



MATERIAL SAFETY DATA SHEET SUPERIOR No. 20

DATE REVISED: November 11, 2003



Product Name: Superior No. 20

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 = 2 FLAMMABILITY = 0 REACTIVITY = 1

SECTION I - IDENTIFICATION

Common Name: Superior No. 20

Chemical Family: Aluminum Brazing Powder Flux

CAS Number: NA

Chemical Name: NA

Formula: See Below

SECTION II - COMPOSITION INFORMATION

<u>Components</u>	<u>CAS Number</u>	<u>%</u>	<u>OSHA PEL</u>
Lithium Chloride	7447-41-8	30-45	NA
Zinc Chloride	7646-85-7	6-10	1PPM
Potassium Chloride	7447-40-7	30-45	10PPM
Sodium Fluoride	7681-49-4	10-25	2.5PPM
Sodium Chloride	7647-14-5	8-13	10PPM

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

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.

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 PPM

ACGIH Threshold Limit Value (TLV): 1 PPM

Superior manufactures quality fluxes. Our business is solving problems.



SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flash Point: NA
Extinguishing Media: Dry Chemical, CO₂ Foam
Special Fire Fighting Procedures: Normal Cautions when Dealing with Chemicals.
Unusual Fire and Explosion Hazards: Chloride and Fluoride fumes with high heat.

Flammable Limits: NA

Auto Ignition Temperature: None

SECTION V - 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 VI - 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 VII - CONTROL MEASURES

Respiratory Protection (TYPE): NIOSH Approved Respirator.
Mechanical (General): Yes
Eye Protection: Safety Glasses/Goggles
Protective Gloves: Recommended, NIOSH Approved
Other Protective Clothing or Equipment: Optional to User's Preference

Ventilation: Yes

Local Exhaust: Yes

SECTION VIII - PHYSICAL AND CHEMICAL CHARACTERISTICS

Boiling Point: NA
Vapor Pressure (mm Hg): NA
Vapor Density (Air = 1): NA
Melting Point: NA
Reactivity in Water: Exothermic

Specific Gravity (Water = 1): NA

Percent Volatile by Volume: 1.0%

Evaporation Rate (Butyl Acetate = 1): NA

Solubility in Water: Unlimited

Appearance and Odor: White Odorless Powder

SECTION IX - STABILITY AND REACTIVITY

Stability: Product is Stable
Incompatibility: NA
Hazardous Decomposition Products: Hydrogen Chloride Fumes, Fluorides with High Heat.
Hazardous Polymerization: Will Not Occur

(Conditions to Avoid): Metals

(Conditions to Avoid): Excessive Heat or Cold

SECTION X - TRANSPORTATION AND DISPOSAL CONSIDERATIONS

D.O.T. Proper Shipping Name: Corrosive Solids, NOS, (Contains Zinc Chloride, Anhydrous)
Hazard Class: 8
Identification Number: UN1759
Packing Group: III
Type D.O.T Label Required Information: Corrosive
Waste Disposal Method: Dispose of in Accordance with EPA Regulations

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.

MSDS: Superior No. 20 p. 2/2

The information contained herein is based on data considered to be accurate and is intended for use by persons having technical skills at their own discretion and risk. Since conditions of use are outside of Superior Flux & Mfg. Co.'s control, we cannot assume liability for results obtained or damage incurred due to misuse, nor can we assume customer liability.

Superior manufactures quality fluxes. Our business is solving problems.



**Superior Flux
& Mfg. Co.**

6615 Parkland Blvd. • Cleveland, OH 44139 • Phone: 440-349-3000 • Fax: 440-349-3003
www.superiorflux.com • e-mail: info@superiorflux.com