SAFETY DATA SHEET
SUPERIOR NO. 592

DATE REVISED: January 1, 2017

Product Name: Superior No. Superior 592
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 = 3 FLAMMABILITY = 0 REACTIVITY = 0

SECTION I - IDENTIFICATION

Common Name: Superior 592
Chemical Family: Soldering 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): Corrosive

Corrosive Irritant Environmentally Damaging

Precautionary Phrases: P264, P270, P273, P280, P301+P312, P305+P351+P338, P330, P337+P313, P301+P330+P331, P304+P340, P309+P311
Risk Phrases: R36/37/38, R34
Safety Phrases: S-26, S-27, S-36/37/39, S-45, S18, S61, S62, S64
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	1-5	3 mg/m^3	NA
Zinc Chloride	7646-85-7	30-45	1 mg/m^3	H302, H314, H319, H335, H400, H401

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

SECTION IV – FIRST AID MEASURES

Inhalation: Remove to fresh air
Eyes: Flush with water for fifteen (15) Minutes. Call physician.
Skin: Wash thoroughly with soap and water.
Ingestion: If patient is fully conscious, give large amounts of water. Obtain medical attention immediately.

Most Important Symptoms and effects, both acute and delayed
Primary Routes of Entry into Body: Fume inhalation, ingestion, skin, and eyes.
Symptoms of Overexposure: Salivation, coughing, choking, chills, may cause weight loss, brittle bones, anemia, and stiff joints.
Medical Conditions Generally Aggravated by Exposure: Any weakness of the lungs, kidneys or liver will be aggravated.
Chemical Listed as Carcinogen or Potential Carcinogen: None
OSHA Permissible Exposure Limit (PEL): NA
ACGIH Threshold Limit Value (TLV): NA

SECTION V - FIRE AND EXPLOSION HAZARD DATA

Flash Point: NA
Flammable Limits: NA
Extinguishing Media: Dry chemical, CO2 foam
Auto Ignition Temperature: None
Special Fire Fighting Procedures: Normal cautions when dealing with chemicals.
Unusual Fire and Explosion Hazards: Toxic and acrid fumes may be produced in a fire

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 of in accordance with EPA regulations.

SECTION VII - HANDLING AND STORAGE

Storage Requirements: Store in plastic containers in cool area, away from heat.
Handling Precautions: Safe precautionary practices to avoid spills and exposure to skin and fumes.
Other Precautions: NA

SECTION VIII - CONTROL MEASURES

Respiratory Protection (TYPE): NIOSH approved respirator.
Ventilation: Yes
Mechanical (General): Explosion proof
Local Exhaust: Yes
Protective Gloves: Recommended, NIOSH approved
Other Protective Clothing or Equipment: Rubber apron is recommended.
Eye Protection: Safety Glasses
Regulatory Information: The chemical components are listed on TSCA and DSL inventory. See composition section ii for CAS numbers

SECTION IX - PHYSICAL AND CHEMICAL CHARACTERISTICS

Boiling Point: 114ºC/237ºF
Specific Gravity (Water = 1): 1.455
Vapor Pressure (mm Hg): NE
Percent Volatile by Volume: 65%
Vapor Density (Air = 1): NE
Evaporation Rate (Butyl Acetate = 1): NE
Melting Point: NA
Solubility in Water: Unlimited
Reactivity in Water: None
Appearance and Odor: Light yellow liquid/mild odor

SECTION X - STABILITY AND REACTIVITY

Stability: Product is stable **(Conditions to Avoid):** Metals
Incompatibility: Alkaline, strong oxidizing or reducing materials, cyanides or combustible materials.
Hazardous Decomposition Products: HCl, zinc chloride, zinc oxide, ammonium.
Hazardous Polymerization: Will not occur **(Conditions to Avoid):** Excessive heat or cold

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, N.O.S. (hydrobromic acid, zinc chloride)
Hazard Class: 8
Identification Number: UN1760
Packing Group: II
Type D.O.T Label Required Information: Corrosive
Waste Disposal Method: Dispose of in accordance with EPA regulations

SECTION XV - REGULATORY INFORMATION

OSHA Hazardous Chemical According to 29 CFR 1910.1200: NA
Carcinogenicity Classification: (Components Present at 0.1% or More)
International Agency for Research on Cancer (IARC): NA
American Conference of Governmental Industrial Hygienists (ACGIH): NA
National Toxicology Program (NTP): NA
Occupational Safety and Health Administration (OSHA): NA
All 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:

R34	Causes burns
R36	Irritating to eyes
R37	Irritating to respiratory system
R38	Irritating to skin

S-18	Handle and open container with care
S-26	In case of eye contact, rinse thoroughly and get medical attention
S-27	Take off immediately contaminated clothing
S-36/37/39	Wear suitable protective clothing, gloves, and eye/face protection
S-45	In case of accident or if feel unwell call medical advice immediately
S61	Avoid release to the environment. Refer to special instructions/safety data sheet
S62	If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label where possible
S64	If swallowed, rinse mouth with water (only if the person is conscious)

P264	Wash … thoroughly after handling
P270	Do not eat, drink or smoke when using this product
P273	Avoid release to the environment
P280	Wear protective gloves/protective clothing/eye protection/face protection
P301+P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing
P330	Rinse mouth
P337+P313	If eye irritation persists get medical advice/attention
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting
P304+P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
P309+P311	IF exposed or you feel unwell: Call a POISON CENTER or doctor/physician

H302	Harmful if swallowed
H319	Causes serious eye irritation
H401	Toxic to aquatic life
H314	Causes severe skin burns and eye damage
H335	May cause respiratory irritation
H400	Very toxic to aquatic life

Further information:

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