>
</tr>
<tr>
<td><strong>Serious eye damage/eye irritation</strong></td>
<td>(Rabbit, 24h): none</td>
</tr>
<tr>
<td><strong>Respiratory or skin sensitization</strong></td>
<td>No data available.</td>
</tr>
<tr>
<td><strong>Germ cell mutagenicity</strong></td>
<td></td>
</tr>
<tr>
<td>In vitro</td>
<td>Genetic toxicity studies were negative.</td>
</tr>
<tr>
<td>In vivo</td>
<td>Genetic toxicity studies were negative.</td>
</tr>
<tr>
<td><strong>Carcinogenicity</strong></td>
<td>Ingestion (Rat); OECD Test No. 453: Combined Chronic Toxicity/Carcinogenicity Studies; Remarks: negative.</td>
</tr>
<tr>
<td><strong>Reproductive toxicity</strong></td>
<td>NOAEL (Rat): ≥1000 mg/kg</td>
</tr>
<tr>
<td><strong>Specific target organ toxicity - single exposure</strong></td>
<td>Not classified.</td>
</tr>
<tr>
<td><strong>Specific target organ toxicity - repeated exposure</strong></td>
<td>Not classified.</td>
</tr>
<tr>
<td><strong>Aspiration hazard</strong></td>
<td>Not classified.</td>
</tr>
<tr>
<td><strong>Other effects</strong></td>
<td>No data available.</td>
</tr>
</tbody>
</table>
### 12. Ecological Information

#### Ecotoxicity

**Acute hazards to the aquatic environment**

<table>
<thead>
<tr>
<th>Component</th>
<th>Effect</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fish</td>
<td>LC50</td>
<td>1000 mg/l</td>
</tr>
<tr>
<td>Aquatic invertebrates</td>
<td>LL50</td>
<td>&gt;100 mg/l</td>
</tr>
<tr>
<td>Algae/aquatic plants</td>
<td>No data available</td>
<td></td>
</tr>
</tbody>
</table>

**Chronic hazards to the aquatic environment**

<table>
<thead>
<tr>
<th>Component</th>
<th>Effect</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fish</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Aquatic invertebrates</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Toxicity to aquatic plants</td>
<td>LOEC</td>
<td>≥100 mg/l</td>
</tr>
</tbody>
</table>

#### Persistence and degradation

<table>
<thead>
<tr>
<th>Component</th>
<th>Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biodegradation</td>
<td>Inherently biodegradable</td>
</tr>
<tr>
<td>BOD/COD ratio</td>
<td>No data available</td>
</tr>
</tbody>
</table>

#### Bioaccumulative potential

<table>
<thead>
<tr>
<th>Component</th>
<th>Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bioconcentration factor (BCF)</td>
<td>Has the potential to bioaccumulate</td>
</tr>
<tr>
<td>Partition coefficient n-octanol / water (log Kow)</td>
<td>Log Kow: &gt;6</td>
</tr>
<tr>
<td>Mobility in soil</td>
<td>No data available</td>
</tr>
<tr>
<td>Other adverse effects</td>
<td>No data available</td>
</tr>
</tbody>
</table>

### 13. Disposal Considerations

**Disposal methods**

Do not pour any sewers, ground, or pour any water. All disposal practices
must be in compliance with state and local laws and regulations. Empty packaging should be taken to an approved waste handling site for recycling or disposal. See headings 15 for more information.

14. Transport Information

DOT
Class not regulated.

IMDG
Class not regulated.

IATA
Class not regulated.

15. Regulatory Information

US EPCRA (SARA Title III) Section 313 - Toxic Chemical List
None

OSHA
Hazardous

TSCA (US Toxic Substances Control Act)
The intentional components of this product are listed on the TSCA inventory. Any impurities present in this product are exempt from listing.

DSL (Canadian Domestic Substances List) and CEPA (Canadian Environmental Protection Act)
All intentional components of this product are listed on the DSL. Any impurities present in this product are exempt from listing.

AICS / NICNAS (Australian Inventory of Chemical Substances and National Industrial Chemicals Notification and Assessment Scheme)
All components of this product are listed on AICS or otherwise comply with NICNAS.

16. Other Information

Supersedes date 05-Jan-2014

Revision date 10-Jan-2016

Revision note New SDS format. SDS sections updated: All.
Disclaimer

The SDS information applies only to the specified product, unless otherwise specified, in the case of a mixture of this product with other substances, which do not apply. The information provided is a guide for the safe operation and not as a guarantee of the quality manual. The SDS only those received professional training in the proper use of the product provides product safety information for. Users of this SDS, under special conditions of use must be made of the suitability of the SDS independent judgment. In special occasions, due to the use of this SDS caused injury, this SDS writers will not be held responsible.