Safety Data Sheet

Compilation date : 10-Jan-2017 **Version:** 1

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

Product name	**SCHULTZ® 380**
Recommended use	Heat transfer fluids
Manufacturer	Jiangsu Zhongneng Chemical Technology Co., Ltd
Address	Chemical Industry Park, Duigougang, Jiangsu
Telephone	+86 518 83866555
E-mail address	Sales@dynovacn.com
Emergency telephone	+86 518 83866558

2. Hazards Identification

Hazard classification

Health hazards

Acute toxicity (Oral)	Category 5
Acute toxicity (Inhalation)	Category 4
Aspiration hazard (Oral)	Category 1
Specific target organ toxicity-single exposure (Inhalation)	Category 3
Acute hazards to the aquatic environment	Category 1
Chronic hazards to the aquatic environment	Category 1

Hazard and precautionary statements

Hazard pictogram

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Signal word: Danger

Hazard statements

H304	May be fatal if swallowed and enters airways.
H332	Harmful if inhaled.
H335	May cause respiratory irritation .
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

Precautionary statements

Prevention	
P261	Avoid breathing dust/fume/gas/mist/vapors/spray.
P273	Avoid release to the environment.

Response	
P301+P310	IF SWALLOWED: immediately call a POISON CENTER / DOCTOR
P331	Do NOT induce vomiting.
P391	Collect spillage.

Storage	
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
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.

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3. Composition/Information on Ingredients

Component	CAS No.	Weight (%)
Diphenyl ether	101-84-8	45%
Terphenyl	26140-60-3	39%
Biphenyl	92-52-4	16%
Phenanthrene	85-01-8	<1%

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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. Never give liquid to an unconscious person.

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 vapors 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.
Notes to rescuers	Personal protective equipment should be worn at the site of the accident

5. Fire-Fighting Measures

Extinguishing media	
Suitable extinguishing media	Water spray, Dry powder, Carbon dioxide (CO_2). 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.

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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

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	sales or customer service contact.

8. Exposure Controls/Personal Protection

Occupational exposure standards

Component	Criterion	Type	Standard value
Diphenyl ether	GBZ 2.1-2007	PC-TWA	7 mg/m^3
		PC-STEL	14 mg/m^3
Biphenyl	GBZ 2.1-2007	PC-TWA	1.5 mg/m^3

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.

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9. Physical and Chemical Properties

Information on basic physical and chemical properties

Appearance	Clear liquid
Color	Amber
Odor	Aromatic
Odor threshold	No data available
pH	inapplicability
Melting point/freezing point	-18℃
Boiling point/boiling range	271℃
Flash point	134℃ (Open-up)
Evaporation rate	No data available
Flammability (solid, gas)	Not applicable
Upper flammability limit(%)	7
Lower flammability limit(%)	1
Vapor pressure	624 kPa (380℃)
Vapor density (air=1)	10
Specific gravity	1.06 (20℃)
Solubility(ies)	
Solubility in water	No data available
Solubility (other)	No data available
Partition coefficient: n-octanol/water	No data available
Autoignition temperature	585℃
Decomposition temperature	No data available
Dynamic viscosity	No data available
kinematic viscosity	5.76 mm^2/s (40℃)
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. Heat, sparks, flames.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	Emits acrid smoke and fumes when heated to decomposition.

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11. Toxicological Information

Information on likely routes of exposure

Inhalation	May be harmful by inhalation. May cause irritation to the respiratory system.
Ingestion	Droplets of the product aspirated into the lungs through ingestion or vomiting may cause a serious chemical pneumonia. May be harmful if swallowed.
Skin contact	None known.
Eyes contact	None known.

Information on toxicological effects

Acute toxicity	
Oral	LD50 (Rat): ＞2000 mg/kg. Not classified.
Dermal	LD50 (Rabbit): ＞2000 mg/kg. Not classified.
Inhalation	Dusts, mists and fumes: LC50 (Expert judgement., 4 h): > 2,66 mg/l Harmful if inhaled.
Repeated dose toxicity	No data available.
Skin corrosion/irritation	Not classified. Rabbit:Non-irritating to the skin.
Serious eye damage/eye irritation	Not classified. Rabbit:Not irritating.
Respiratory or skin sensitization	No data available.
Germ cell mutagenicity **In vitro/In vivo**	No data available.
Carcinogenicity	No data available.
Reproductive toxicity	No data available.
Specific target organ toxicity - single exposure	Inhale dust and smoke: irritate the respiratory system.

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Specific target organ toxicity- repeated exposure	Based on available data,the classification criteria are not met.
Aspiration hazard	Droplets of the product aspirated into the lungs through ingestion or vomiting may cause a serious chemical pneumonia.
Other effects	No data available.

12. Ecological Information

Ecotoxicity

Acute hazards to the aquatic environment

Fish	No data available.
Aquatic invertebrates	No data available.
Algae/aquatic plants	No data available.

Chronic hazards to the aquatic environment

Fish	No data available.
Aquatic invertebrates	No data available.
Toxicity to aquatic plants	No data available.

Persistence and degradability

Biodegradation	No data available.
BOD/COD ratio	No data available.

Bioaccumulative potential

Bioconcentration factor (BCF)	No data available.
Partition coefficient n-octanol / water (log Kow)	Not applicable.
Mobility in soil	No data available.
Other adverse effects	No data available.

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13. Disposal Considerations

Disposal methods	Do not dispose into the environment, in drains or in water courses. Dispose in accordance with prevailing regulations, preferably to a recognized waste collector or contractor. Since emptied containers retain product residue, follow label warnings even after container is emptied. Recycle empty drums at an appropriate facility in accordance with current applicable laws and regulations, and product characteristics at time of disposal. Ensure drums are tightly sealed.

14. Transport Information

DOT	
UN/ID no.	UN 3082
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Diphenyl ether, Biphenyl)
Hazard class	9
Packing group	III
Marine pollutant	Yes

IMDG	
UN/ID no.	UN 3082
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Diphenyl ether, Biphenyl)
Hazard class	9
Packing group	III
Marine pollutant	Yes

IATA	
UN/ID no.	UN 3082
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Diphenyl ether, Biphenyl)
Hazard class	9
Packing group	III

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15. Regulatory Information

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

GB 12268-2005: Product name list of dangerous goods

GB 13690-2009: Chemical classification and Dangerous publicity

Regulations on safety management of hazardous chemicals

Safe use of chemicals in the workplace

16. Other Information

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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.

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