

Revision Number: 005.0

#### **PRODUCT AND COMPANY IDENTIFICATION** 1.

Product name:

One Henkel Way

Rocky Hill, Connecticut 06067

**BONDERITE C-IC SC0592 ACID** CLEANER known as SC0592 Product type/use: Cleaner **Restriction of Use:** None identified Company address: Henkel Corporation

**IDH number:** Item number: **Region:** 

593851 United States **Contact information:** Telephone: +1 (860) 571-5100 MEDICAL EMERGENCY Phone: Poison Control Center 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

593851

# 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**

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

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

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Hazardous Component(s)	CAS Number	Percentage*
Ferric sulfate	10028-22-5	10 - 30
Sulfuric acid	7664-93-9	10 - 30
Nitric acid	7697-37-2	5 - 10
Ammonium bifluoride	1341-49-7	1 - 5

\* Exact percentages may vary or are trade secret. Concentration range is provided to assist users in providing appropriate protections.

	4. FIRST AID MEASURES
Inhalation:	If mist or vapor of this product is inhaled, remove person immediately to fresh air. Seek medical attention if symptoms develop or persist. If breathing is difficult, give oxygen. Trained personnel should administer 2.5% calcium gluconate through a nebulizer for 20 minutes.
Skin contact:	Remove contaminated clothing and footwear while rinsing the affected area with large amounts of running water for at least 15 minutes. GET IMMEDIATE MEDICAL ATTENTION. If iced solution of 0.13% aqueous Benzalkonium Chloride (Zephiran) or 2.5% calcium gluconate gel is available, rinsing may be limited to 5 minutes, with the soak solution or gel applied as soon as the rinsing is stopped. Gloves should be worn when applying the gel to prevent transfer of HF and secondary burns. If using calcium gluconate gel, it should be continuously re-applied and massaged into the affected area until pain has been relieved for at least 30 minutes. If Benzalkonium Chloride (Zephiran) or calcium gluconate gel is not available, rinsing must continue until medical treatment is provided.
Eye contact:	Immediately flush affected eye with large amounts of gently flowing water or 0.9% sterile saline solution for at least 15 minutes. Hold eyelid wide open. Get immediate medical attention. Eye flushing should continue during transportation to a doctor.
Ingestion:	Get immediate medical attention. Do not induce vomiting. Attempt immediate administration of a fluoride binding substance: milk, chewable calcium carbonate tablets or 4-8 ounces (120-240 ml) of milk of magnesia or a liquid antacid. Avoid large amounts of liquid as it may induce vomiting. Never give anything by mouth to an unconscious person.
Symptoms:	See Section 11.
Notes to physician:	Ocular exposure to corrosive fluoride compounds has been treated with isotonic sodium chloride or magnesium chloride. Dermal exposure to corrosive fluoride compounds has been treated with calcium gluconate or calcium carbonate gel applied topically to the affected areas to relieve pain at the site of exposure. Treatment of hypocalcemia associated with corrosive fluoride compounds exposure may be corrected by intravenous calcium gluconate or calcium chloride. Treatment of hypomagnesemia may be corrected by intravenous magnesium sulfate. If cyanosis is severe, intravenous injection of methylene blue, 1 mg/kg body weight, may be of value.

# 5. FIRE FIGHTING MEASURES

Extinguishing media:	Use media appropriate for surrounding material.
Special firefighting procedures:	Wear full protective clothing. Wear self-contained breathing apparatus.
Unusual fire or explosion hazards:	May react with metals to form flammable hydrogen gas. This product is an aqueous mixture which will not burn.

Hazardous combustion products:

Upon decomposition, this product emits oxides of sulfur, carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons. Oxides of nitrogen. May liberate hydrogen fluoride. Ammonia.

## 6. ACCIDENTAL RELEASE MEASURES

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

Environmental precautions:	Prevent further leakage or spillage if safe to do so. Wear appropriate protective equipment and clothing during clean-up. Dike the spilled material, where this is possible. Block any potential routes to water systems.	
Clean-up methods:	Absorb spill with inert material. Shovel material into appropriate container for disposal. Dispose of according to Federal, State and local governmental regulations.	

7. HANDLING AND STORAGE

Handling:

Avoid contact with eyes, skin and clothing. Avoid breathing vapors or mists of this product. Wash thoroughly after handling. Do not take internally. For industrial use only. Provide adequate ventilation. Use caution when combining with water; DO NOT add water to acid, ALWAYS add acid to water while stirring to prevent release of heat, steam and fumes.

Storage:

For safe storage, store between -20 °C (-4°F) and 50 °C (122°F) Keep container tightly closed and in a cool, well-ventilated place away from incompatible materials. Supplier recommends that this product be stored with a vented bung.

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
Ferric sulfate	1 mg/m3 TWA (as Fe)	None	None	None
Sulfuric acid	0.2 mg/m3 TWA Thoracic fraction.	1 mg/m3 PEL	None	None
Nitric acid	2 ppm TWA 4 ppm STEL	2 ppm (5 mg/m3) PEL	None	None
Ammonium bifluoride	2.5 mg/m3 TWA (as F)	2.5 mg/m3 PEL (as F) 2.5 mg/m3 TWA Dust.	None	None

**Engineering controls:** 

**Respiratory protection:** 

Eye/face protection:

Skin protection:

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

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

Wear chemical goggles; face shield (if splashing is possible).

Chemical resistant, impermeable gloves. Gloves should be tested to determine suitability for prolonged contact. Use of impervious apron and boots are recommended.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Color: Odor: Odor threshold: pH: Vapor pressure: Liquid brown Acidic Not available. < 1.0 Not applicable

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Boiling point/range:	> 225 °F (> 107.2 °C)
Melting point/ range:	Not available.
Specific gravity:	1.365 - 1.405
Vapor density:	Not available.
Flash point:	107 °C (224.6 °F)
Flammable/Explosive limits - lower:	Not applicable
Flammable/Explosive limits - upper:	Not applicable
Autoignition temperature:	Not applicable
Flammability:	Not applicable
Evaporation rate:	Not available.
Solubility in water:	Complete
Partition coefficient (n-octanol/water):	Not available.
VOC content:	Not applicable
Viscosity:	Not available.
Decomposition temperature:	Not available.

# **10. STABILITY AND REACTIVITY**

Stability:	Stable at normal conditions.	
Hazardous reactions:	Will not occur.	
Hazardous decomposition products:	May liberate hydrogen fluoride. Upon decomposition, this product may yield oxides of nitrogen and ammonia, carbon dioxide, carbon monoxide and other low molecular weight hydrocarbons. Oxides of sulfur.	
Incompatible materials:	Avoid contact with organic materials, oils, greases, and any oxidizable materials. This product may react with strong alkalies. Adding water to this product may cause localized overheating and splattering.	
Reactivity:	Not available.	
Conditions to avoid:	Store away from incompatible materials.	
11. TOXICOLOGICAL INFORMATION		

Relevant routes of exposure:

Skin, Inhalation, Eyes

## Potential Health Effects/Symptoms

Inhalation:	Mists, vapors or liquid may cause severe irritation or burns. Contains fluorides. Exposure to fluorides over years may cause fluorosis.
Skin contact:	This product is severely irritating to the skin and may cause burns. Liquid or vapor can cause fluoride-type irritation or burns which may not be immediately painful or visible. Hydrofluoric acid will penetrate the skin and attack underlying tissue and bone. Large burns (over 25 square inches) may also cause hypocalcemia and other systemic effects which may be fatal.
Eye contact:	This product is severely irritating to the eyes and may cause irreversible damage including burns and blindness.
Ingestion:	Ingestion of small amounts of this product may result in potentially fatal hypocalcemia and systemic toxicity. Ingestion of large amounts of this product may result in fluoride poisoning including symptoms of calcification of the ligaments and severe bone changes making normal movements painful, mottling of the teeth, pulmonary fibrosis, anemia, anorexia, dental effects, and possibly death. Ingestion causes burns of the upper digestive and respiratory tracts. Contains fluorides. Exposure to fluorides over years may cause fluorosis.

Hazardous Component(s)	LD50s and LC50s	Immediate and Delayed Health Effects
Ferric sulfate	None	Eyes, Gastrointestinal, Irritant, Liver, Lung, Metabolic, Vascular
Sulfuric acid	None	Carcinogen, Corrosive, Irritant
Nitric acid	None	Irritant, Corrosive, Lung, Teeth
Ammonium bifluoride Oral LD50 (Rat) +/- 130 mg/kg		Cardiac, Corrosive, Gastrointestinal tract, Irritant, Kidney, Lung, Metabolic, Nervous System, Respiratory, Teeth

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Ferric sulfate	No	No	No
Sulfuric acid	Known To Be Human Carcinogen.	Group 1	No
Nitric acid	No	No	No
Ammonium bifluoride	No	No	No

# 12. ECOLOGICAL INFORMATION

**Ecological information:** 

Not available.

# **13. DISPOSAL CONSIDERATIONS**

## Information provided is for unused product only.

Recommended method of disposal:

Dispose of according to Federal, State and local governmental regulations.

## **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 (4 Proper shipping name: Hazard class or division: Identification number: Packing group: DOT Hazardous Substance(s):	<b>I9 CFR)</b> Corrosive liquid, acidic, inorganic, n.o.s. (Nitric acid, Sulfuric acid) 8 UN 3264 II Ferric sulfate, Sulfuric acid
International Air Transportation (ICAO/IATA) Proper shipping name: Hazard class or division: Identification number: Packing group:	Corrosive liquid, acidic, inorganic, n.o.s. (Nitric acid, Sulphuric acid) 8 UN 3264 II
Water Transportation (IMO/IMDG) Proper shipping name: Hazard class or division: Identification number: Packing group:	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Nitric acid, Sulphuric acid) 8 UN 3264 II

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# 15. REGULATORY INFORMATION

#### **United States Regulatory Information**

TSCA 8 (b) Inventory Status:	All components are listed as active or are exempt from listing on the Toxic Substances Control Act (TSCA) inventory.
TSCA 12 (b) Export Notification:	None above reporting de minimis
CERCLA/SARA Section 302 EHS: CERCLA/SARA Section 311/312: CERCLA/SARA Section 313: CERCLA Reportable quantity:	Sulfuric acid (CAS# 7664-93-9). Nitric acid (CAS# 7697-37-2). Immediate Health, Delayed Health 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). Nitric acid (CAS# 7697-37-2). Ammonium bifluoride (CAS# 1341-49-7). Ammonium fluoride (CAS# 12125-01-8). Ferric sulfate (CAS# 10028-22-5) 1,000 lbs. (454 kg) Sulfuric acid (CAS# 7664-93-9) 1,000 lbs. (454 kg) Nitric acid (CAS# 7697-37-2) 1,000 lbs. (454 kg)
California Proposition 65:	Ammonium bifluoride (CAS# 1341-49-7) 100 lbs. (45.4 kg) This product contains a chemical known in the State of California to cause cancer.
Camornia Proposition 65.	
Canada Regulatory Information	
CEPA DSL/NDSL 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.

Prepared by: Regulatory Affairs

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