

# MATERIAL SAFETY DATA SHEET

## SUPERIOR No. 71

DATE REVISED: January 1, 2014

**Product Name:** Superior No. 71

**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. 71

**Chemical Family:** High Activity Stainless Steel Flux

**CAS Number:** NA

**Chemical Name:** NA

**Formula:** See Below

### SECTION II - COMPOSITION INFORMATION

Components	CAS Number	%	OSHA PEL
Ammonium Bifluoride	1341-49-7	3-6	2.5 mg/m <sup>3</sup>
Ammonium Chloride	12125-02-9	4-15	NA
Hydrochloric Acid	7647-01-0	3-15	5 mg/m <sup>3</sup>
Zinc Chloride	7646-85-7	30-45	1 mg/m <sup>3</sup>

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 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/m<sup>3</sup>

**ACGIH Threshold Limit Value (TLV):** 1 mg/m<sup>3</sup>

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## SECTION IV - 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 physician.  
**Ingestion:** Give water or milk. get medical attention.

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## SECTION V - FIRE AND EXPLOSION HAZARD DATA

**Flash Point:** NA  
**Flammable Limits:** NA  
**Extinguishing Media:** Dry chemical, CO<sub>2</sub> foam  
**Auto Ignition Temperature:** None  
**Special Fire Fighting Procedures:** Normal cautions when dealing with chemicals.  
**Unusual Fire and Explosion Hazards:** Will release small amounts of HCl if heated sufficiently.

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## 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.

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## 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.

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## SECTION VIII - CONTROL MEASURES

**Respiratory Protection (TYPE):** NIOSH approved respirator.  
**Ventilation:** Yes  
**Mechanical (General):** Yes  
**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.

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## SECTION IX - PHYSICAL AND CHEMICAL CHARACTERISTICS

**Boiling Point:** 104°C/220°F  
**Specific Gravity (Water = 1):** 1.50  
**Vapor Pressure (mm Hg):** NA  
**VOC Content:** 0%  
**Percent Solids:** 56.9%  
**Vapor Density (Air = 1):** NA  
**Evaporation Rate (Butyl Acetate = 1):** 0.6  
**Melting Point:** 0°C/32°F  
**Solubility in Water:** Unlimited  
**Reactivity in Water:** None  
**Appearance and Odor:** Clear odorless liquid

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## 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

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## 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
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## SECTION XII - ECOLOGICAL INFORMATION

**This Material has not been Tested for Environmental Effects.**

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## SECTION XIII - DISPOSAL CONSIDERATIONS

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

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## SECTION XIV- TRANSPORTATION

**D.O.T. Proper Shipping Name:** Corrosive Liquid, Acidic, Inorganic, N.O.S.  
(Contains Zinc Chloride, Hydrochloric Acid)  
**Hazard Class:** 8  
**Identification Number:** UN3264  
**Packing Group:** III  
**Type D.O.T Label Required Information:** Corrosive

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## **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 premanufacture notification requirements. This Product is RoHS Compliant.**

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## **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.

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