SAFETY DATA SHEET SUPERIOR NO. 515

DATE REVISED: January 1, 2016

Product Name: Superior No. 515

Manufacturer: Superior Flux & Mfg. Co. 6615 Parkland Blvd. Cleveland, OH 44139

Emergency Phone Number: 1-800-424-9300 (CHEMTREC)

Other Information Calls: (440) 349-3000

To the Purchaser: This MSDS contains important environmental, health, and toxicology information for your employees who have ordered this product. Please be sure this information is given to them. If you resell this product, a copy of the MSDS should be given to the buyer.

H.M.I.S. INFORMATION: HEALTH = 2 FLAMMABILITY = 0 REACTIVITY = 0

SECTION I - IDENTIFICATION

Common Name: Superior No. 515

Chemical Family: Chloride free inorganic acid flux

CAS Number: NA Chemical Name: NA Formula: See below

SECTION II – HAZARDS IDENTIFICATION

Classification of Substance or Mixture:

Classification (CLP): Corrosive

Label Elements (CLP): No Data Available



Corrosive

Irritant

Precautionary Statements: P234, P260, P264, P271, P280, P303+P361+P353, P310,

P305+P351+P338, P390, P363, P301+P330+P331, P304+P340

Risk Phrases: R20/21/22, R34, R37 **Safety Phrases:** S26, S36/37/39, S45

See section XVI for full text description of S and R phrases

Other Hazards: None if used properly

SECTION III- COMPOSITION INFORMATION

Components	CAS Number	%	OSHA PEL	H Phrases
Hydrobromic Acid	10035-10-6	4-10		H314, H335, H290
Monoethanolamine	141-43-5	2-6	3 mg/m^3	H314, H335, H227
				H312, H332, H302

Unlisted percentages are non-hazardous stabilizers, activators, and water. None of the materials in this product are listed in NTP, IARC, or OSHA as carcinogens.

SECTION IV- HEALTH HAZARDS

Primary Routes of Entry: Fume inhalation, ingestion, skin, and eyes.

Signs and Symptoms of Exposure:

1) Acute Effects: Reddening of eyes and skin, acid stomach if ingested, inhalation may cause

respiratory tract irritation.

2) Chronic Effects: No specific information available

Medical Conditions Generally Aggravated by Overexposure: None presently known.

Chemical Listed as a Carcinogen or Potential Carcinogen: None

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

EMERGENCY AND FIRST AID PROCEDURES

Eyes: Flush with water for 10 minutes. Call a physician.

Skin: Wash thoroughly with water.

Inhalation: Remove to fresh air or administer oxygen. Call a physician.

Ingestion: If patient is fully conscious, give two glasses of water. Obtain medical attention

immediately.

SECTION V - FIRE AND EXPLOSION HAZARD DATA

Flash Point: NA

Flammable Limits in Air % by Volume: NA Extinguishing Media: CO₂, dry chemical Auto Ignition Temperature: None

Unusual Fire and Explosion Hazards: Will release small amounts of HBr.

Special Fire Fighting Procedures: None

SECTION VI - ACCIDENTAL RELEASE MEASURES

Steps to be taken in case material is spilled: First neutralize with soda ash or sodium bicarbonate, dilute with water and dispose in accordance with EPA regulations and wash with plenty of water.

SECTION VII - HANDLING AND STORAGE

Storage Requirements: Plastic containers in a cool dry place away from heat.

Handling Requirements: Safe precautionary use to prevent spills and exposure to skin or fumes.

Other Precautions: None

SECTION VIII - CONTROL MEASURES

Respiratory Protection (TYPE): NIOSH approved respirator.

Ventilation: Yes

Mechanical (General): Yes

Local Exhaust: Yes

Eye Protection: Safety glasses/goggles

Protective Gloves: Recommended, NIOSH approved

Other Protective Clothing or Equipment: Optional to user's preference

SECTION IX - PHYSICAL AND CHEMICAL CHARACTERISTICS

Boiling Point: ~104°C/220°F

Specific Gravity (Water = 1): 1.06 Vapor Pressure (mmHg): Nil Percent Volatile By Volume: 88% Vapor Density (Air = 1): NA

Evaporation Rate (Butyl acetate = 1): 0.9

Melting Point: ~0°C/32°F Solubility in Water: Unlimited Reactivity in Water: None

Appearance and Odor: Pink, odorless liquid

SECTION X - STABILITY AND REACTIVITY

Stability: Product is Stable **Conditions to Avoid:** None

Hazardous Polymerization: None **Conditions to Avoid:** Extreme Heat

Incompatibility: Oxidizing Agents and Metals.

Hazardous Decomposition Products: Hydrobromides, Nitrogen Products, CO, CO₂

SECTION XI - TOXICOLOGICAL INFORMATION

Acute Toxicity Data

1) Oral: LD-50 (rat): Not available

2) Inhalation: LC-50 (rat): Not available
3) Dermal: LD-50 (rabbit): Not available
4) Skin Irritation: (rabbit): Not available

Chronic Toxicity Data

1) Repeated Skin Application: (rat): Not available

2) Eye Irritation: (rabbit): Not available

SECTION XII - ECOLOGICAL INFORMATION

This Material has not been Tested for Environmental Effects.

SECTION XIII - DISPOSAL CONSIDERATIONS

Waste Disposal Method: Dispose of in accordance with EPA regulations.

SECTION XIV-TRANSPORTATION

D.O.T. Proper Shipping Name: Corrosive liquid, acidic, inorganic NOS (contains hydrobromic acid)

Hazard Class: 8

Identification Number: UN3264

Packing Group: III

Type D.O.T Label Required Information: Corrosive

Waste Disposal Method: Dispose in accordance with EPA regulations

SECTION XV - REGULATORY INFORMATION

OSHA Hazardous Chemical According to 29 CFR 1910.1200: None

Carcinogenicity Classification (Components Present at 0.1% or More): Non-Carcinogenic

International Agency for Research on Cancer (IARC): Not Listed

American Conference of Governmental Industrial Hygienists (ACGIH): Not Listed

National Toxicology Program (NTP): Not Listed

Occupational Safety and Health Administration (OSHA): Not Listed

None of the Components of this Product are Listed on the U.S. Toxic Substances Control Act. Inventory or Otherwise Comply with TSCA Pre-manufacture Notification Requirements. This Product is RoHS Compliant.

SECTION XVI - OTHER INFORMATION

The labeling of this product is indicated in Section II. The full text of all abbreviations indicated by codes in the MSDS are as follows:

R20/21/22	Harmful by inhalation, in contact with skin, and if swallowed
R34	Causes Burns
R37	Irritating to respiratory system
S-26	In case of contact with eyes rinse immediately with water and seek medical
	attention

S-36/37/39 Wear suitable protective clothing, gloves, and eye/face protection

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	H314:	Causes severe skin burns and eye damage
H335:		May cause respiratory irritation
H290:		May be corrosive to metals
H227		Combustible liquid.
H312		Harmful in contact with skin.
H332		Harmful if inhaled.
H302		Harmful if swallowed.
P234:		Keep only in original container.
P260.		Do not breathe duct/fume/gas/mist/vanours/enray

Do not breathe dust/fume/gas/mist/vapours/spray. P260:

Wash thoroughly after handling. P264:

Use only outdoors or in a well-ventilated area. P271:

MSDS. Superior No. 515. Page 4 of 5

P280: Wear protective gloves/protective clothing/ eye protection/face protection.

P301 + P330 + P331:IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303 + P361 + P353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304 + P340:IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P305 + P351 + P338:IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310: Immediately call a POISON CENTER or doctor/physician.

P363: Wash contaminated clothing before reuse.

P390: Absorb spillage to prevent material damage

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