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## **POWER DELIMER**

### **Heavy Duty Scale and Rust Remover**

#### **Product Description**

A heavy-duty product for dissolving scale and rust from pipes, equipment, urinal gutters and floors where calcium and magnesium deposits have formed. **POWER DELIMER** also removes mortar and cement left on concrete and ceramic floors after construction work. Dirty and stained mosaic and concrete floors can also be cleaned effectively.

#### **Special Features**

- Effective and fast reaction.
- Can be used on most metal and stone surfaces, except aluminum, magnesium, marble, terrazzo etc.

#### **Directions for Use**

Dilute **POWER DELIMER** with cold water only, add product to water and not vice versa.

- Heavy scale            - dilute 1:3
- Normal scale        - dilute 1:8
- Light scale           - dilute 1:15

Apply product to surface by mop, brush, or acid-resistant sprayer. Allow chemical reaction to take place for about 1 minute. Scrub or agitate well, then rinse thoroughly with water.

*NOTE: Use **POWER DELIMER** for one time use on severe build-up, and not as a regular cleaning solution. It will etch marble, terrazzo, and other types of smooth or polished surfaces. If unsure about suitability of **POWER DELIMER**, test on inconspicuous area to ascertain if surface is adversely affected.*

#### **Precautions**

This product is highly acidic. Avoid ingestion, inhalation, skin, and eye contact. Do not use bare hands to handle this product. Wear rubber gloves and protective clothing when handling. Allow for adequate ventilation when in use. If ingested, consume large amounts of cold water to dilute. If product contacts skin or eyes, flush thoroughly with cold water and seek medical help as soon as possible. Store in a cool place and keep container sealed.

# SAFETY DATA SHEET

SECTION 1 - IDENTIFICATION				
Product Identifier: POWER DELIMER		Supplier: Klenco (Singapore) Pte Ltd. Address: 18 Gul Crescent, Singapore 629527 Department: Chemical Person in Charge: Chemist		
Other means of identification Heavy Duty Scale & Rust Remover		Phone: (65) 6862 3388		
Date of SDS: 01 January 2024		Fax: (65) 6861 7575		
Recommended use and restriction on use: POWER DELIMER is for dissolving scale and rust from pipes, equipment, urinal gutters and floors where calcium and magnesium deposits have formed.		Email: info@klenco-asia.com Emergency contact: (65) 6862 3388 Ext 249		
SECTION 2 - HAZARDS IDENTIFICATION				
GHS classification: Acute toxicity: Category 3 Skin corrosion: Category 1,		Eye damage: Category 1		
GHS label elements: Pictogram:		Signal Words: Danger		
				
Hazard statements:		H301: Toxic if swallowed. H314: Causes skin burns and eye damage.		
Precaution statements:		P201: Obtain special instruction before use. P233: Keep container tightly closed. P280: Wear protective gloves/ protective clothing/ eye protection/ face protection.		
SECTION 3 - COMPOSITION/ INFORMATION ON INGREDIENTS				
Chemical Identification	Component & Composition	Chemical Formula	CAS NO.	EC NO.
Hydrochloric Acid	< 18.0 %	HCl	7647-01-0	231-595-7
Hydrofluoric Acid	< 2.0 %	HF	7664-39-3	231-634-8
Nonyl Phenol Ethoxylate	< 2.0 %	C33H60O10	9016-45-9	247-816-5
Burnt Sugar	< 1.0 %	C7H10O2	8028-89-5	232-435-9
Water	> 80.0 %	H <sub>2</sub> O	7732-18-5	231-791-2
SECTION 4 – FIRST AID MEASURES				
Inhalation: 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.				
Skin contact: Wash with large amounts of soap and water. If irritation persists, consult a physician.				
Eye contact: Flush with cool water for at least 15 minutes. Then consult a physician immediately.				
Ingestion: Induce vomiting. Dilute by drinking water. Call a physician immediately.				
Notes to Physicians: Treatment should be directed at preventing absorption, administering to symptoms (if they occur), and providing supportive therapy.				
SECTION 5 – FIRE-FIGHTING MEASURES				
Suitable fire-extinguishing media:		Water, dry chemical, fog and foam.		
Specific hazards arising from the chemical:		Burning can produce carbon dioxide, and/or carbon monoxide.		
Special protective actions for fire fighters:		Fire fighters may be exposed to the products of combustion should wear a self-contained breathing apparatus with full protective equipment.		
SECTION 6 - ACCIDENTAL RELEASE MEASURE				
Personal precautions, protective equipment, and emergency measure: Use proper protective equipment (chemical protection suit, gloves, goggles, mask, etc).				
Environmental precautions:		Chemical substance should not be released into the environment (water, soil).		
Methods and materials for containment and cleaning up: Safely stop discharge. Contain material, as necessary, with dike or barrier. Stop material from contaminating soil or from entering sewers or bodies of water. Provide optimum ventilation. Stop discharge, if safe to do so. Cover spills with absorbent clay, sawdust, inert material, soda ash, slaked lime and place in closed chemical waste containers. Dispose of according to applicable local, state and federal regulations.				
SECTION 7 - HANDLING AND STORAGE				
Precaution for safe handling: Wash thoroughly after handling, especially before eating and drinking. Wash contaminated goggles, face-shield, and gloves. Launder contaminated clothing before re-use.				
Conditions for safe storage, including any incompatibilities: This product is a corrosive liquid. Store in a cool, dry, well-ventilated area at room temperature. Keep away from strong alkalis and oxidizing agents especially chlorine releasing agents. Do not re-use empty container for food, clothing or products for human or animal consumption or where skin contact can occur.				

SECTION 8 - EXPOSURE CONTROLS/ PERSONAL PROTECTION	
Control parameters/ Occupational exposure limits:	ACGIH - TLV: Provide suitable personal protective equipment and/or ventilation to maintain exposure below TLV levels.
Appropriate engineering control measures:	Local exhaust ventilation is usually required, when vapours, mist, or dusts can be released.
Personal Protection:	Use the protective equipment such as rubber/PVC gloves, safety glasses/goggles.
SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES	
Appearance & Odour:	Clear brown liquid with characteristic odour.
Solubility in water:	Complete.
Boiling Point:	100 °C
Specific Gravity:	1.095 +/- 0.005 g/cm <sup>3</sup>
PH:	0.5 +/- 0.5
Flash Point (T.C.C.):	None to boiling
Vapour Pressure:	Not determined
Vapour Density:	Not determined
Flammable Limits - Upper:	Not applicable
Flammable Limits - Lower:	Not applicable
SECTION 10 - STABILITY AND REACTIVITY	
Reactivity/ In compatible materials:	Strong alkalis and oxidizing materials.
Chemical stability:	Stable under normal temperature and pressure.
Possibility of hazardous reaction:	Will not occur.
Condition to avoid:	Not applicable
SECTION 11 – TOXICOLOGICAL INFORMATION	
Acute toxicity: Oral:	Ingestion of high amount of product is fatal.
Skin or eye irritation:	This product contains Acidic material that will cause burns and intense irritation to eyes and/or skin.
SECTION 12 – ECOLOGICAL INFORMATION	
Toxicity:	Concentrations with a pH value of 6.0 or lower especially in fresh water may be fatal to fish and other aquatic organism. Can cause damage to aquatic plants and vegetation.
Persistence and degradability:	Product degrades readily by reaction of carbon dioxide in the air as well as decomposition by microorganism.
Bioaccumulative potential:	It is soluble in water and does not bio-accumulate.
SECTION 13 – DISPOSAL CONSIDERATIONS	
Disposal method:	Dispose of 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.
SECTION 14 – TRANSPORT INFORMATION	
This material is classified UN hazard code class 8 (Corrosive substances). HS Code: 34024290	
SECTION 15 – REGULATORY INFORMATION	
International regulation:	
Classification:	This product contains hydrochloric acid as an ingredient that is classified as corrosive under EC Classification.
Risk phrases:	R28 Very toxic if swallowed. R34 Causes burns.
Safety phrases:	S07 Keep container tightly closed. S18 Handle and open container with care. S50 Do not mix with oxidizing materials.
SECTION 16 – OTHER INFORMATION	
Hazard Rating: HMIS (Hazardous Materials Information System)	
HEALTH:	2
FLAMMABILITY:	0
REACTIVITY:	1
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.