



Revision Number: 001.2

Issue date: 09/11/2014

**1. PRODUCT AND COMPANY IDENTIFICATION**

**Product name:** BONDERITE C-IC SMUTGO NC AERO known as TURCO LIQUID SMUT-GO NC  
**IDH number:** 597213  
**Product type:** Rust dissolver  
**Restriction of Use:** None identified  
**Region:** United States  
**Company address:** Henkel Corporation, One Henkel Way, Rocky Hill, Connecticut 06067  
**Contact information:** Telephone: (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

**2. HAZARDS IDENTIFICATION**

**EMERGENCY OVERVIEW**

**DANGER:** HARMFUL IF SWALLOWED.  
 CAUSES SEVERE SKIN BURNS AND EYE DAMAGE.  
 MAY CAUSE CANCER.

HAZARD CLASS	HAZARD CATEGORY
ACUTE TOXICITY ORAL	4
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. Do not breathe vapors, mist, or spray. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves, eye protection, and face protection. Use personal protective equipment as required.

**Response:** If SWALLOWED: Immediately call poison control or physician if you feel unwell. 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.

**Storage:** Store locked up.

**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

Hazardous Component(s)	CAS Number	Percentage <sup>a</sup>
Ferric sulfate	10028-22-5	30 - 60
Nitric acid	7697-37-2	5 - 10
Sodium hydrogendifluoride	1333-83-1	1 - 5
Sulfuric acid	7664-93-9	0.1 - 1

<sup>a</sup> 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 inhaled, immediately remove the affected person to fresh air. If not breathing, give artificial respiration. Get medical attention.
<b>Skin contact:</b>	Rinse with large amounts of running water. GET MEDICAL ATTENTION IMMEDIATELY! If iced 0.13% benzalkonium chloride (Zephiran) solution or 2.5% calcium gluconate gel are available, the rinsing may be limited to 5 minutes, with the soaks or gel applied as soon as the rinsing is stopped. If benzalkonium chloride or calcium gluconate gel is not available, rinsing must continue until medical treatment is provided.
<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>	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.
<b>Notes to physician:</b>	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.

### 5. FIRE FIGHTING MEASURES

<b>Extinguishing media:</b>	Use media appropriate for surrounding material.
<b>Special firefighting procedures:</b>	Fire fighters should wear full-face, self contained breathing apparatus and impervious protective clothing. Fire fighters should avoid inhaling any combustion products.
<b>Unusual fire or explosion hazards:</b>	This product is an aqueous mixture which will not burn.
<b>Hazardous combustion products:</b>	May liberate hydrogen fluoride.

### 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. Contain spill. Wear appropriate personal protective equipment. Do not allow product to enter sewer or waterways.
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**Clean-up methods:**

Collect spilled material with an inert absorbent such as sand or vermiculite. Place in properly labeled closed container. Thoroughly wash the area with water after a spill or leak clean-up. Dispose of according to Federal, State and local governmental regulations.

## 7. HANDLING AND STORAGE

**Handling:**

Avoid contact with eyes, skin and clothing. Provide adequate ventilation. Avoid breathing vapors or mists of this product. Keep container closed. Wash thoroughly after handling. Do not reuse the empty container.

**Storage:**

For safe storage, store between 40 °F (4.4 °C) and 100 °F (37.8 °C). Keep the container tightly closed and in a cool, well-ventilated place.

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/m <sup>3</sup> TWA (as Fe)	None	None	None
Nitric acid	2 ppm TWA 4 ppm STEL	2 ppm (5 mg/m <sup>3</sup> ) PEL	None	None
Sodium hydrogendifluoride	2.5 mg/m <sup>3</sup> TWA (as F)	2.5 mg/m <sup>3</sup> PEL (as F) 2.5 mg/m <sup>3</sup> TWA Dust.	None	None
Sulfuric acid	0.2 mg/m <sup>3</sup> TWA Thoracic fraction.	1 mg/m <sup>3</sup> PEL	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. Use of impervious apron and boots are recommended.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical state:</b>	Liquid
<b>Color:</b>	dark brown
<b>Odor:</b>	Acidic
<b>Odor threshold:</b>	Not available.
<b>pH:</b>	< 2
<b>Vapor pressure:</b>	20 mm hg
<b>Boiling point/range:</b>	> 100 °C (> 212°F)
<b>Melting point/ range:</b>	Not determined
<b>Specific gravity:</b>	1.30 - 1.34
<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 determined
<b>Evaporation rate:</b>	Not determined
<b>Solubility in water:</b>	Complete
<b>Partition coefficient (n-octanol/water):</b>	Not determined

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.  
**Incompatible materials:** Avoid contact with iron, aluminum, zinc, copper and strong bases.  
**Reactivity:** Not available.  
**Conditions to avoid:** Heat. Contact with most metals produces highly flammable hydrogen gas.

### 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:** Corrosive to the skin. Contact with the skin or mucous membranes may cause severe irritation and burns. Liquid or vapor can cause fluoride-type irritation or burns which may not be immediately painful or visible.  
**Eye contact:** This product is severely irritating to the eyes and may cause irreversible damage including burns and blindness.  
**Ingestion:** 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
Ferric sulfate	None	Eyes, Gastrointestinal, Irritant, Liver, Lung, Metabolic, Vascular
Nitric acid	Inhalation LC50 (RAT, 30 min) = 334 mg/l Inhalation LC50 (RAT, 30 min) = 244 mg/l Inhalation LC50 (RAT, 30 min) = 138 mg/l Inhalation LC50 (RAT, 4 h) = 65 mg/l	Irritant, Corrosive, Lung, Teeth
Sodium hydrogendifluoride	Oral LD50 (RAT) = 80 mg/kg	Blood, Cardiac, Central nervous system, Corrosive, Gastrointestinal, Irritant, Kidney, Metabolic, Muscle, Mutagen, Teeth, Less weight gain and food intake.
Sulfuric acid	Inhalation LC50 (RAT, 1 h) = 347 mg/l	Carcinogen, Corrosive, Irritant, Lung

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

### 12. ECOLOGICAL INFORMATION

**Ecological Information:** No data available.

### 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: Corrosive liquid, acidic, inorganic, n.o.s. (FERRIC SULPHATE, Nitric acid)  
Hazard class or division: 8  
Identification number: UN 3264  
Packing group: II  
DOT Hazardous Substance(s): Ferric sulfate, Sodium bifluoride

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

Proper shipping name: Corrosive liquid, acidic, inorganic, n.o.s. (FERRIC SULPHATE, Nitric acid)  
Hazard class or division: 8  
Identification number: UN 3264  
Packing group: II

#### Water Transportation (IMO/IMDG)

Proper shipping name: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (FERRIC SULPHATE, Nitric acid)  
Hazard class or division: 8  
Identification number: UN 3264  
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: Nitric acid (CAS# 7697-37-2).  
CERCLA/SARA Section 311/312: Immediate Health, Delayed Health  
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). Nitric acid (CAS# 7697-37-2).  
CERCLA Reportable quantity: Ferric sulfate (CAS# 10028-22-5) 1,000 lbs. (454 kg)  
Sodium hydrogendifluoride (CAS# 1333-83-1) 100 lbs. (45.4 kg)  
Nitric acid (CAS# 7697-37-2) 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/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: Reviewed MSDS. Reissued with new date.

Prepared by: John DiCerbo, Sr. Regulatory Affairs Specialist

Issue date: 09/11/2014

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Rudolph Bros. & Co.  
6550 Oley Speaks Way  
Canal Winchester, OH 43110  
Phone: 614-833-0707  
Fax: 800-600-9508  
e-mail: [rbcsupport@rudbro.com](mailto:rbcsupport@rudbro.com)  
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