

# SAFETY DATA SHEET

## GENGARD GN8020

### 1. Chemical product and company identification

**Product name** GENGARD GN8020

**Recommended use and Limitations on use**

**Recommended use** Deposit controller Deposition / fouling controller  
Deposit control agent

#### 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>	Not classified.	
<b>Health hazards</b>	Skin corrosion/irritation	Category 2
	Serious eye damage/eye irritation	Category 2
	Sensitization, skin	Category 1
<b>Environmental hazards</b>	Not classified.	

#### Label elements

##### Pictogram



##### Signal word

Warning

##### Hazard statement

Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation.

#### Precautionary statement

##### Prevention

Wear eye/face protection. Avoid breathing mist or vapor. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Contaminated work clothing should not be allowed out of the workplace. Wear eye protection/face protection. Wear protective gloves.

##### Response

IF ON SKIN: Wash with plenty of water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a POISON CENTER/doctor if you feel unwell. Specific treatment (see this label). If skin irritation or rash occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash it before reuse.

##### Storage

Store in a well-ventilated place. Keep container tightly closed. Store locked up.

##### Disposal

Dispose of contents/container in accordance with local/regional/national/international regulations.

#### Supplemental information

None.

### 3. Composition / information on ingredients

**Substance or mixture** Mixtures

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### Chemical property

Chemical name	CAS Number	Concentration (%)
CARBOXYLIC ACID POLYMER	TRADE SECRET	10 - 30

### 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>	Remove contaminated clothing immediately and wash skin with soap and water. In case of eczema or other skin disorders: Seek medical attention and take along these instructions. Wash contaminated clothing before reuse.
<b>Eye contact</b>	Rinse with water. Remove contact lenses, if present and easy to do. Continue rinsing. 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>	Severe eye irritation. Skin irritation. May cause an allergic skin reaction. Dermatitis. Rash.
<b>Personal protection for first-aid responders</b>	Wash contaminated clothing before reuse.
<b>Notes to physician</b>	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

### 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>	None.
<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. Avoid breathing mist or vapor. 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>	<p>Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.</p> <p>Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.</p> <p>Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.</p>

### 7. Handling and storage

#### Handling

<b>Technical measures</b>	Avoid breathing mist or vapor. Avoid contact with eyes, skin, and clothing. 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>	Avoid breathing mist or vapor. Avoid contact with eyes, skin, and clothing.
<b>Safe handling advice</b>	Observe good industrial hygiene practices. Use personal protection recommended in Section 8 of the SDS.

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### Storage

<b>Technical measures</b>	Keep container tightly closed. Store away from incompatible materials (see Section 10 of the SDS).
<b>Suitable storage conditions</b>	Keep container tightly closed. Store away from incompatible materials (see Section 10 of the SDS).
<b>Incompatible materials</b>	For further information, please refer to section 10 of the SDS.
<b>Safe packaging materials</b>	Keep in original container.

### 8. Exposure controls/personal protection

<b>Exposure limits</b>	No exposure limits noted for ingredient(s).
<b>Engineering measures</b>	Provide eyewash station. Eye wash fountain and emergency showers are recommended.
<b>Personal protective equipment</b>	
<b>Respiratory protection</b>	In case of insufficient ventilation, wear suitable respiratory equipment.
<b>Hand protection</b>	Wear appropriate chemical resistant gloves.
<b>Eye protection</b>	Face shield is recommended. Wear safety glasses with side shields (or goggles).
<b>Skin and body protection</b>	Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.
<b>Hygiene measures</b>	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. Contaminated work clothing should not be allowed out of the workplace.

### 9. Physical and chemical properties

#### Appearance

<b>Physical state</b>	Liquid.
<b>Form</b>	Not available.
<b>Color</b>	Not available.
<b>Odor</b>	Not available.
<b>Odor threshold</b>	Not available.
<b>pH (concentrated product)</b>	2.6
<b>pH in aqueous solution</b>	3 (5% SOL.)
<b>pH</b>	Not available.
<b>Melting point/freezing point</b>	-3 °C
<b>Boiling point, initial boiling point, and boiling range</b>	100 °C
<b>Flash point</b>	Not available.
<b>Auto-ignition temperature</b>	Not available.
<b>Flammability (solid, gas)</b>	Not applicable.

#### Upper/lower flammability or explosive limits

<b>Flammability limit - lower (%)</b>	Not available.
<b>Flammability limit - upper (%)</b>	Not available.
<b>Explosive limit - lower (%)</b>	Not available.
<b>Explosive limit - upper (%)</b>	Not available.
<b>Vapor pressure</b>	18 mm Hg
<b>Vapor pressure temp.</b>	21 °C
<b>Vapor density</b>	< 1 (Air = 1)
<b>Evaporation rate</b>	< 1 (Water = 1)
<b>Relative density</b>	1.17
<b>Relative density temperature</b>	21 °C

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**Density** Not available.

**Solubility(ies)**

**Solubility (water)** 100 %

**Partition coefficient (n-octanol/water)** Not available.

**Decomposition temperature** Not available.

**Viscosity** 17 cps

**Viscosity temperature** 21 °C

**Pour point** 0 °C

**Other data**

**Explosive properties** Not explosive.

**Oxidizing properties** Not oxidizing.

**Specific gravity** 1.166

**VOC (Weight %)** 0 % (Estimated)

### 10. Stability and reactivity

**Reactivity** The product is stable and non-reactive under normal conditions of use, storage and transport.

**Stability** Not available.

**Conditions to avoid** None.

**Incompatible materials** Strong oxidizing agents.

**Hazardous decomposition products** None.

**Possibility of hazardous reactions** Hazardous polymerization does not occur.

### 11. Toxicological information

**Acute toxicity**

Product	Species	Test Results
GENGARD GN8020 (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
CARBOXYLIC ACID POLYMER (CAS TRADE SECRET)		
<b>Acute</b>		
<i>Oral</i>		
LD50	Rat	4563 mg/kg

**Routes of exposure** Inhalation. Skin contact. Eye contact.

**Symptoms** Severe eye irritation. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. Rash.

**Skin corrosion/irritation** Prolonged skin contact may cause temporary irritation.

**Serious eye damage/eye irritation** Direct contact with eyes may cause temporary irritation.

**Respiratory or skin sensitization**

**Respiratory sensitization** Not a respiratory sensitizer.

**Skin sensitization** This product is not expected to cause skin sensitization.

**Germ cell mutagenicity** No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

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<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>Other information</b>	Not available.

## 12. Ecological information

### Ecotoxicological data

Product	Species	Test Results	
GENGARD GN8020 (CAS Mixture)	IC50	Selenastrum (algae)	3872 mg/l, Growth Inhibition, 96 hour, (pH adjusted)
	LC50	Fathead Minnow	5814 mg/l, Static Renewal Bioassay, 96 hour, (pH adjusted)
	NOEL	Fathead Minnow	5000 mg/l, Static Renewal Bioassay, 96 hour, (pH adjusted)
		Selenastrum (algae)	2000 mg/l, Growth Inhibition, 96 hour, (pH adjusted)
<b>Aquatic</b> Crustacea	LC50	Daphnia magna	3628 mg/l, Static Renewal Bioassay, 48 hour, (pH adjusted)
	NOEL	Daphnia magna	1250 mg/l, Static Renewal Bioassay, 48 hour, (pH adjusted)
Fish	LC50	Rainbow Trout	7071 mg/l, Static Renewal Bioassay, 96 hour, (pH adjusted)
	NOEL	Rainbow Trout	5000 mg/l, Static Renewal Bioassay, 96 hour, (pH adjusted)

**Ecotoxicity** 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.

### Bioaccumulation

**Mobility in soil** No data available for this product.

**Other hazardous effects** No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

**Environmental fate** 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.

### Persistence and degradability

Testing has shown product not to be readily biodegradable.

- COD (mgO <sub>2</sub> /g)	359
- BOD 5 (mgO <sub>2</sub> /g)	21
- BOD 28 (mgO <sub>2</sub> /g)	3
- Closed Bottle Test (% Degradation in 28 days)	1 OECD 301D

## 13. Disposal considerations

**Local disposal regulations** Dispose of contents/container in accordance with local/regional/national/international regulations.

## 14. Transport information

### IATA

Not regulated as dangerous goods.

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### IMDG

Not regulated as dangerous goods.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not established.

### 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)**

Not regulated.

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

**Listed substances**

Not regulated.

**Listed substances / Allowed until 2040**

Not regulated.

**NSF Registered and/or meets USDA (according to 1998 guidelines):**

Registration No. – 144523

Category Code(s):

G5 Cooling and retort water treatment products

G7 Boiler, steam line treatment products – nonfood contact

### 16. Other information

**Issued by** Not available.

**Disclaimer** Not available.

**Issue date** Aug-31-2014

**Revision date** 27/09/2018

**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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