

SAFETY DATA SHEET

HYPERSPERSE MSI410

1. Chemical product and company identification

Product name HYPERSPERSE MSI410

Recommended use and Limitations on use

Recommended use Membrane 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

Physical hazards	Not classified.	
Health hazards	Skin corrosion/irritation	Category 1
	Serious eye damage/eye irritation	Category 1
Environmental hazards	Not classified.	

Label elements

Pictogram



Signal word

Danger

Hazard statement

Causes severe skin burns and eye damage. Causes serious eye damage.

Precautionary statement

Prevention

Wear eye/face protection. Do not breathe mist or vapor. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection. Avoid breathing dust/fume/gas/mist/vapours/spray.

Response

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Rinse skin with water/shower. 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: 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. If experiencing respiratory symptoms: Rinse cautiously with water for several minutes. Wash contaminated clothing before reuse. IF ON SKIN (or hair): If skin irritation occurs: IF SWALLOWED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Get immediate medical advice/attention.

Storage

Store in a well-ventilated place. Store in a closed container. 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 (%)
PHOSPHONIC ACID DERIVATIVE	TRADE SECRET	<= 10

4. First aid measures

First aid measures for different exposure routes

Inhalation	Call a physician if symptoms develop or persist.
Skin contact	Take off immediately all contaminated clothing. Rinse skin with water/shower. Chemical burns must be treated by a physician. Wash contaminated clothing before reuse.
Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician or poison control center immediately.
Ingestion	Call a physician or poison control center immediately. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

Most important symptoms and effects Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.

Personal protection for first-aid responders Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

Notes to physician Provide general supportive measures and treat symptomatically. Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim under observation. Symptoms may be delayed.

5. Fire-fighting measures

Extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO ₂).
Extinguishing media to avoid	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards	During fire, gases hazardous to health may be formed.
Special fire fighting procedures	Use standard firefighting procedures and consider the hazards of other involved materials.
Protection of fire-fighters	Move containers from fire area if you can do so without risk.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe 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.
Environmental precautions	Avoid discharge into drains, water courses or onto the ground.
Spill clean-up methods	<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

Technical measures	Do not breathe mist or vapor. Do not get in eyes, on skin, or on clothing. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.
Local and general ventilation	Provide adequate ventilation.
Precautions	Do not breathe mist or vapor. Do not get in eyes, on skin, or on clothing.

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Safe handling advice	Avoid prolonged exposure. Observe good industrial hygiene practices. Use personal protection recommended in Section 8 of the SDS.
Storage	
Technical measures	Store locked up. Keep container tightly closed. Store away from incompatible materials (see Section 10 of the SDS).
Suitable storage conditions	Store locked up. Keep container tightly closed. Store away from incompatible materials (see Section 10 of the SDS).
Incompatible materials	For further information, please refer to section 10 of the SDS.
Safe packaging materials	Keep in original container.

8. Exposure controls/personal protection

Exposure limits	No exposure limits noted for ingredient(s).
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. Eye wash facilities and emergency shower must be available when handling this product.
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) and a face shield.
Skin and body protection	Wear appropriate chemical resistant 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)	2.43
pH	Not available.
Melting point/freezing point	-4 °C
Boiling point, initial boiling point, and boiling range	104 °C
Flash point	> 101 °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)
Evaporation rate	< 1 (Ether = 1)

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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	19 cps
Viscosity temperature	21 °C
Pour point	-1 °C
Other data	
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.
Specific gravity	1.134
VOC (Weight %)	0 % (Calculated)

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Stability	Material is stable under normal conditions.
Conditions to avoid	None.
Incompatible materials	Strong oxidizing agents.
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
HYPERSPERSE MSI410 (CAS Mixture)		
Acute		
<i>Dermal</i>		
	Rabbit	> 5000 mg/kg, (Calculated according to GHS additivity formula)
<i>Oral</i>		
	Rat	> 5000 mg/kg, (Calculated according to GHS additivity formula)

Components	Species	Test Results
PHOSPHONIC ACID DERIVATIVE (CAS TRADE SECRET)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	> 7940 mg/kg
<i>Oral</i>		
LD50	Rat	7180 mg/kg

Routes of exposure	Inhalation. Ingestion. Skin contact. Eye contact.
Symptoms	Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.
Skin corrosion/irritation	Causes severe skin burns and eye damage.

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

12. Ecological information

Ecotoxicological data

Product	Species	Test Results		
HYPERSPERSE MSI410 (CAS Mixture)	LC50	Fathead Minnow	8842 mg/L, Acute Toxicity, 96 hour, (Estimated)	
	NOEL	Fathead Minnow	8500 mg/L, Acute Toxicity, 96 hour, (Estimated)	
	Aquatic Crustacea	LC50	Daphnia magna	5061 mg/L, Acute Toxicity, 48 hour, (Estimated)
		NOEL	Daphnia magna	3165 mg/L, Acute Toxicity, 48 hour, (Estimated)

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	

13. Disposal considerations

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

IATA

UN number	UN3265
UN proper shipping name	Corrosive liquid, acidic, organic, n.o.s. (PHOSPHONIC ACID DERIVATIVE)
Transport hazard class(es)	
Class	8
Subsidiary risk	-
Packing group	II
Environmental hazards	No.
ERG Code	153

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Special precautions for user Not available.

IMDG

UN number UN3265
UN proper shipping name CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (PHOSPHONIC ACID DERIVATIVE)
Transport hazard class(es)
Class 8
Subsidiary risk -
Packing group II
Environmental hazards
Marine pollutant No.
EmS F-A, S-B
Special precautions for user Not available.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code 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)

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.

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Listed substances / Allowed until 2040

Not regulated.

16. Other information

Issued by	Not available.
Disclaimer	Not available.
Issue date	Sep-08-2017
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	Hazards identification: Hazard statement Hazards identification: Prevention Hazards identification: Response Composition / Information on Ingredients: Disclosure Overrides Composition / information on ingredients: Composition comments Exposure controls/personal protection: Engineering measures Exposure controls/personal protection: Exposure guidelines Physical & Chemical Properties: Multiple Properties Toxicological information: Carcinogenicity Toxicological information: Skin corrosion/irritation Toxicological information: Other information Other information: Disclaimer GHS: Classification

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