

# Material Safety Data Sheet

Revision date 03-Mar-2015

Supersedes date: 05-Jan-2014

Version 2

## 1. Product and Company Identification

<b>Product name</b>	<b>SCHULTZ® S760</b>
<b>Recommended Use</b>	Heat transfer fluids
<b>Company</b>	Schultz Canada Chemicals Ltd
<b>address:</b>	1699 Matthews Ave Vancouver BC, V6J 2T3
<b>Telephone</b>	778-383-2793
<b>E-mail address</b>	Jillian.Jiang@schultzchem.com
<b>Emergency Telephone</b>	<b>778-938-5977</b>

## 2. Hazards Identification

<b>Appearance</b>	Clear
<b>Color</b>	Colorless to Yellow
<b>Physical State</b>	Liquid
<b>Odor</b>	Slight
<b>Potential health effects</b>	
<b>Eye Contact</b>	May cause moderate irritation.
<b>Skin Contact</b>	Brief contact is nonirritating. Repeated exposure may cause irritation or burns.
<b>Inhalation</b>	May cause respiratory irritation. May have an effect on the central nervous system.
<b>Ingestion</b>	If swallowed, low toxicity.

## 3. Composition/Information on Ingredients

Component	CAS No	Weight %
1,2,3,4-Tetrahydro-5-(1-phenylethyl)naphthalene	60466-61-7	≥85
1,2,3,4-Tetrahydro-6-(1-phenylethyl)naphthalene	6196-98-1	≤15

## 4. First-Aid Measures

<b>Eye contact</b>	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.
<b>Skin contact</b>	Rinse immediately contaminated clothing and skin with plenty of water before removing clothes. If exposed or concerned get medical advice/attention. Wash contaminated clothing before reuse.
<b>Inhalation</b>	Remove to fresh air and keep comfortable for breathing. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician. Persons who have inhaled smoke or vapors fumes have to be put under medical observation for at least 48 hours, due to the delayed appearance of poisoning.
<b>Ingestion</b>	If swallowed: rinse mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. Do NOT induce vomiting unless directed to do so by a physician. Call a physician immediately. If breathing is difficult, give oxygen.
<b>Notes to physician</b>	Persons who have inhaled vapors or smoke fumes have to be put under medical observation for at least 48 hours, due to the delayed appearance of poisoning.

## 5. Fire-Fighting Measures

<b>Suitable extinguishing media</b>	Water spray, Foam, Dry powder, Carbon dioxide (CO <sub>2</sub> ). Do not use direct water stream. May spread fire.
<b>Special Protective Equipment for Firefighters</b>	As in any fire, wear self-contained breathing apparatus pressure-demand, and full protective gear.
<b>Hazardous Combustion Products</b>	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.

## 6. Accidental Release Measures

<b>Personal precautions</b>	No action shall be taken involving any personal risk or without suitable training. Do not touch or walk through spilled material. Avoid contact with skin, eyes and clothing. Wear personal protective equipment.
<b>Environmental precautions</b>	Stop leak if safe to do so. Clean up spill immediately. Prevent from entering into soil, drains or water courses.
<b>Methods for cleaning up</b>	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

<b>Handling</b>	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.
<b>Storage</b>	Store in tightly closed container. Keep containers stored in a dry, cool and well-ventilated place. Keep away from direct sunlight. Keep away from contact with oxidizing materials. Away from fire and heat source. Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

## 8. Exposure Controls/Personal Protection

<b>Exposure Limits</b>	None established.
<b>Engineering Controls</b>	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.
<b>Personal protective equipment</b>	
<b>Eye/face protection</b>	Use chemical goggles.
<b>Skin and body protection</b>	Wear protective gloves. If necessary, wear protective clothing and rubber boots to prevent skin and body contact with liquid Material. Do not wear rings, watches or similar apparel that could entrap the material and cause a skin reaction.
<b>Respiratory protection</b>	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

<b>Appearance</b>	Clear Liquid
<b>Color</b>	Colorless to Yellow
<b>Odor</b>	Slight
<b>Odor threshold</b>	No information available
<b>pH</b>	No information available
<b>Melting point/freezing point</b>	-34°C
<b>Boiling point/boiling range</b>	351 °C (1013 hPa)
<b>Flash point</b>	192 °C (Open Cup)
<b>Evaporation Rate</b>	No information available
<b>Flammability (solid, gas)</b>	Not flammable
<b>Flammability Limits in Air</b>	
<b>Upper flammability limit</b>	4.59 % (V)
<b>Lower flammability limit</b>	0.39 % (V)
<b>Vapor pressure</b>	≤1.0 mmHg (20°C)
<b>Vapor density</b>	No information available
<b>Specific gravity</b>	1.03
<b>Water solubility</b>	< 0.01 % (25 °C)
<b>Partition coefficient:n-octanol/water</b>	1288250
<b>Auto-ignition temperature</b>	390 °C
<b>Decomposition temperature</b>	No information available
<b>Viscosity, kinematic</b>	14.8 mm <sup>2</sup> /s (40 °C)
<b>Other information</b>	
<b>Density</b>	1026 kg/m <sup>3</sup> (20 °C)

## 10. Stability and Re-activity

<b>Stability</b>	Stable under recommended storage and handling conditions.
<b>Conditions to avoid</b>	Heating in air.
<b>Incompatible materials</b>	Strong oxidizing agents. Inorganic acid.
<b>Hazardous polymerization</b>	Will not occur.
<b>Hazardous decomposition products</b>	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## 11. Toxicological Information

<b>Acute toxicity</b>	
<b>LD50 Oral ( Rat )</b>	> 2000 mg/kg.
<b>LD50 Dermal ( Rabbit )</b>	> 2000 mg/kg.
<b>LC50 Inhalation</b>	No data available
<b>Inhalation</b>	May cause respiratory irritation. May have an effect on the central nervous system.
<b>Eyes irritation</b>	May cause moderate eye irritation. Corneal injury is unlikely
<b>Skin corrosion / irritation</b>	Brief contact is essentially nonirritating to skin. Repeated exposure may cause irritation or burns.
<b>Ingestion</b>	If swallowed, into the lungs can be fatal.
<b>Sensitization</b>	Tested in guinea pigs did not cause allergic skin reactions.
<b>Repeated Dose Toxicity</b>	Experimental animals after repeated skin contact does not cause systemic toxicity.
<b>Chronic toxicity/ carcinogenicity</b>	No information.
<b>Developmental Toxicity</b>	Even in toxic effects on mother and does not cause birth defects or other effects on the fetus.
<b>Reproductive toxicity</b>	In animal studies, this compound had no effect on the reproductive function of animals.
<b>Genetic Toxicology</b>	In vitro genetic toxicity studies were negative.
<b>Target organ effects</b>	None known.

## 12. Ecological Information

<b>Acute aquatic toxicity</b>	Substances for acute toxic to aquatic organisms.(For most sensitive species LC50 / EC50 <0.1 mg / L)
<b>48 hr LC50 (Fish)</b>	> 1 000 mg/l (rainbow trout)
<b>48 hr LC50 (Aquatic invertebrates)</b>	0.0225 mg/l (Daphnia magna)
<b>96 hr EC50 (Algae/aquatic plants)</b>	> 0.07 mg/l (Selenastrum capricornutum)
<b>EC50 (Half effect concentration)</b>	OECD 209 Test; Activated sludge, 3 h: 0.062 mg/l.
<b>Eco-toxicity</b>	
<b>Persistence and degradation</b>	Considers the substance biodegradable very slowly (in the environment). Not by OECD / EEC rapid biodegradability tests. Biodegradable substances (OECD inherent biodegradability tests, more than 20 per cent of degradation).
<b>Bio-accumulation</b>	Bio-concentration potential higher likelihood (BCF> 3000 or Log Pow between 5 and 7).
<b>Mobility in soil</b>	Mobility in soil: that the relative stability in the soil (Koc)> 5000). Partition coefficient, soil organic carbon / water (Koc):> 5,000 estimates. Henry constant (H): 4.67E-04 atm.m3/mole; 25 degrees C estimate.
<b>PBT and vPvB assessment</b>	The substance is not assessed to be persistent, bio-accumulative and toxic (PBT).
<b>Other information</b>	The substance is not in the EU regulations 2037/2000 Annex I ODS list.

## 13. Disposal Considerations

<b>Waste disposal methods</b>	Do not pour any sewers, ground, or pour any water. All disposal practices must be in compliance with state and local laws and regulations.
<b>Contaminated packaging</b>	Empty packaging should be taken to an approved waste handling site for recycling or disposal.

**14. Transport Information**

<b>IMDG</b>	
<b>UN/ID no</b>	UN3082
<b>Proper Shipping Name</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (1,2,3,4-TETRAHYDRO-(1-PHENYLETHYL)-NAPHTHALENE)
<b>Hazard Class</b>	9
<b>Packing Group</b>	III
<b>Marine pollutant</b>	Yes
<b>EmS</b>	F-A,S-F

<b>ICAO/IATA</b>	
<b>UN/ID no</b>	UN3082
<b>Proper Shipping Name</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (1,2,3,4-TETRAHYDRO-(1-PHENYLETHYL)-NAPHTHALENE)
<b>Hazard Class</b>	9
<b>Packing Group</b>	III
<b>Marine pollutant</b>	Yes

## 15. Regulatory Information

### U.S. Federal Regulations

#### SARA 313

Section 313 of Title III of the Superfund Amendments and Re-authorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

SARA 311/312 Hazard Categories	
Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

#### Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

#### CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Re-authorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

### U.S. State Regulations

#### California Proposition 65

This product does not contain any Proposition 65 chemicals

### International Regulations

#### Canada

**This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR**

#### WHMIS Hazard Class

D2B Toxic materials

Materials causing other toxic effects

**16. Other Information**

<b>NFPA</b>	<b>Health hazard 1 Flammability 1 Stability 0</b>
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<b>Supersedes date</b>	05-Jan-2014
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<b>Revision date</b>	03-Mar-2015
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<b>Revision Note</b>	New SDS format. SDS sections updated: All.
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**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.