Safety Data Sheet



Revision Number: 002.2

1. PRODUCT AND COMPANY IDENTIFICATION

Product name:

Product type: Restriction of Use: Company address: Henkel Corporation One Henkel Way Rocky Hill, Connecticut 06067

BONDERITE C-IC SMUTGO NCB AERO IDH number: known as TURCO LIQUID SMUT-GO NCB Rust dissolver None identified Region:

United States Contact information: Telephone: (860) 571-5100 MEDICAL EMERGENCY Phone: Poison Control Center 1-877-671-4608 (toll free) or 1-303-592-1711 TRANSPORT ENERGENCY Phone: CHEMTREC 1-800-424-9300 (toll free) or 1-703-527-3887 Internet: www.henkelna.com

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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, eve protection, |
|-----------------------|--|
| Response: | and face protection. Use personal protective equipment as required. 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 |
| Storage: | |
| Disposal: | Dispose of contents and/or container according to Federal, State/Provincial and local governmental regulations. |
| Storage: Disposal: | 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. Store locked up. Dispose of contents and/or container according to Federal, State/Provincial and local |

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* | |
|------------------------------|------------|-------------|--|
| Ferric sulfate | 10028-22-5 | 10 - 30 | |
| Nitric acid | 7697-37-2 | 10 - 30 | |
| Potassium hydrogendifluoride | 7789-29-9 | 1 - 5 | |
| Sulfuric acid | 7664-93-9 | 0.1 - 1 | |

* Exact percentage is a 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. |
| Skin contact: | Remove contaminated clothing and footwear. 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. Discard any shoes or clothing items that cannot be decontaminated. |
| Eye contact: | In case of contact with the eyes, rinse immediately with plenty of water for 15 minutes, and seek immediate medical attention. |
| Ingestion: | Get immediate medical attention. Do not induce vomiting. Give one to two glasses of water or milk. Never give anything by mouth to a victim who is unconscious or is having convulsions. |
| 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. |

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: | This product is an aqueous mixture which will not burn. |

Hazardous combustion products:

Flammable and explosive hydrogen gas may be formed when acids react with certain metals. Hydrogen fluoride gas may evolve when chemical is subjected to prolonged high temperature.

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. Contain spill. |
|----------------------------|--|
| Clean-up methods: | Collect spilled material with an inert absorbent such as sand or vermiculite. Place in properly labeled closed container. Flush area with water to remove trace residue. Dispose of according to Federal, State and local governmental regulations. |

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. Keep container closed. 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:

Keep in a cool, well ventilated area.

For safe storage, store between 40 °F (4.4 °C) and 100 °F (37.8 °C)

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 |
| Nitric acid | 2 ppm TWA 4 ppm STEL | 2 ppm (5 mg/m3) PEL | None | None |
| Potassium hydrogendifluoride | 2.5 mg/m3 TWA (as F) | 2.5 mg/m3 PEL (as F) 2.5 mg/m3 TWA Dust. | None | None |
| Sulfuric acid | 0.2 mg/m3 TWA Thoracic fraction. | 1 mg/m3 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

Physical state: Color: Odor: Odor threshold: Liquid brown Acidic Not available.

| pH: |
|--|
| Vapor pressure: |
| Boiling point/range: |
| Melting point/ range: |
| Specific gravity: |
| Vapor density: |
| Flash point: |
| Flammable/Explosive limits - lower: |
| Flammable/Explosive limits - upper: |
| Autoignition temperature: |
| Evaporation rate: |
| Solubility in water: |
| Partition coefficient (n-octanol/water): |
| VOC content: |
| Viscosity: |
| Decomposition temperature: |

< 1.5 20 mm hg Approximately > 100 °C (> 212°F) Not determined 1.40 - 1.43 > 1 Not available. Not applicable Not applicable < 1 Complete Not determined Not applicable Not available. Not available. 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: | Keep away from alkalis. Explosive HYDROGEN GAS may be released if aqueous solutions of this material come into contact with reactive metals (IRON, ZINC, ALUMINUM). Can attack glass and vitreous materials. |
| Reactivity: | Not available. |
| Conditions to avoid: | Avoid excessive heat and ignition sources. |
| 11. TOXICOLOGICAL INFORMATION | |
| Relevant routes of exposure: | Skin, Inhalation, Eyes |

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Potential Health Effects/Symptoms

| Inhalation: | This product is irritating to the respiratory system. Mists, vapors or liquid may cause severe irritation or burns. |
|---------------|---|
| Skin contact: | Contact with liquid may produce severe skin irritation including redness, inflammation and chemical burns. A component in this product may be absorbed through the skin, especially if skin is damaged. |
| Eye contact: | This product may cause severe irritation, redness, or blurred vision. Contact with the eyes can cause severe burns and permanent eye damage. |
| Ingestion: | Ingestion may produce burns to the lips, oral cavity, upper airway, esophagus and possibly the digestive tract. |

| 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 |
| Potassium hydrogendifluoride | None | No Target Organs |
| 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 |
| Potassium hydrogendifluoride | No | No | No |
| Sulfuric acid | Known To Be Human Carcinogen. | Group 1 | No |

12. ECOLOGICAL INFORMATION

Ecological information:

Harmful to aquatic organisms.

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, Nitric acid

| 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 |

IDH number: 597091

| Water Transportation (IMO/IMDG) Proper shipping name: | CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (FERRIC SULPHATE, Nitric acid) | |
|---|--|--|
| Hazard class or division: Identification number: Packing group: | 8 UN 3264 II | |
| 15. REGULATORY INFORMATION | | |

United States Regulatory Information

| TSCA 8 (b) Inventory Status: TSCA 12 (b) Export Notification: | All components are listed or are exempt from listing on the Toxic Substances Control Act Inventory. None above reporting de minimis |
|--|---|
| CERCLA/SARA Section 302 EHS: CERCLA/SARA Section 311/312: CERCLA/SARA Section 313: | 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). Nitric acid (CAS# 7697-37-2). |
| CERCLA Reportable quantity: | Ferric sulfate (CAS# 10028-22-5) 1,000 lbs. (454 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

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