

# SAFETY DATA SHEET

## SUPERIOR NO. 71

DATE REVISED: January 1, 2016

**Product Name:** Superior No. Superior 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 71

**Chemical Family:** High Activity Stainless Steel 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



Toxic

**Precautionary Phrases:** P264, P270, P273, P280, P301+P312, P310, 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                          |
|---------------------|------------|-------|-----------------------|------------------------------------|
| Ammonium Bifluoride | 1341-49-7  | 3-6   | 2.5 mg/m <sup>3</sup> | H301, H314                         |
| Ammonium Chloride   | 12125-02-9 | 4-15  | NA                    | H302, H319, H401                   |
| Hydrochloric Acid   | 7647-01-0  | 3-15  | 5 mg/m <sup>3</sup>   | H314, H335                         |
| Zinc Chloride       | 7646-85-7  | 30-45 | 1 mg/m <sup>3</sup>   | 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.

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## 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

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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 upon decomposition

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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.

**Other Precautions:** NA

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## 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

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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:** 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.**

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## 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 |
| P310           |   |
| 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   |

|      |   |
|------|---|
| H301 | Toxic if swallowed                      |
| 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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