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

Product name
SCHULTZ® S715

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

Health hazards

<table>
<thead>
<tr>
<th>Flammable liquids</th>
<th>Category 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aspiration hazard</td>
<td>Category 1</td>
</tr>
<tr>
<td>Skin corrosion/irritation</td>
<td>Category 2</td>
</tr>
</tbody>
</table>

Hazard and precautionary statements

Hazard pictogram

Signal word: Danger

Hazard statements

H226 Flammable liquid and vapor.
H304 May be fatal if swallowed and enters airways.
H315 Causes skin irritation.

Precautionary statements

Prevention
P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P233 Keep container tightly closed.
P240 Ground/bond container and receiving equipment.
P241 Use explosion-proof electrical/ventilating/lighting/equipment.
P242 Use only non-sparking tools.
P243 Take precautionary measures against static discharge.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P264 Wash hands thoroughly after handling.

Response
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P303+P361+P353 IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.
P331 Do NOT induce vomiting.
P332+P313 If skin irritation occurs: Get medical advice/attention.
P362 Take off contaminated clothing and wash before reuse.

Storage
P403+P235 Store in a well-ventilated place. Keep cool.
P405 Store locked up.

Disposal
P501 Dispose of contents/container to an appropriate treatment and disposal facility in accordance with local/regional/national/international regulations.

3. Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS No.</th>
<th>Weight (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diethylbenzene</td>
<td>25340-17-4</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 skin irritation occurs: 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.

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### 5. Fire-Fighting Measures

#### General fire hazards

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. Keep upwind. In case of fire and/or explosion do not breathe fumes. This product is not classified as a fire-resistant heat transfer fluid. Precautions to avoid sources of ignitions should be taken.

#### 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**

Don’t 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 scene. Prevent fire extinguishing water from contaminating surface water and groundwater systems. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and extinguishing water contaminated must comply with local regulations for disposal. In the premise there is no danger of the container is removed from the scene in. Water spray to cool containers / tanks.

**Special protective equipment for firefighters**
In any fire, wear self-contained breathing apparatus pressure-demand, and full protective gear.

### 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.

### 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

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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>Diethylbenzene</td>
<td>TWA</td>
<td>5 ppm</td>
<td>US. OARS, WEELs Workplace Environmental Exposure Level Guide(2009)</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

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Clear liquid</td>
</tr>
<tr>
<td>Color</td>
<td>Colorless, light yellow</td>
</tr>
<tr>
<td>Odor</td>
<td>Aromatic, hydrocarbon</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
</tr>
</tbody>
</table>
### Melting point/freezing point
-75°C

### Boiling point/boiling range
182°C (1013hPa)

### Flash point
58°C (Pensky-Martens Closed Cup)

### Evaporation rate
Not determined

### Flammability (solid, gas)
Not applicable

### Upper flammability limit (%)
No data available

### Lower flammability limit (%)
No data available

### Vapor pressure
1hPa(°C)

### Vapor density (air=1)
No data available

### Specific gravity
0.870 (15°C)

### Solubility(ies)
- **Solubility in water**: 14mg/l(25°C)
- **Solubility (other)**: No data available

### Partition coefficient: n-octanol/water
Log Kow: 3.72

### Autoignition temperature
429°C

### Decomposition temperature
No data available

### Dynamic viscosity
No data available

### Kinematic viscosity
0.93 mm²/s (40°C)

### Explosive properties
Not classified

### Oxidizing properties
Not classified

## 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. Heat, sparks, flames.

### Incompatible materials

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

## 11. Toxicological Information

### Information on likely routes of exposure

<table>
<thead>
<tr>
<th>Route</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Inhalation</strong></td>
<td>None known.</td>
</tr>
<tr>
<td><strong>Ingestion</strong></td>
<td>May be fatal if swallowed and enters airways.</td>
</tr>
<tr>
<td><strong>Skin contact</strong></td>
<td>Causes skin irritation.</td>
</tr>
</tbody>
</table>

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Eyes contact

None known.

Information on toxicological effects

Acute toxicity

<table>
<thead>
<tr>
<th>Route</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral</td>
<td>LD50 (Rat): 2050 mg/kg.</td>
</tr>
<tr>
<td>Dermal</td>
<td>LD50 (Rabbit): &gt;5000 mg/kg.</td>
</tr>
<tr>
<td>Inhalation</td>
<td>No data available.</td>
</tr>
<tr>
<td>Repeated dose</td>
<td>NOAEL (Rat, by gavage): 150 mg/l bw/day.</td>
</tr>
<tr>
<td></td>
<td>NOAEC (Rat, Inhalation): 190 mg/m³</td>
</tr>
<tr>
<td>Skin corrosion/irritation</td>
<td>Acute dermal irritation/corrosion(Rabbit, 24h): Irritating to skin.</td>
</tr>
<tr>
<td>Serious eye damage/eye irritation</td>
<td>(Rabbit, 24 h): Not irritating.</td>
</tr>
<tr>
<td>Respiratory or skin sensitization</td>
<td>OECD 406: Guinea pig sensitization(Guinea Pig): Not a skin sensitizer.</td>
</tr>
<tr>
<td>Germ cell mutagenicity</td>
<td>Mutagenicity-bacterial: negative.</td>
</tr>
<tr>
<td></td>
<td>Mutagenicity-mammalian: negative.</td>
</tr>
<tr>
<td></td>
<td>Chromosomal aberration: negative.</td>
</tr>
<tr>
<td></td>
<td>(Mammalian erythrocyte micronucleus test)(Mouse)negative.</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>Not classified. This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.</td>
</tr>
<tr>
<td>Reproductive toxicity</td>
<td>(Rat): NOAEL: 750mg/kg; Gavage(Oral).</td>
</tr>
<tr>
<td>Specific target organ toxicity - single exposure</td>
<td>Not classified.</td>
</tr>
<tr>
<td>Specific target organ toxicity- repeated exposure</td>
<td>Not classified.</td>
</tr>
<tr>
<td>Aspiration hazard</td>
<td>May be fatal if swallowed and enters airways.</td>
</tr>
<tr>
<td>Other effects</td>
<td>No data available.</td>
</tr>
</tbody>
</table>

12. Ecological Information
### Ecotoxicity

#### Acute hazards to the aquatic environment

<table>
<thead>
<tr>
<th>Category</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fish</strong></td>
<td>LC50 (Oncorhynchus mykiss, 96 h): 0.673 mg/l.</td>
</tr>
<tr>
<td>Aquatic invertebrates</td>
<td>EC50 (Daphnia magna, 48 h): 2.01 mg/l.</td>
</tr>
<tr>
<td>Algae/aquatic plants</td>
<td>No data available.</td>
</tr>
</tbody>
</table>

#### Chronic hazards to the aquatic environment

<table>
<thead>
<tr>
<th>Category</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fish</strong></td>
<td>No data available.</td>
</tr>
<tr>
<td>Aquatic invertebrates</td>
<td>No data available.</td>
</tr>
<tr>
<td><strong>Toxicity to aquatic plants</strong></td>
<td>EC-50 (Algae(Pseudokirchneriella subcapitata), 72h): 1.21mg/l.</td>
</tr>
</tbody>
</table>

### Persistence and degradability

<table>
<thead>
<tr>
<th>Category</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Biodegradation</strong></td>
<td>4.7%(28d) Not readily degradable.</td>
</tr>
<tr>
<td><strong>BOD/COD ratio</strong></td>
<td>No data available.</td>
</tr>
</tbody>
</table>

### Bioaccumulative potential

<table>
<thead>
<tr>
<th>Category</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Bioconcentration factor (BCF)</strong></td>
<td>Bioconcentration Factor(BCF): 320-629 Potential to bioaccumulate is low.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Category</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Partition coefficient n-octanol / water (log Kow)</strong></td>
<td>Log Kow: 3.72</td>
</tr>
<tr>
<td><strong>Mobility in soil</strong></td>
<td>No data available.</td>
</tr>
<tr>
<td><strong>Other adverse effects</strong></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.
15. Regulatory Information

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

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.

**WHMIS (Canada) status:** controlled.

**WHMIS (Canada) hazard classification:** D/2/B.

**SARA 311-312 Hazard classification(s):** immediate (acute) health hazard.

**US EPCRA (SARA Title III) Section 313 - Toxic chemical List:** NONE.

**OSHA:** hazardous.

**TSCA (US Toxic Substances Control Act):** This product is 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):** This product is 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): This product is listed on AICS or otherwise complies with NICNAS.

MITI (Japanese Handbook of Existing and New Chemical Substances): This product is listed in the Handbook or has been approved in Japan by new substance notification.

ECL (Korean Toxic Substances Control Act): This product is listed on the Korean inventory or otherwise complies with the Korean Toxic Substances Control Act.

16. Other Information

<table>
<thead>
<tr>
<th>Supersedes date</th>
<th>05-Jan-2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revision date</td>
<td>10-Jan-2016</td>
</tr>
<tr>
<td>Revision note</td>
<td>New SDS format. SDS sections updated: All.</td>
</tr>
</tbody>
</table>

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.