



Revision Number: 005.1

Issue date: 09/12/2014

## 1. PRODUCT AND COMPANY IDENTIFICATION

<b>Product name:</b>	<b>BONDERITE C-IC HX-357 MU ACID DEOXIDIZER known as DEOXIDIZER HX-357 MAKE UP</b>	<b>IDH number:</b>	891145
<b>Product type:</b>	Rust dissolver	<b>Region:</b>	United States
<b>Restriction of Use:</b>	None identified	<b>Contact information:</b>	
<b>Company address:</b>			
Henkel Corporation	Telephone: (860) 571-5100		
One Henkel Way	MEDICAL EMERGENCY Phone: Poison Control Center		
Rocky Hill, Connecticut 06067	1-877-671-4608 (toll free) or 1-303-592-1711		
	TRANSPORT EMERGENCY Phone: CHEMTREC		
	1-800-424-9300 (toll free) or 1-703-527-3887		
	Internet: www.henkelna.com		

## 2. HAZARDS IDENTIFICATION

### EMERGENCY OVERVIEW

**DANGER:** CONTAINS FLUORIDES. MAY CAUSE DELAYED BURNS (NOT IMMEDIATELY PAINFUL OR VISIBLE)! LONG TERM EXPOSURE TO FLUORIDES OVER YEARS MAY CAUSE FLUOROSIS! MAY BE CORROSIVE TO METALS. CAUSES SEVERE SKIN BURNS AND EYE DAMAGE. MAY CAUSE CANCER.

HAZARD CLASS	HAZARD CATEGORY
CORROSIVE TO METALS	1
SKIN CORROSION	1B
SERIOUS EYE DAMAGE	1
CARCINOGENICITY	1A

### PICTOGRAM(S)



### Precautionary Statements

<b>Prevention:</b>	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep only in original container. Do not breathe vapors, mist, or spray. Wash thoroughly after handling. Wear protective gloves, eye protection, and face protection. Use personal protective equipment as required.
<b>Response:</b>	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to remove. Continue rinsing. IF exposed or concerned: Get medical attention. Immediately call a poison control center or physician. Wash contaminated clothing before reuse. Absorb spillage to prevent material damage.
<b>Storage:</b>	Store locked up. Store in corrosive resistant container with a resistant inner liner.
<b>Disposal:</b>	Dispose of contents and/or container according to Federal, State/Provincial and local governmental regulations.

IDH number: 891145

Product name: BONDERITE C-IC HX-357 MU ACID DEOXIDIZER known as DEOXIDIZER HX-357 MAKE UP

Classification complies with OSHA Hazard Communication Standard (29 CFR 1910.1200) and is consistent with the provisions of the United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

See Section 11 for additional toxicological information.

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Component(s)	CAS Number	Percentage*
Sulfuric acid	7664-93-9	30 - 60
Hexafluorosilicic acid	16961-83-4	0.1 - 1

\* Exact percentage is a trade secret. Concentration range is provided to assist users in providing appropriate protections.

### 4. FIRST AID MEASURES

<b>Inhalation:</b>	If mist or vapor of this product is inhaled, remove person immediately to fresh air. Seek medical attention if symptoms develop or persist.
<b>Skin contact:</b>	Remove contaminated clothing and footwear. For skin contact, flush with large amounts of water. Seek immediate medical attention.
<b>Eye contact:</b>	In case of contact with the eyes, rinse immediately with plenty of water for 15 minutes, and seek immediate medical attention.
<b>Ingestion:</b>	Seek medical advice. DO NOT induce vomiting unless directed to do so by medical personnel. Give one to two glasses of water or milk. Never give anything by mouth to a victim who is unconscious or is having convulsions.
<b>Symptoms:</b>	See Section 11.

### 5. FIRE FIGHTING MEASURES

<b>Extinguishing media:</b>	Use media appropriate for surrounding material.
<b>Special firefighting procedures:</b>	Wear full protective clothing. Wear self-contained breathing apparatus.
<b>Unusual fire or explosion hazards:</b>	This product is an aqueous mixture which will not burn.
<b>Hazardous combustion products:</b>	Irritating and toxic gases or fumes may be released during a fire. Oxides of sulfur.

### 6. ACCIDENTAL RELEASE MEASURES

Use personal protection recommended in Section 8, isolate the hazard area and deny entry to unnecessary and unprotected personnel.

<b>Environmental precautions:</b>	Prevent further leakage or spillage if safe to do so. Wear appropriate personal protective equipment.
<b>Clean-up methods:</b>	Absorb spill with inert material. Shovel material into appropriate container for disposal. Do not allow product to enter sewer or waterways.

## 7. HANDLING AND STORAGE

**Handling:** Prevent contact with eyes, skin and clothing. Do not breathe vapor and mist. Wash thoroughly after handling. Do not take internally. For industrial use only. NEVER ADD WATER TO PRODUCT. For dilutions, add product slowly to water while stirring. Use caution; heat may be generated.

**Storage:** For safe storage, store at or above 40 °F (4.4 °C)  
Keep container tightly closed and in a cool, well-ventilated place away from incompatible materials. Thaw and mix thoroughly if frozen.

For information on product shelf life, please review labels on container or check the Technical Data Sheet.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Employers should complete an assessment of all workplaces to determine the need for, and selection of, proper exposure controls and protective equipment for each task performed.

Hazardous Component(s)	ACGIH TLV	OSHA PEL	AIHA WEEL	OTHER
Sulfuric acid	0.2 mg/m3 TWA Thoracic fraction.	1 mg/m3 PEL	None	None
Hexafluorosilicic acid	2.5 mg/m3 TWA (as F)	2.5 mg/m3 PEL (as F) 2.5 mg/m3 TWA Dust.	None	None

**Engineering controls:** Provide local and general exhaust ventilation to effectively remove and prevent buildup of any vapors or mists generated from the handling of this product.

**Respiratory protection:** If ventilation is not sufficient to effectively prevent buildup of aerosols, mists or vapors, appropriate NIOSH/MSHA respiratory protection must be provided.

**Eye/face protection:** Wear chemical goggles; face shield (if splashing is possible).

**Skin protection:** Chemical resistant, impermeable gloves. Recommended gloves include PVC and neoprene. Use of impervious apron and boots are recommended.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical state:</b>	Liquid
<b>Color:</b>	Colorless
<b>Odor:</b>	Acidic
<b>Odor threshold:</b>	Not available.
<b>pH:</b>	< 1
<b>Vapor pressure:</b>	Not determined
<b>Boiling point/range:</b>	> 100 °C (> 212°F) calculated
<b>Melting point/ range:</b>	Not determined
<b>Specific gravity:</b>	1.31 - 1.35
<b>Vapor density:</b>	Not determined
<b>Flash point:</b>	Not applicable
<b>Flammable/Explosive limits - lower:</b>	Not available.
<b>Flammable/Explosive limits - upper:</b>	Not available.
<b>Autoignition temperature:</b>	Not applicable
<b>Evaporation rate:</b>	Not available.
<b>Solubility in water:</b>	Complete
<b>Partition coefficient (n-octanol/water):</b>	Not determined
<b>VOC content:</b>	Not applicable
<b>Viscosity:</b>	Not available.
<b>Decomposition temperature:</b>	Not available.

## 10. STABILITY AND REACTIVITY

<b>Stability:</b>	Stable at normal conditions.
<b>Hazardous reactions:</b>	Will not occur.
<b>Hazardous decomposition products:</b>	Oxides of sulfur.
<b>Incompatible materials:</b>	Keep away from organic, alkaline, and oxidizing materials, metallic powders, chromates, chlorates, nitrates, and carbides.
<b>Reactivity:</b>	Not available.
<b>Conditions to avoid:</b>	Store away from incompatible materials.

## 11. TOXICOLOGICAL INFORMATION

**Relevant routes of exposure:** Skin, Inhalation, Eyes

### Potential Health Effects/Symptoms

<b>Inhalation:</b>	Mists, vapors or liquid may cause severe irritation or burns.
<b>Skin contact:</b>	This product is severely irritating to the skin and may cause burns.
<b>Eye contact:</b>	This product is severely irritating to the eyes and may cause irreversible damage including burns and blindness.
<b>Ingestion:</b>	This product may produce corrosive damage to the gastrointestinal tract if it is swallowed.

Hazardous Component(s)	LD50s and LC50s	Immediate and Delayed Health Effects
Sulfuric acid	Inhalation LC50 (RAT, 1 h) = 347 mg/l	Carcinogen, Corrosive, Irritant, Lung
Hexafluorosilicic acid	Oral LD50 (RAT) = 430 mg/kg	Blood, Central nervous system, Corrosive, Carcinogen, Gastrointestinal tract, Irritant, Kidney, Metabolic, Muscle, Teeth, Less weight gain and food intake.

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Sulfuric acid	Known To Be Human Carcinogen.	Group 1	No
Hexafluorosilicic acid	No	No	No

## 12. ECOLOGICAL INFORMATION

**Ecological information:** Because of the low pH of this product, it would be expected to produce significant ecotoxicity upon exposure to aquatic organisms and aquatic systems.

### 13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

**Recommended method of disposal:** Follow all local, state, federal and provincial regulations for disposal.

**Hazardous waste number:** This product, if discarded directly, would be a characteristic RCRA corrosive waste (D002).

### 14. TRANSPORT INFORMATION

The transport information provided in this section only applies to the material/formulation itself, and is not specific to any package/configuration.

#### U.S. Department of Transportation Ground (49 CFR)

**Proper shipping name:** Sulfuric acid  
**Hazard class or division:** 8  
**Identification number:** UN 2796  
**Packing group:** II  
**DOT Hazardous Substance(s):** Sulfuric acid

#### International Air Transportation (ICAO/IATA)

**Proper shipping name:** Sulphuric acid  
**Hazard class or division:** 8  
**Identification number:** UN 2796  
**Packing group:** II

#### Water Transportation (IMO/IMDG)

**Proper shipping name:** SULPHURIC ACID  
**Hazard class or division:** 8  
**Identification number:** UN 2796  
**Packing group:** II

### 15. REGULATORY INFORMATION

#### United States Regulatory Information

**TSCA 8 (b) Inventory Status:** All components are listed or are exempt from listing on the Toxic Substances Control Act Inventory.

**TSCA 12 (b) Export Notification:** None above reporting de minimis

**CERCLA/SARA Section 302 EHS:** Sulfuric acid (CAS# 7664-93-9).  
**CERCLA/SARA Section 311/312:** Immediate Health, Delayed Health, Reactive  
**CERCLA/SARA Section 313:** This product contains the following toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (40 CFR 372). Sulfuric acid (CAS# 7664-93-9).  
**CERCLA Reportable quantity:** Sulfuric acid (CAS# 7664-93-9) 1,000 lbs. (454 kg)  
**California Proposition 65:** This product contains a chemical known in the State of California to cause cancer.

#### Canada Regulatory Information

**CEPA DSL/NDL Status:** All components are listed on or are exempt from listing on the Canadian Domestic Substances List.

### 16. OTHER INFORMATION

This safety data sheet contains changes from the previous version in sections: New Safety Data Sheet format.

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