



**MATERIAL SAFETY
DATA SHEET**

HMIS SYMBOL		HMIS		NFPA		NFPA RATING	
HEALTH	2	SEVERE	4	EXTREME	FIRE	0	
FLAMMABILITY	0	SERIOUS	3	HIGH	REACTIVITY	2	
REACTIVITY	2	MODERATE	2	MODERATE	TOXICITY	2	
		SLIGHT	1	SLIGHT	SPECIAL	b	
		MINIMAL	0	INSIGNIFICANT			

NE = Not Established; NA = Not Applicable Evaluation for OSHA HCS Hazardous Non-Hazardous

I. GENERAL INFORMATION

Product Name Kingdom Concrete Stains	Emergency Telephone Number 1-800-535-5053
Chemical Family Mixture	Telephone Number for Information 570-489-6025
Manufacturer Kingdom Products	Date Prepared 06/02/05
45 Underwood Road Throop, PA 18512	Signature of Preparer Robert Levetan
	Date Last Revised 02/11/09

II. HAZARDOUS INGREDIENTS

Principal Hazardous Components	Threshold Limit Value (Units)
Hydrochloric acid (7647-01-1)	5 ppm (ceiling)
May contain one or more of the following metal ions: Cu ⁺² , Fe ⁺³ , Fe ⁺² , Cr ⁺³ , CrO ₄ ⁺²	NE
CAS # (7758-99-0), (7758-95-3), (7705-08-0), (10588-01-9), (10025-73-7)	

III. PHYSICAL DATA

Boiling Point (°F)	~100° C	Specific Gravity (H₂O=1)	1.12 – 1.30
Vapor Pressure (mm Hg)	NE	Percent Volatile By Volume	NA
Vapor Density (Air=1)	NE	Evaporation Rate (H₂O=1)	~1
Solubility in Water	Soluble	pH	1- 2

Appearance & Odor: Flowable liquids of various colors with mild acidic odor.

IV. FIRE & EXPLOSION HAZARD DATA

Flash Point (Test Method): None -- Nonflammable			
Flammable Limits:	LEL NA	UEL NA	VOC CONTENT 0 g/L
Extinguishing Media: Same as for surrounding materials			
Special Fire Fighting Procedures: Wear NIOSN/MSHA approved self contained breathing apparatus if product is involved in a fire. Cool fire exposed containers with water spray.			
Unusual Fire & Explosion Hazards: Product exposed to high temperatures will evolve corrosive acid fumes.			

V. HEALTH HAZARD DATA

OSHA Permissible Exposure Limit NE	ACGIH Threshold Limit Value NE
Carcinogen - NTP Program Chromates are listed as possible carcinogens	Carcinogen - IARC Program

Symptoms of Over Exposure: **INHALATION:** Coughing, sore throat, shortness of breath, irritation of mucous membrane. **INGESTION:** Sore throat, abdominal pain, burning. May cause kidney damage. **EYES:** Can cause severe irritation and damage. **SKIN CONTACT:** Irritation and possible burns. May cause allergic reactions in some people. Repeated exposure should be avoided.

Medical Conditions Aggravated by Exposure: NE
Primary Route(s) of Entry: Skin, inhalation.
Emergency First Aid: **INGESTION:** Rinse mouth with water. Drink 1-2 glasses of water to dilute. Do not induce vomiting.
Get Immediate Medical Help. Never give anything by mouth to an unconscious person.
EYE CONTACT: Immediately flush with water and continue for 15 minutes, lifting both eyelids. **Get Medical Help.**
SKIN CONTACT: Wash with soap and water. Rinse thoroughly. Remove and wash contaminated clothing before reuse.
INHALATION: Remove to fresh air. If breathing difficulty occurs, administer oxygen. If difficulty continues, **Get Medical Help.**

VI. REACTIVITY DATA

Stability <input type="checkbox"/> Unstable <input checked="" type="checkbox"/> Stable	Conditions to Avoid: Temperatures above 40° C (120° F)
Incompatibility	Materials to Avoid: Alkaline products, bleach, Carbonates.
Hazardous Polymerization <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Conditions to Avoid: NA

Hazardous Decomposition Products: May generate acid fumes on exposure to heat.

VII. ENVIRONMENTAL PROTECTION PROCEDURES

Spill Response: Large quantities – Wear protective clothing and acid respirator during cleanup. Contain spill and reclaim as much as possible by mopping or collection on absorbent material. Collect and store in a sealable container. Sprinkle residue with soda ash or sodium bicarbonate to neutralize and flush neutral residue to drain.

Waste Disposal Method: Seal container and dispose of at an approved waste disposal facility. Alternatively, neutralize reclaimed liquid to a pH of 7-9 using soda ash or sodium bicarbonate and release to drain as local regulations permit.

VIII. SPECIAL PROTECTION INFORMATION

Eye Protection: Goggles	Skin Protection: rubber or plastic glove
Respiratory Protection (Specific Type): OSHA approved mask with acid cartridge if using in enclosed areas with poor ventilation.	Ventilation Recommended: <input checked="" type="checkbox"/> General Mechanical <input type="checkbox"/> Local Exhaust

Other Protection: NA

Hygienic Practices in Handling & Storage: Wash hands after using and before eating. Do not contaminate food or feed stuff.

Precautions for Repair & Maintenance of Contaminated Equipment: NA

Other Precautions: Read all label directions and precautions before using the product.

IX TRANSPORT INFORMATION

Identification Number	UN1789 or ORM-D (Based on inner package <4L)
Proper shipping name	Hydrochloric acid solution
Class/Division	8
Packaging Group	III

