SAFETY DATA SHEET SUPERIOR NO. 510

DATE REVISED: February 20, 2019

SECTION 1 -- IDENTIFICATION

Product Name/Part number: Superior No. 510Recommended use:Chloride free inorganic acid fluxManufacturer:Superior Flux & Mfg. Co.6615 Parkland BlvdCleveland OH, 44139For

Emergency Contact: CHEMTREC Emergency Phone: 1-800-424-9300 For other info: (440) 349-3000

SECTION 2 – HAZARD(S) IDENTIFICATION

Classification of the substance or mixture

GHS Classification in accordance with OSHA HCS (29 CFR 1910)

Acute toxicity, Oral (Category 4)	H302	
Acute toxicity, Inhalation (Category 4)	H332	
Acute toxicity, Dermal (Category 4)	H312	
Skin corrosion (Category 1B)	H314	
Serious eye damage (Category 1)	H319	
Specific target organ toxicity – Single exposure,		
Respiratory system (Category 3)	H335	
Acute aquatic toxicity (Category 2)	H401	
Chronic aquatic toxicity (Category 3)	H412	

See below for full text of H-Statement

GHS Label Elements, including precautionary statements Pictogram(s):



Signal Word: Danger

Hazard Statement(s)

- H302 Harmful if swallowed
- H332 Harmful if inhaled
- H312** Harmful if in contact with skin
- H314 Causes severe skin burns and eye damage
- H319** Causes serious eye damage
- H335 May cause respiratory irritation
- H401** Harmful to aquatic life
- H412 Harmful to aquatic life with long lasting effects

**May be omitted from label due to presence of stricter statement.

Precautionary statement(s)

- P261 Do not breathe mist, fumes, vapors, or spray
- P264 Wash any exposed skin thoroughly after handling
- P270 Do not eat, drink or smoke when using this product
- P271 Use only outdoors or in a well-ventilated area
- P273 Avoid release to the environment
- P280 Wear protective gloves, eye protection, and face protection

P301+P312+P330+P3	IF SWALLOWED: Call a POISON CENTER if you feel unwell.			
	Rinse mouth. Do NOT induce vomiting			
P303+P361+P353	IF ON SKIN (or hair): Remove all contaminated clothing. Rinse skin with			
	water or shower.			
P304+P340+P310	IF INHALED: Remove person to fresh air and keep comfortable for			
	breathing. Immediately call a POISON CENTER or doctor			
P305+P351+P338+P3	IF IN EYES: Rinse cautiously with water for several minutes.			
	Remove contact lenses, if present and easy to do. Continue rinsing.			
	Immediately call a POISON CENTER or doctor.			
P363	Wash contaminated clothing before reuse.			
P403+P223+P235	Store in a well-ventilated place. Keep container tightly closed. Keep cool.			
P405	Store locked up			
P501	Dispose of contents and/or container to an approved waste disposal plant			
Hazards not otherwise classified or not covered by GHS: None				

SECTION 3 – COMPOSITION INFORMATION

Components	CAS Number	%	
Hydrobromic Acid	10035-10-6	20-40	
Monoethanolamine	141-43-5	5-20	
Unlisted percentages are non-hazardous stabilizers, and water.			

SECTION 4 – FIRST AID MEASURES

Description of first aid measures

General advice: Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

- **Inhalation:** If breathed in, move to fresh air. If not breathing, give artificial respiration. Consult a physician.
- **Eyes:** Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Continue rinsing eyes during transport to hospital.

Skin: Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician.

Ingestion: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

Most Important Symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in section 2 (labeling)

Medical Conditions Generally Aggravated by Exposure: Any weakness of the lungs, kidneys or liver will be aggravated.

SECTION 5 – FIREFIGHTING MEASURES

Suitable Extinguishing Media: No data available

Special Hazards: Will release small amounts of hydrobromic acid

Special protective actions for firefighters: Wear self-contained breathing apparatus for

firefighting if necessary.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Personal Precautions and Equipment and emergency procedures: Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. *See section 8 for personal protection.*

Environmental Precautions: Prevent further leakage or spillage if safe to do so.

In Case Material is spilled: First, neutralize with soda ash or sodium bicarbonate. Dilute with water and place in container for disposal according to local regulations.

SECTION 7 - HANDLING AND STORAGE

- **Precautions for safe handling:** Avoid inhalation of vapor, fumes, or mist. Keep closed in a dry and well-ventilated place. Keep cool.
- **General Precautions:** Do not eat, drink, or smoke while using this product. Wash hands after use. Remove contaminated clothing and protective equipment before entering eating areas.

For full precaution statements see Section 2

Storage Requirements: Store in plastic containers in cool area. Keep container away from excessive heat.

SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION CONTROL PARAMETERS

OSHA Permissible Exposure Limit (PEL): 5 mg/m³ **ACGIH Threshold Limit Value (TLV):** 5 mg/m³

- **Engineering Controls:** Use local exhaust ventilation to maintain air concentrations of vapors and fumes below occupational exposure standards.
- Special Engineering Control Needs: No data available
- **Respiratory Protection:** Where risk assessment shows air-purifying respirators are appropriate, use a respirator with multi-purpose combination (USA) or ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face respirator. Use respirators and components tested an approved under appropriate government standards such as NIOSH (USA) or CEN (EU).
- **Protective Gloves:** Handle with gloves. (Nitrile Rubber recommended) Gloves must be inspected prior to use. Use proper glove removal techniques (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good lab practices. Wash and dry hands after handling.
- **Eye Protection:** Use appropriately fitting safety goggles. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (USA) or EN 166 (EU)
- **Body Protection:** Chemical resistant rubber apron if desired. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any

SECTION 9 - PHYSICAL AND CHEMICAL CHARACTERISTICS

- Appearance Odor **Odor threshold** pН Melting point/Freezing point Initial boiling point and boiling range Flash point **Evaporation rate** Flammability (Solid, gas) Upper flammability or explosive limits Lower flammability or explosive limits Vapor pressure Vapor density Relative density (Water = 1) Solubility(ies) Partition coefficient: n-octanol/water Auto-ignition temperature **Decomposition temperature** Viscosity
- Pink liquid None No data available No data available ~0°C/32°F ~104°C/220°F Not applicable No data available Not applicable Upper explosion limit: Not applicable Lower explosion limit: Not applicable No data available No data available 1.220 Miscible in water No data available Not applicable No data available No data available

SECTION 10 - STABILITY AND REACTIVITY

Reactivity: No data available
Stability: Product is stable under recommended storage conditions
Possibility of hazardous reactions: No data available
Conditions to Avoid: Excessive heat or cold, metals, strong oxidizers
Incompatibility: No data available
Hazardous Decomposition Products Small amounts of hydrobromic acid, nitrogen oxides (NOx), carbon oxides(Under fire conditions)
In the event of fire: See Section 5

SECTION 11 - TOXICOLOGICAL INFORMATION

Likely Route(s) of Exposure: Inhalation, ingestion, skin and eye contact Symptoms (Immediate and Chronic) from

Acute Exposure No data available

Prolonged or Repeated Exposure No data available

Measure(s) of toxicity

No data available

- **IARC:** No component of this product is present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
- **NTP:** No component of this product is present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
- **OSHA:** No component of this product is present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA

SECTION 12 - ECOLOGICAL INFORMATION

Toxicity

No data available Persistence and degradability

No data available

Bioaccumulative potential No data available

Mobility in soil No data available

Other adverse effects

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

SECTION 13 - DISPOSAL CONSIDERATIONS

Waste treatment methods

ProductOffer surplus and non-recyclable solutions to a licensed disposal company.
Contact a licensed professional waste disposal service to dispose of this material.Contaminated packagingDispose of as unused product.

SECTION 14- TRANSPORTATION

D.O.T. (USA)
Proper Shipping Name: Corrosive liquid, acidic, inorganic NOS (contains hydrobromic acid)
Identification Number: UN3264
Packing Group: III
Reportable Quantity (RQ): 5,000
Special Precautions to Note:Environmental Hazards: N/A
Type D.O.T. Label Required Information: Corrosive

SECTION 15 - REGULATORY INFORMATION

SARA 302 ComponentsNo Chemicals in this material are subject to the reporting
requirement of SARA Title III, Section 302.SARA 313 ComponentsNo chemicals in this material are subject to the reporting
requirement of SARA Title III, Section 313.SARA 311/312 HazardsAcute Health Hazard

California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

THIS PRODUCT IS ROHS 3 COMPLIANT

SECTION 16 - OTHER INFORMATION

Further information:

Judgments as to the suitability of information herein or the purchaser's purposes are necessarily the purchaser's responsibility. The above information does not represent any guarantee of the properties of the product. It is believed to be correct, but does not purport to be all inclusive and should be used only as a guide. Reasonable care has been taken in the preparation of this material, and is based on the present state of our knowledge.

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Preparation information Superior Flux & Mfg. Co. 440-349-3000