

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 ³
Ammonium Chloride	12125-02-9	4-15	NA
Hydrochloric Acid	7647-01-0	3-15	5 mg/m ³
Zinc Chloride	7646-85-7	30-45	1 mg/m ³

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/m³

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

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.

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: Will release small amounts of HCl if heated sufficiently.

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
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: 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

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
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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, 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

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.

SECTION XVI - OTHER INFORMATION

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