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## **HP 710**

### **CHLOR CHEMICAL FOR RE-CYCLED WATER**

#### **Product Description**

A broad-spectrum biocide developed specially for the control of microbiological fouling in water systems. It is effective in preventing the build up of microbiological slimes and can also be used to clean heavily fouled systems. High activity against aerobic bacteria (including legionella), anaerobic bacteria, algae and fungi.

#### **Areas of Use**

Water treatment systems

#### **Special Features**

- Fast killing biocide.
- Excellent pH stability ranging from pH 5 to pH 12.
- Has visible bleaching effect against a mixed culture of algae and highly effective at removing bacterial slimes from surfaces.
- Corrosion inhibiting properties makes it safe on most metals.
- Effective against gram positive bacteria, yeast and mold.

#### **Effective Algae Strains:**

Oscillatoria geminate, Nostoc spec, Phormidium foveolarum, Chlorella vulgaris  
Chlorella pyrenoidosa, Scenedesmus spec, Ulothrix subtilissima, Tribonema aequale

#### **Effective Fungi Strains:**

Aspergillus niger, Aspergillus phoenicis, Penicillium funiculosum, Aitemaria altemata  
Cladosporium cladosporioides, Candida albicans, Endomyces pullulans, Chaetomium globosum

#### **Effective Bacteria Strains:**

Pseudomonas putida, Streptococcus faecium, Norcardia sp, Lactobacillus lactis  
Escherichia coli, Legionella pneumophila, Proteus vulgaris, Pseudomans aeruginose,  
Salmonella typhimurium, Bacillus subtilis, Enterobacter cloacae, Listeria monocytogenes,  
Streptococcus lactis, Streptococcus aureus

#### **Directions for use**

Dilute with water only. Dilution rates may vary depending on strains, general guidelines are:

- Maximum efficacy ~ dilute 1:2
- Minimum efficacy ~ dilute 1:8

#### **Precaution**

Avoid ingestion, inhalation, eye and skin contact. Flush or dilute with cold water if contacted in any way, and seek medical help if ingested, inhaled or contacted with eye.

**KLENCO (SINGAPORE) PTE LTD**

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KLENCO products are used in over 20 countries across Asia, the Middle East, Europe and Africa

# SAFETY DATA SHEET

SECTION 1 - IDENTIFICATION				
<b>Product Identifier:</b> HP 710		<b>Supplier:</b> Klenco (Singapore) Pte Ltd. <b>Address:</b> 18 Gul Crescent, Singapore 629527 <b>Department:</b> Chemical <b>Person in Charge:</b> Chemist		
<b>Other means of identification:</b> Chlor Chemical for Recycled Water		<b>Phone:</b> (65) 6862 3388 <b>Fax:</b> (65) 6861 7575 <b>Email:</b> info@klenco-asia.com <b>Emergency contact:</b> (65) 6862 3388 Ext 249		
<b>Date of SDS:</b> 1 January 2022				
<b>Recommended use and restriction on use:</b> HP 710 is ideal for water treatment systems.				
SECTION 2 - HAZARDS IDENTIFICATION				
<b>GHS classification:</b> Acute toxicity: Category 4; Skin irritation: Category 2; Eye irritation: Category 2				
<b>GHS label elements:</b> Pictogram:  Signal Words: Warning				
<b>Hazard statements:</b> H302: Harmful if swallowed H315: Causes skin irritation H320: Causes eye irritation				
<b>Precaution statements:</b> P102: Keep out of reach of children P233: Keep container tightly closed.				
SECTION 3 - COMPOSITION/ INFORMATION ON INGREDIENTS				
Chemical Identification	Component & Composition	Chemical Formula	CAS NO.	EC NO.
Tributyltetradecyl Phosphonium Chloride	< 10.0 %	C26H56ClP	81741-28-8	279-808-2
Water	> 90.0 %	H2O	7732-18-5	231-791-2
SECTION 4 – FIRST AID MEASURES				
<b>Inhalation:</b> Move to area of fresh air. If breathing has stopped, artificial respiration should be started. Oxygen may be administered if available. Call a physician. Never give anything by mouth to an unconscious person.				
<b>Skin contact:</b> Wash with large amounts of soap and water. If irritation persists, consult a physician.				
<b>Eye contact:</b> Flush with cool water for at least 15 minutes. Then consult a physician immediately.				
<b>Ingestion:</b> Induce vomiting. Dilute by drinking water. Call a physician immediately.				
<b>Notes to Physicians:</b> Treatment should be directed at preventing absorption, administering to symptoms (if they occur), and providing supportive therapy.				
SECTION 5 – FIRE-FIGHTING MEASURES				
<b>Suitable fire-extinguishing media:</b> Water, dry chemical, carbon dioxide and foam.				
<b>Specific hazards arising from the chemical:</b> Burning can produce carbon dioxide and/or carbon monoxide.				
<b>Special protective actions for fire fighters:</b> Fire fighters may be exposed to the products of combustion should wear a self-contained breathing apparatus with full protective equipment.				
SECTION 6 - ACCIDENTIAL RELEASE MEASURE				
<b>Personal precautions, protective equipment, and emergency measure:</b> Use proper protective equipment (chemical protection suit, gloves, goggles, mask, etc).				
<b>Environmental precautions:</b> Chemical substance should not be released into the environment (water, soil).				
<b>Methods and materials for containment and cleaning up:</b> Safely stop discharge. Contain material, as necessary, with dike or barrier. Stop material from contaminating soil or from entering sewers or bodies of water. Prevent run-off. Cover spills with absorbent clay, sawdust or inert material and place in closed chemical waste containers. Dispose of according to applicable local, state and federal regulations.				
SECTION 7 - HANDLING AND STORAGE				
<b>Precaution for safe handling:</b> Wash thoroughly after handling, especially before eating and drinking. Wash contaminated goggles, face-shield, and gloves. Launder contaminated clothing before re-use.				
<b>Conditions for safe storage, including any incompatibilities:</b> Store in cool, dry, well-ventilated area at room temperature. Store away from any oxidizing materials. Do not re-use empty container for food, clothing or products for human or animal consumption or where skin contact can occur.				

<b>SECTION 8 - EXPOSURE CONTROLS/ PERSONAL PROTECTION</b>	
<b>Control parameters/ Occupational exposure limits:</b>	ACGIH - TLV: None
<b>Appropriate engineering control measures:</b>	Normal ventilation is sufficient
<b>Personal Protection:</b>	Use the protective equipment such as rubber/PVC gloves; protective glasses/goggles if splashing is anticipated.
<b>SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES</b>	
<b>Appearance &amp; Odour:</b>	Clear odourless liquid
<b>Solubility in water:</b>	Complete.
<b>Boiling Point:</b>	100 °C
<b>Specific Gravity:</b>	1.000 +/- 0.005 g/cm <sup>3</sup>
<b>PH:</b>	7.0 +/- 0.5
<b>Flash Point (T.C.C.):</b>	None to boiling
<b>Flammable Limits - Upper:</b>	Not applicable
<b>Lower:</b>	Not applicable
<b>Vapour Pressure:</b>	Not determined
<b>Vapour Density:</b>	Not determined
<b>SECTION 10 - STABILITY AND REACTIVITY</b>	
<b>Reactivity/ In compatible materials:</b>	Strong alkalis and oxidizers, anionic surfactants, complex phosphate.
<b>Chemical stability:</b>	Stable under normal temperature and pressure.
<b>Possibility of hazardous reaction:</b>	Will not occur.
<b>Condition to avoid:</b>	Not applicable
<b>SECTION 11 – TOXICOLOGICAL INFORMATION</b>	
<b>Acute toxicity: Oral:</b>	Low oral toxicity, but ingestion may cause irritation of the gastrointestinal tract.
<b>SECTION 12 – ECOLOGICAL INFORMATION</b>	
<b>Toxicity:</b>	See Section 11
<b>Persistence and degradability:</b>	Product degrades readily by reaction of carbon dioxide in the air as well as decomposition by microorganism.
<b>Bioaccumulative potential:</b>	It is soluble in water and does not bio-accumulate.
<b>SECTION 13 – DISPOSAL CONSIDERATIONS</b>	
<b>Disposal method:</b>	Dispose off in an approved waste facility according to local regulations. It is recommended that an alternative be selected according to the following order of preference, based upon environmental acceptability: (1) Re-cycle or rework, if feasible (2) Incinerate at an authorized facility (3) Treat at an acceptable waste treatment facility.
<b>SECTION 14 – TRANSPORT INFORMATION</b>	
This material is non-regulated and no special requirement is necessary. HS Code: 34021990	
<b>SECTION 15 – REGULATORY INFORMATION</b>	
<b>International regulation:</b>	
<b>Classification:</b>	This product is not classified as hazardous due to its formulated active concentration.
<b>Risk phrases:</b>	R22 Harmful if swallowed R36/38 Irritating to eyes and skin
<b>Safety phrases:</b>	S02 Keep out of reach of children S07 Keep container tightly closed
<b>SECTION 16 – OTHER INFORMATION</b>	
<b>Hazard Rating: HMIS (Hazardous Materials Information System)</b>	
<b>HEALTH:</b>	0
<b>FLAMMABILITY:</b>	0
<b>REACTIVITY:</b>	0
0=Minimal, 1=Slight, 2=Moderate, 3=Serious, 4=Extreme	

**NOTICE:** SDS is correct at date of publication. It is not necessarily fully adequate for every circumstance, nor to be confused with or followed in violation of applicable laws or insurance requirements. Health hazards and effects of over-exposure apply only to negligent handling or misuse of product in its concentrated form (as supplied); and not routine exposure to diluted product under normal use. No warranty, express or implied, of merchantability, fitness or accuracy of data is made; as such the vendor assumes no responsibility for injury or damages resulting from use of this product.