

# SAFETY DATA SHEET

## OPTISPERSE HP54707

### 1. Chemical product and company identification

**Product name** OPTISPERSE HP54707

**Recommended use and Limitations on use**

**Recommended use** Internal boiler treatment

**Company/undertaking identification**

PT SUEZ WATER TECHNOLOGIES AND SOLUTIONS  
INDONESIA

South Quarter, Tower A, 18th Floor  
Unit F-G, Jl. RA Kartini Kav 8, Cilandak Barat  
Jakarta Selatan 12430, Indonesia  
Tel: +62 21 80669678

**Emergency telephone**

001-803-017-9114 (Indonesia)

+1 703-527-3887 (US)

### 2. Hazards identification

**GHS classification**

<b>Physical hazards</b>	Corrosive to metals	Category 1
<b>Health hazards</b>	Not classified.	
<b>Environmental hazards</b>	Not classified.	

**Label elements**

**Pictogram**



**Signal word** Danger

**Hazard statement** May be corrosive to metals. Causes severe skin burns and eye damage. Causes serious eye damage. May cause drowsiness or dizziness.

**Precautionary statement**

<b>Prevention</b>	Keep only in original container. Do not breathe mist or vapor. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection.
<b>Response</b>	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor. Wash contaminated clothing before reuse. Absorb spillage to prevent material damage.
<b>Storage</b>	Store in a well-ventilated place. Keep container tightly closed. Store locked up. Store in corrosive resistant container with a resistant inner liner.
<b>Disposal</b>	Dispose of contents/container in accordance with local/regional/national/international regulations.

**Supplemental information** None.

### 3. Composition / information on ingredients

**Substance or mixture** Mixtures

**Chemical property**

Chemical name	CAS Number	Concentration (%)
Sodium hydroxide	1310-73-2	<= 10

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### 4. First aid measures

#### First aid measures for different exposure routes

<b>Inhalation</b>	Move to fresh air. Call a physician if symptoms develop or persist.
<b>Skin contact</b>	Wash off with soap and water. Get medical attention if irritation develops and persists.
<b>Eye contact</b>	Rinse with water. Get medical attention if irritation develops and persists.
<b>Ingestion</b>	Rinse mouth. Get medical attention if symptoms occur.
<b>Most important symptoms and effects</b>	Direct contact with eyes may cause temporary irritation.
<b>Personal protection for first-aid responders</b>	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.
<b>Notes to physician</b>	Treat symptomatically.

### 5. Fire-fighting measures

<b>Extinguishing media</b>	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO <sub>2</sub> ).
<b>Extinguishing media to avoid</b>	Do not use water jet as an extinguisher, as this will spread the fire.
<b>Specific hazards</b>	During fire, gases hazardous to health may be formed.
<b>Special fire fighting procedures</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>Protection of fire-fighters</b>	Move containers from fire area if you can do so without risk.
<b>Specific methods</b>	Use standard firefighting procedures and consider the hazards of other involved materials.

### 6. Accidental release measures

<b>Personal precautions</b>	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained.
<b>Environmental precautions</b>	Avoid discharge into drains, water courses or onto the ground.
<b>Spill clean-up methods</b>	Prevent entry into waterways, sewer, basements or confined areas.  Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb spillage to prevent material damage. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.  Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.  Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

### 7. Handling and storage

#### Handling

<b>Technical measures</b>	Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.
<b>Local and general ventilation</b>	Provide adequate ventilation.
<b>Precautions</b>	Wear appropriate personal protective equipment.
<b>Safe handling advice</b>	Avoid prolonged exposure. Observe good industrial hygiene practices. Use personal protection recommended in Section 8 of the SDS.

#### Storage

<b>Technical measures</b>	Store in a cool, dry place out of direct sunlight. Store in corrosive resistant container with a resistant inner liner. Keep only in the original container. Store away from incompatible materials (see Section 10 of the SDS).
<b>Suitable storage conditions</b>	Store in a cool, dry place out of direct sunlight. Keep only in the original container.
<b>Incompatible materials</b>	Metals. For further information, please refer to section 10 of the SDS.
<b>Safe packaging materials</b>	Store in corrosive resistant container with a resistant inner liner.

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### 8. Exposure controls/personal protection

#### Exposure limits

Indonesia. OELs (Minister of Manpower and Transmigration Regulation No. Per.13/MEN/X/2011 concerning Threshold Limit Values, Annex II)

Components	Type	Value
Sodium hydroxide (CAS 1310-73-2)	Ceiling	2 mg/m <sup>3</sup>

#### Occupational exposure limits

US. ACGIH Threshold Limit Values

Components	Type	Value
Sodium hydroxide (CAS 1310-73-2)	Ceiling	2 mg/m <sup>3</sup>

#### Engineering measures

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

#### Personal protective equipment

**Respiratory protection** In case of insufficient ventilation, wear suitable respiratory equipment.

**Hand protection** Wear appropriate chemical resistant gloves.

**Eye protection** Wear safety glasses with side shields (or goggles).

**Skin and body protection** Wear suitable protective clothing.

#### Hygiene measures

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

### 9. Physical and chemical properties

#### Appearance

**Physical state** Liquid.

**Form** Not available.

**Color** Not available.

**Odor** Not available.

**Odor threshold** Not available.

**pH (concentrated product)** 13

**pH in aqueous solution** 12.5 (5% SOL.)

**pH** Not available.

**Melting point/freezing point** -4 °C

**Boiling point, initial boiling point, and boiling range** 99 °C

**Flash point** > 93 °C P-M(CC)

**Auto-ignition temperature** Not available.

**Flammability (solid, gas)** Not applicable.

#### Upper/lower flammability or explosive limits

**Flammability limit - lower (%)** Not available.

**Flammability limit - upper (%)** Not available.

**Explosive limit - lower (%)** Not available.

**Explosive limit - upper (%)** Not available.

**Vapor pressure** 18 mm Hg

**Vapor pressure temp.** 21 °C

**Vapor density** < 1 (Air = 1)

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Evaporation rate	< 1 (Ether = 1)
Relative density	1.13
Relative density temperature	21 °C
Density	Not available.
Solubility(ies)	
Solubility (water)	100 %
Partition coefficient (n-octanol/water)	Not available.
Decomposition temperature	Not available.
Viscosity	21 cps
Viscosity temperature	21 °C
Pour point	-1 °C
Other data	
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.
Specific gravity	1.13
VOC (Weight %)	0 % (Calculated)

### 10. Stability and reactivity

Reactivity	May be corrosive to metals.
Stability	Not available.
Conditions to avoid	Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents. Metals.
Hazardous decomposition products	No hazardous decomposition products are known.
Possibility of hazardous reactions	Hazardous polymerization does not occur.

### 11. Toxicological information

#### Acute toxicity

Product	Species	Test Results
OPTISPERSE HP54707 (CAS Mixture)		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Rabbit	> 5000 mg/kg, (Calculated according to GHS additivity formula)
<i>Oral</i>		
LD50	Rat	> 5000 mg/kg, (Calculated according to GHS additivity formula)

Components	Species	Test Results
Sodium hydroxide (CAS 1310-73-2)		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Rabbit	1350 mg/kg
<i>Oral</i>		
LD50	Rabbit	> 500 mg/kg

Routes of exposure	Inhalation.
Symptoms	Direct contact with eyes may cause temporary irritation.
Skin corrosion/irritation	Prolonged skin contact may cause temporary irritation.
Serious eye damage/eye irritation	Direct contact with eyes may cause temporary irritation.

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### Respiratory or skin sensitization

<b>Respiratory sensitization</b>	Not a respiratory sensitizer.
<b>Skin sensitization</b>	This product is not expected to cause skin sensitization.
<b>Germ cell mutagenicity</b>	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
<b>Carcinogenicity</b>	Not available.
<b>Toxic to reproduction</b>	This product is not expected to cause reproductive or developmental effects.
<b>Specific target organ toxicity - single exposure</b>	Not classified.
<b>Specific target organ toxicity - repeated exposure</b>	Not classified.
<b>Aspiration hazard</b>	Not an aspiration hazard.
<b>Chronic effects</b>	Prolonged inhalation may be harmful.
<b>Other information</b>	Not available.

## 12. Ecological information

### Ecotoxicological data

Product	Species	Test Results
OPTISPERSE HP54707 (CAS Mixture)	LC50	Fathead Minnow 5464 mg/l, Static Renewal Bioassay, 96 hour, (pH adjusted)
	NOEL	Fathead Minnow 4000 mg/l, Static Renewal Bioassay, 96 hour, (pH adjusted)
<b>Aquatic</b> Crustacea	LC50	Daphnia magna 2828 mg/l, Static Renewal Bioassay, 48 hour, (pH adjusted)
	NOEL	Daphnia magna 2000 mg/l, Static Renewal Bioassay, 48 hour, (pH adjusted)

<b>Ecotoxicity</b>	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
<b>Bioaccumulation</b>	
<b>Mobility in soil</b>	No data available for this product.
<b>Other hazardous effects</b>	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.
<b>Environmental fate</b>	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
<b>Persistence and degradability</b>	

## 13. Disposal considerations

<b>Local disposal regulations</b>	Dispose of contents/container in accordance with local/regional/national/international regulations.
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## 14. Transport information

<b>IATA</b>	
<b>UN number</b>	UN3266
<b>UN proper shipping name</b>	Corrosive liquid, basic, inorganic, n.o.s. (SODIUM HYDROXIDE, SODIUM PHOSPHATES)
<b>Transport hazard class(es)</b>	
<b>Class</b>	8
<b>Subsidiary risk</b>	-
<b>Packing group</b>	III
<b>Environmental hazards</b>	No.
<b>ERG Code</b>	154
<b>Special precautions for user</b>	Not available.

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### IMDG

<b>UN number</b>	UN3266
<b>UN proper shipping name</b>	CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (SODIUM HYDROXIDE, SODIUM PHOSPHATES)
<b>Transport hazard class(es)</b>	
<b>Class</b>	8
<b>Subsidiary risk</b>	-
<b>Packing group</b>	III
<b>Environmental hazards</b>	
<b>Marine pollutant</b>	No.
<b>EmS</b>	F-A, S-B
<b>Special precautions for user</b>	Not available.
<b>Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b>	Not established.

### IATA; IMDG



## 15. Regulatory information

### Applicable regulations

Additional information is given in the Safety Data Sheet.

**CWC (Law of RI No. 9 of 2008 re: Prohibition on the Use of Chemicals as Chemical Weapon)**

Not regulated.

**CWC (Law of RI No. 9 of 2008 re: Prohibition on the Use of Chemicals as Chemical Weapon, March 10, 2008)**

Not regulated.

**Dangerous Substances that Must be Registered (Regulation of the Minister of Health of the Republic of Indonesia)**

Not regulated.

**Import and Distribution Control of Hazardous Materials (Minister of Trade Regulation No. 75/M-DAG/PER/10/2014, Annex I)**

Not listed.

**Precursor Chemicals (Ministry of Industry and Trade Decree No. 647/MPP/Kep/10/2004 concerning Regulation on Import of Precursors, Attachment 1)**

Not regulated.

**Prohibited Substances (Government Regulation No. 74 of 2001 regarding Management of Hazardous and Poisonous Substances, Attachment II, Table 1)**

Not regulated.

**Restricted Substances (Government Regulation No. 74 of 2001 regarding Management of Hazardous and Poisonous Substances, Attachment II, Table 2)**

Not regulated.

**Toxic and Hazardous Materials List (Decree of the Ministry of Industry on the Safeguarding of Toxic and Hazardous Materials in Industrial Plants, No. 148/M/SK/4/1985)**

Sodium hydroxide (CAS 1310-73-2)

**Hazardous Substances Approved for Use (Government Regulation No. 74 of 2001 regarding Management of Hazardous and Poisonous Substances, Attachment I)**

**Listed substances**

Sodium hydroxide (CAS 1310-73-2)

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Listed substances / Allowed until 2040

Not regulated.

### 16. Other information

**Issued by** Not available.

**Disclaimer** Not available.

**Issue date** Aug-15-2013

**Revision date** 26/09/2018

**Legend to abbreviations and acronyms used in the SDS** Not available.

**References and sources for data used to compile the SDS** Not available.

**Revision information** This document has undergone significant changes and should be reviewed in its entirety.

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