

MATERIAL SAFETY DATA SHEET

SUPERIOR NO. 592

DATE REVISED: January 1, 2011

Product Name: Superior No. 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 No. 592

Chemical Family: Soldering flux

CAS Number: NA

Chemical Name: NA

Formula: See below

SECTION II - COMPOSITION INFORMATION

Components	CAS Number	%	OSHA PEL
Zinc Chloride	7646-85-7	30-45	1 mg/m ³
Hydrobromic Acid	7647-01-0	5-15	3 mg/m ³

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 III - HEALTH HAZARDS

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

Symptoms of Overexposure: Pulmonary edema, abdominal pain, vomiting, eye damage and skin burn.

Medical Conditions Generally Aggravated by Overexposure: None presently known.

Chemical Listed as a Carcinogen or Potential Carcinogen: None

OSHA Permissible Exposure Limit (PEL): 1 mg/m³

ACGIH Threshold Limit Value (TLV): 1 mg/m³

SECTION IV - EMERGENCY AND FIRST AID PROCEDURES

Eyes: Flush with water for 15 minutes. Call a physician.

Skin: Wash thoroughly with soap and water.

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

Ingestion: Drink three to four glasses water or milk. Do not induce vomiting. Get medical attention.

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.

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: 114°C/237°F

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: Strong oxidizing materials and alkaline materials.

Hazardous Decomposition Products: Corrosive fumes of hydrogen bromide.

Hazardous Polymerization: Will not occur.

(Conditions to Avoid): NA

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

Disclaimer: Judgments as to the suitability of information herein or the purchaser's purposes are necessarily the purchaser's responsibility. Reasonable care has been taken in the preparation of this material, but there are NO WARRANTIES, NO REPRESENTATIONS AND NO RESPONSIBILITY AS TO THE ACCURACY OR THE SUITABILITY OF THIS INFORMATION FOR ANY PURCHASER'S USE OR FOR ANY CONSEQUENCE TO USE.