

1. Identification

Product identifier: HYDREX 1255

Other means of identification: None.

Recommended use of the chemical and restrictions on use

Recommended use: Boiler Water Treatment. PROFESSIONAL USE ONLY

Recommended restrictions: No other uses are advised.

Manufacturer/Importer/Supplier/Distributor information

SupplierAddress: Veolia Water Technologies (SEA) PTE LTD
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2. Hazards identification

GHS classification

Physical hazards: Not classified.

Health hazards: Skin corrosion/irritation Category 2
Serious eye damage/eye irritation Category 2A

Environmental hazards: Not classified.

GHS label elements, including precautionary statements

Pictograms:



Signal word: WARNING

Hazard statements: H315 - Causes skin irritation.
H319 - Causes serious eye irritation.

Precautionary statement

Prevention: P280 - Wear protective gloves/protective clothing/eye protection/face protection

Response: P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P321 - Specific treatment (see First aid measures on this label).
P332 + P313 - If skin irritation occurs: Get medical advice/attention.
P337 + P313 - If eye irritation persists: Get medical advice/attention.

Storage: Not available

Disposal: P501 - Dispose of contents/container in accordance with local / regional / national / international regulations.

Other hazards which do not result in classification:

None known.

Supplemental information

None

3. Composition/information on ingredients

Substance or mixture	Mixture		
Chemical name	Common name and synonyms	CAS Number	Concentration (%)
Nitrilotrimethylene tris (phosphonic acid)		6419-19-8	1 - 5
Maleic Acid		110-16-7	< 1
Other components below reportable levels			> 94

4. First-aid measures

Inhalation:	Move to fresh air. Call a physician if symptoms develop or persist
Skin contact:	Wash off with soap and water. Get medical attention if irritation develops and persists
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. Get medical attention if irritation develops and persists.
Ingestion:	Rinse mouth. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.
Most important symptoms/effects, acute and delayed:	Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.
Indication of immediate medical attention and special treatment needed:	Provide general supportive measures and treat symptomatically. Keep victim warm. Keep victim under observation. Symptoms may be delayed.
General information:	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

5. Fire-fighting measures

Suitable extinguishing media:	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).
Unsuitable extinguishing media:	Not available.
Specific hazards arising from the chemical:	During fire, gases hazardous to health may be formed.
Fire fighting equipment/instructions:	Move containers from fire area if you can do so without risk.
Special protective equipment and precautions for firefighters:	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
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, protective equipment and emergency procedures:	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. For personal protection, see section 8 of the SDS.
Environmental precautions:	Avoid discharge into drains, water courses or onto the ground.
Methods and materials for containment and cleaning up:	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.

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

Precautions for safe handling:	Avoid forming spray/aerosol mists. Do not taste or swallow. Avoid contact with eyes. Avoid prolonged exposure. When using, do not eat, drink or smoke. Provide adequate ventilation. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Observe good industrial hygiene practices.
Conditions for safe storage, including any incompatibilities:	Protect from sunlight. Store in tightly closed container. Store away from incompatible materials (see Section 10 of the SDS). Store in cool, dry place.

8. Exposure controls/personal protection

Occupational exposure limits	No exposure limits noted for ingredient(s)
Appropriate engineering control measures:	Ensure adequate ventilation, especially in confined areas.
Individual protection measures, such as personal protective equipment	
Eye/face protection:	Not available.
Skin protection:	
Hand protection	Chemical resistant gloves. Suitable gloves can be recommended by the glove supplier.
Other	Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended. Chemical resistant gloves.
Respiratory protection:	In case of insufficient ventilation, wear suitable respiratory equipment. Avoid forming spray/aerosol mists.
Thermal hazards:	Wear appropriate thermal protective clothing, when necessary.
General hygiene considerations:	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	Clear
Physical state:	Liquid
Form:	Liquid
Color:	Colorless to light yellow
Odor:	Odorless
Odor threshold:	Not available.
pH (as is) @ 25 °C:	8.0 – 11.0
Melting point/freezing point:	< 32 °F (< 0 °C)
Initial boiling point:	273.99 °F (134.44 °C)
Flash point:	Not available.
Evaporation rate:	Not available.
Flammability:	Not available.
Flammability limit - lower(%):	Not available.

Flammability limit - upper(%):	Not available.
Explosive limit - lower (%):	Not available.
Explosive limit - upper (%):	Not available.
Vapor pressure:	Not available.
Vapor density:	Not available.
Relative density:	Not available.
Solubility (Water):	Miscible (100%, soluble in all proportion)
Explosive property:	Not explosive
Kinematic viscosity:	Not available.
Oxidizing property:	Not oxidizing
Specific gravity (@20 °C):	1.13 – 1.17

10. Stability and reactivity

Reactivity:	Not available.
Chemical stability:	Not available.
Possibility of hazardous reactions:	Not available.
Conditions to avoid:	Not available.
Incompatible materials:	Strong Acids.
Hazardous decomposition products:	At thermal decomposition temperatures, carbon monoxide and carbon dioxide, Phosphorus compounds.

11. Toxicological information

Information on likely routes of exposure

Inhalation:	No adverse effects due to inhalation are expected.
Skin contact:	Causes skin irritation.
Eye contact:	Causes serious eye irritation.
Ingestion:	Expected to be a low ingestion hazard

Acute toxicity Not available

Symptoms:	Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain
Skin corrosion/irritation:	Causes skin irritation. Causes serious eye 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
Reproductive toxicity:	
Specific target organ toxicity single exposure:	Not available.
Specific target organ toxicity repeated exposure:	Not available.
Aspiration hazard:	Not an aspiration hazard.
Chronic effects:	Not available.

12. Ecological information

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.

Product	Acute		Species	Test Results
Hydrex 1255	Algae	EC50	Algae	>= 440 mg/l, 96 Hours
	Crustacea	EC50	Daphnia	>= 5800 mg/l, 48 hours
	Fish	LC50	Fish	>= 1000 mg/l, 96 hours
Persistence and degradability:	No data is available on the degradability of any ingredients in the mixture			
Bioaccumulative potential:	No data available.			
Mobility in soil:	No data available.			
Other adverse effects:	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.			

13. Disposal considerations

Disposal methods/information: Collect and reclaim or dispose in sealed containers at licensed waste disposal site

Special precautions: Dispose in accordance with all applicable regulations

14. Transport information

ADR / RID / AND / IATA / 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

Safety, health and environmental regulations specific for the product in question

Prior Informed Consent (PIC) Substances (Environment Protection and Management Act, 2nd Schedule, Part 1, Jul. 1, 2013): Not regulated.

Chemical Weapons Prohibition (Act): Not applicable.

Environmental Protection and Management (Hazardous Substances) Regulations:
Nitrilotrimethylenetris(phosphonic acid) (CAS 6419-19-8) 0 KG

Environmental Public Health Act: Not applicable

International regulations

Montreal Protocol / Stockholm Convention / Rotterdam Convention / Kyoto protocol / Basel Convention: Not applicable.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Industrial Chemicals (AICIS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical	No

	Substances(EINECS)	
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances(PICCS)	Yes
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information

References:	Not available
Issued by:	VEOLIA WATER Technologies (SEA) Pte Ltd
Prepared by:	Veolia Hydrex Team
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