

Safety Data Sheet

Revision date: 10-Oct-2015

Supersedes date: 05-Jan-2014

Version 3

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

Product name SCHULTZ® S715

Recommended use Heat transfer fluids

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2. Hazards Identification

Hazard classification

Physical hazards

Flammable liquids	Category 3
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Health hazards

Aspiration hazard	Category 1
Skin corrosion/irritation	Category 2

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 applicable laws and regulations, and product characteristics at time of disposal.

3. Composition/Information on Ingredients

Component	CAS No.	Weight (%)
Diethylbenzene	25340-17-4	100

4. First-Aid Measures

General advice	In case of doubt or symptoms persist, seek medical advice. In case of unconscious, get medical attention immediately.
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.
Inhalation	If inhaled: Remove to fresh air and keep comfortable for breathing. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician immediately.
Ingestion	Call a physician or poison control center immediately. Do NOT induce vomiting. Never give liquid to an unconscious person. Provide fresh air, warmth and rest, preferably in comfortable upright sitting position. Loosen tight clothing such as a collar, tie, belt or waistband. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.
Most important symptoms and effects	Risk of chemical pneumonia after aspiration. The liquid may irritate the skin. May cause allergic skin reaction. Contact with hot material can cause thermal burns which may result in permanent damage.
Notes to physician	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

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	Water spray, Foam, Dry powder, Carbon dioxide (CO ₂). Don't use direct water stream. May spread fire.
Special hazard	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. Toxic to aquatic life with long lasting effects. Runoff may pollute waterways.

Advice for firefighters	As 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.
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6. Accidental Release Measures

Personal precautions	Do not touch or walk through spilled material. Avoid contact skin, eyes and clothing. Wear personal protective equipment. If appropriate refer to headings 8.
Environmental precautions	Stop leak if safe to do so. Clean up spill immediately. Prevent from entering into soil, drains or water courses.
Methods 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. Clean contaminated surface thoroughly. Prevent product and washing from entering drains, sewers or surface water. If appropriate refer to headings 13.
Notification procedures	In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

7. Handling and Storage

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. In case of insufficient ventilation, wear suitable respiratory equipment. See also headings 8.
Storage	Store in a dry, cool and well-ventilated place. Keep container closed. Keep away from direct sunlight. Keep away from contact with oxidizing materials. Away from fire and heat source. Keep in properly labeled containers to avoid environmental contamination. Store in accordance with local regulations.

8. Exposure Controls/Personal Protection

Control parameters**Exposure limits**

Chemical name	Type	Exposure limit values	Source
Diethylbenzene	TWA	5 ppm	US. OARS. WEELs Workplace Environmental Exposure Level Guide(2009)

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.

Personal protective equipment**General information**

An eye wash bottle must be available at the work site. Provide access to washing facilities including soap, skin cleanser and fatty cream.

Eye protection

Use chemical goggles. In order to avoid direct exposure to liquid splashes, mists or dusts suggestion: Wear safety glasses with side shields if splashing may occur, wear a mask.

Skin and body protection

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.

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.

Hand protection

Wear chemical resistant gloves. Please read carefully the glove supplier explain the permeability about gloves and solvent penetration time.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using the product. Wash at the end of each work shift and before eating, smoking and using the toilet. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Keep away from food, drink and animal feeding stuffs.

Environmental exposure controls

The product should not be allowed to enter drains, water courses or the soil.

	Avoid release to the environment.
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9. Physical and Chemical Properties

Information on basic physical and chemical properties

Appearance	
Physical state	Liquid
Form	Clear liquid
Color	Colorless, light yellow
Odor	Aromatic, hydrocarbon
Odor threshold	No data available
pH	No data available
Pour point	-75 °C
Boiling point	182 °C(1013hPa)
Flash point	58 °C(Pensky-Martens Closed Cup)
Evaporation rate	Not determined
Flammability (solid, gas)	Not applicable
Flammability limit - Upper(%)	No data available
Flammability limit - Lower(%)	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 Pow: 3.72
Autoignition temperature	429 °C
Decomposition temperature	No data available
Dynamic viscosity	No data available
Kinematic viscosity	0.93 mm ² /s (40°C)
Explosive properties	Not classified
Oxidizing properties	Not classified

10. Stability and Re-activity

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

Information on likely routes of exposure

Inhalation	None known.
Ingestion	May be fatal if swallowed and enters airways.
Skin contact	Causes skin irritation.
Eyes contact	None known.

Information on toxicological effects

Acute toxicity	
Oral	LD50 (Rat): 2050 mg/kg.
Dermal	LD50 (Rabbit): >5000 mg/kg.
Inhalation	No data available.
Repeated dose toxicity	NOAEL (Rat, by gavage): 150 mg/l bw/day. NOAEC (Rat, Inhalation): 190 mg/m ³ .
Skin corrosion/irritation	Acute dermal irritation/corrosion(Rabbit, 24h): Irritating to skin.
Serious eye damage/eye irritation	(Rabbit, 24 h): Not irritating.
Respiratory or skin sensitization	OECD 406: Guinea pig sensitization(Guinea Pig): Not a skin sensitizer.
Carcinogenicity	Not classified. This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.
Toxicity to reproduction	(Rat):NOAEL: 750mg/kg; Gavage(Oral).
Developmental toxicity	Rat:NOAEL: 20 mg/kg; Gavage(Oral).
Germ cell mutagenicity	

In vitro	Mutagenicity-bacterial: negative. Mutagenicity-mammalian: negative. Chromosomal aberration: negative.
In vivo	(Mammalian erythrocyte micronucleus test)(Mouse)negative.
Specific target organ toxicity - single exposure	Not classified.
Specific target organ toxicity- repeated exposure	Not classified.
Aspiration hazard	May be fatal if swallowed and enters airways.
Other effects	No data available.

12. Ecological Information

Ecotoxicity

Acute hazards to the aquatic environment

Fish	LC50 (Oncorhynchus mykiss, 96 h): 0.673 mg/l.
Aquatic invertebrates	EC50 (Daphnia magna, 48 h): 2.01 mg/l.

Chronic hazards to the aquatic environment

Fish	No data available.
Aquatic invertebrates	No data available.
Toxicity to aquatic plants	EC50 (Algae(Pseudokirchneriella subcapitata), 72h): 1.21mg/l.

Persistence and degradability

Biodegradation	4.7%(28d), Not readily degradable.
BOD/COD ratio	No data available.

Bioaccumulative potential

Bioconcentration factor (BCF)	Bioconcentration Factor(BCF): 320-629 Potential to bioaccumulate is low.
Partition coefficient n-octanol / water (log Kow)	Log Kow: 3.72.
Mobility in soil	No data available.

Other adverse effects	No data available.
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13. Disposal Considerations

Waste disposal methods	Do not allow into any sewers, ground, or into any water. All disposal practices must be in compliance with state and local laws and regulations. For the safety of persons conducting disposal, recycling or reclamation activities, please refer to the information in headings 8 (exposure controls and personal protection) of the SDS.
Contaminated packaging	Empty packaging should be taken to an approved waste handling site for recycling or disposal.
Other information	See headings 15 for more information.

14. Transport Information

DOT	
UN/ID no.	UN 2049
Proper shipping name	Diethylbenzene
Hazard class	3
Packing group	III
IMDG	
UN/ID no.	UN 2049
Proper shipping name	DIETHYLBENZENE
Hazard class	3
Packing group	III
Marine pollutant	Yes
IATA	
UN/ID no.	UN 2049
Proper shipping name	Diethylbenzene
Hazard class	3
Packing group	III

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

Supersedes date	05-Jan-2014
Revision date	10-Oct-2015
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.