



ENFORCER Products
 A Division of Acuity Specialty Products
 Group, Inc.
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Material Safety Data Sheet and Safe Handling and Disposal Information

Section 1. Chemical Product and Company Identification

Product name Calcium, Lime & Rust Stain Remover
Product Code HDRUST
Date of issue 04/26/05 **Supersedes** 01/31/03

Emergency Telephone Numbers **For a Medical Emergency:**
 INFOTRAC
 (877) 541-2016 (Toll Free - Calls Recorded)

For a Transportation Emergency:
 CHEMTREC
 (800) 424-9300 (Toll Free - Calls Recorded)

Printing Date:

Prepared by Compliance Services Group
 Acuity Specialty Products Group
 1420 Seaboard Industrial Blvd.
 Atlanta, GA 30318

Section 2. Composition, Information on Ingredients

Name of Hazardous Ingredients	CAS #	% by Weight	Exposure Limits
HYDROCHLORIC ACID; muriatic acid; hydrogen chloride; HCl	7647-01-0	1 - 5	ACGIH TLV/OSHA PEL (United States). CEIL: 5 ppm 8 hour(s). OSHA PEL (United States). CEIL: 7 mg/m ³ 8 hour(s).
HYDROXYACETIC ACID; glycolic acid; hydroxyethanoic acid	79-14-1	1 - 5	Not established
SULFAMIC ACID; amidosulfonic acid	5329-14-6	1 - 5	Not established

Section 3. Hazards Identification

Acute Effects **Routes of Entry** Dermal contact. Eye contact. Inhalation. Ingestion.
Skin Causes skin burns. Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.
Eyes Causes eye burns. Direct contact with the eyes can cause irreversible damage including blindness.
Inhalation Inhalation of the spray mist may produce severe irritation of respiratory tract, characterized by coughing, choking, or shortness of breath. Over-exposure by inhalation may cause respiratory irritation.
Ingestion Harmful if swallowed. May cause burns to mouth, throat and stomach.

HMIS	
Health	3
Fire Hazard	0
Reactivity	0
Personal Protection	D

Carcinogenic Effects Ingredients: Not listed as carcinogen by OSHA, NTP or IARC.

Chronic Effects The substance may be toxic to kidneys, liver, gastrointestinal tract. Repeated or prolonged exposure to the substance can produce target organs damage. Repeated or prolonged contact with spray mist may produce chronic eye irritation and severe skin irritation. Repeated or prolonged exposure to spray mist may produce respiratory tract irritation leading to frequent attacks of bronchial infection.

See Toxicological Information (section 11)

Section 4. First Aid Measures

Eye Contact Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately.
Skin Contact In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.
Inhalation If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. If irritation persists, get medical attention.
Ingestion Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If affected person is conscious, give plenty of water to drink. Get medical attention immediately.

Section 5. Fire Fighting Measures

Flash Point	Not applicable.	Flammable Limits	Not applicable.
Flammability	Non combustible.		
Fire Hazard	May emit toxic fumes under fire conditions.		
Fire-Fighting Procedures	Use an extinguishing agent suitable for surrounding fires. Do not release runoff from fire to sewers or waterways.		

**Section 6. Accidental Release Measures**

Spill Clean up	Put on appropriate personal protective equipment (see Section 8). Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container.
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Section 7. Handling and Storage

Handling	Avoid contact with eyes, skin and clothing. Do not ingest. Avoid breathing vapors or spray mists. Use only with adequate ventilation. Wash thoroughly after handling. Do not use with other products. Do not reuse product container. Observe label precautions.
Storage	Keep container tightly closed. Keep container in a cool, well-ventilated area. Keep out of the reach of children.

Section 8. Exposure Controls, Personal Protection**Personal Protection**

Eyes	Splash goggles. Face shield.
Body	Wear appropriate protective clothing to prevent skin contact. Recommended: Neoprene gloves. Nitrile gloves. Rubber gloves. Wear apron or coverall if potential for exposure to splashes.

Protective Clothing (Pictograms)

Respiratory	Use with adequate ventilation. A respirator is not needed under normal and intended conditions of product use.
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Section 9. Physical and Chemical Properties

Physical State	Liquid.	Color	Clear. Colorless to light yellow.
pH	<1 [Acidic.]	Odor	Sour. Acidic.
Boiling Point	100°C (212°F)	Vapor Pressure	Not determined.
Specific Gravity	1.068 (Water = 1)	Vapor Density	Not determined.
Solubility	Easily soluble in cold water, hot water.	Evaporation Rate	Not determined.
		VOC (Consumer)	0 (g/l).

Section 10. Stability and Reactivity

Stability and Reactivity	The product is stable.
Incompatibility	Reactive with oxidizing agents, organic materials., metals, alkalis. Do not use with other products.
Hazardous Polymerization	Will not occur.
Hazardous Decomposition Products	Not applicable.

Section 11. Toxicological Information

Toxicity to Animals	Hydrochloric Acid:
	ORAL (LD50): Acute: 900 mg/kg [Rabbit].
	VAPOR (LC50): Acute: 3124 ppm 1 hour(s) [Rat].
	HYDROXYACETIC ACID:
	ORAL (LD50): Acute: 1938 mg/kg [Rat.].
	SULFAMIC ACID:
	ORAL (LD50): Acute: 3160 mg/kg [Rat.].

Section 12. Ecological Information

Ecotoxicity	Not available.
Biodegradable/OECD	Not available.

Section 13. Disposal Considerations

Waste Information	Waste must be disposed of in accordance with federal, state and local environmental control regulations.
Waste Stream	Code: D002 Classification: - (Hazardous waste.) Origin: - (RCRA waste.)

Consult your local or regional authorities.

Section 14. Transport Information

Proper shipping name	Corrosive liquid, acidic, inorganic, n.o.s.(Hydrochloric acid, Sulfamic acid) or Consumer Commodity ORM-D in limited quantities
DOT Classification	Class 8: Corrosive liquid.
UN number	UN3264
TDG Classification	TDG Class 8: Corrosive liquid; 9.2: Environmentally hazardous material.

Section 15. Regulatory Information

U.S. Federal Regulations	SARA 313 toxic chemical notification and release reporting: No products were found. Clean Water Act (CWA) 311: Hydrochloric Acid (RQ 5,000 lbs) Clean air act (CAA) 112 regulated toxic substances: No products were found. All Components of this product are listed or exempt from listing on TSCA inventory.
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State Regulations	California prop. 65: No products were found.
WHMIS (Canada)	Class D-1B: Material causing immediate and serious toxic effects (TOXIC). Class D-2B: Material causing other toxic effects (TOXIC). Class E: Corrosive liquid.

Section 16. Other Information

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.