



MATERIAL SAFETY DATA SHEET SUPERIOR No. 4

DATE REVISED: November 12, 2003



Product Name: Superior No. 4

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 = 0

SECTION I - IDENTIFICATION

Common Name: Superior No. 4

Chemical Family: Silver 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>
Potassium Fluoroborate	14075-53-7	60-90	2.5 PPM
Potassium Tetraborate	1332-77-0	10-20	5 PPM
Potassium Fluoride	7789-23-3	8-20	2.5 PPM

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: If Patient is Fully Conscious, Give Large Amounts Water. Obtain Medical Attention Immediately.

Primary Routes of Entry: Fume Inhalation, Ingestion, Skin, and Eyes.

Symptoms of Overexposure: Salivation, Coughing, Choking, and Chills, May Cause Weight Loss, Brittle Bones, Anemia, Weakness and Stiff Joints.

Medical Conditions Generally Aggravated by Overexposure: Any Weakness of the Lungs, Kidneys or Liver will be Aggravated

Chemical Listed as a Carcinogen or Potential Carcinogen: None

OSHA Permissible Exposure Limit (PEL): 2.5 PPM

ACGIH Threshold Limit Value (TLV): 2.5 PPM

Superior manufactures quality fluxes. Our business is solving problems.



**Superior Flux
& Mfg. Co.**

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SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flash Point: None
Extinguishing Media: Not Needed
Special Fire Fighting Procedures: Normal Caution When Dealing with Chemicals
Unusual Fire and Explosion Hazards: Fluorides
Flammable Limits: Lower-NA Upper-NA
Auto Ignition Temperature: None

SECTION V - ACCIDENTAL RELEASE MEASURES

Steps to be Taken in Case Material is Spilled: Clean up Powder and Flush Remaining Material with Lots of Water

SECTION VI - HANDLING AND STORAGE

Storage Requirements: Store in Plastic Containers in Cool Area. Do Not Store in Glass or Porcelain Containers. Avoid Contact with Eyes, Skin, and Clothing. Wash Thoroughly After Handling.
Handling Precautions: Avoid Contact with Skin and Clothing.
Other Precautions: Keep Away from Excessive Heat.

SECTION VII - CONTROL MEASURES

Respiratory Protection (TYPE): NIOSH Approved Respirator. **Ventilation:** Yes
Mechanical (General): Yes **Local Exhaust:** Yes
Protective Gloves: Recommended, NIOSH Approved **Eye Protection:** Safety Glasses
Other Protective Clothing or Equipment: Rubber Apron is Recommended

SECTION VIII - PHYSICAL AND CHEMICAL CHARACTERISTICS

Boiling Point: NA **Specific Gravity (Water = 1):** NA
Vapor Pressure (mm Hg): NA **Percent Volatile by Volume:** 0%
Vapor Density (Air = 1): NA **Evaporation Rate (Butyl Acetate = 1):** NA
Melting Point: 700°C **Solubility in Water:** Moderate
Reactivity in Water: None **Appearance and Odor:** White Odorless Powder

SECTION IX - STABILITY AND REACTIVITY

Stability: Product is Stable **(Conditions to Avoid):** NA
Incompatibility: Glass or Porcelain
Hazardous Decomposition Products: Fluorides with High Heat.
Hazardous Polymerization: NA **(Conditions to Avoid):** NA

SECTION X- TRANSPORTATION AND DISPOSAL

D.O.T. Proper Shipping Name: Non-Hazardous **Hazard Class:** NA
Identification Number: NA **Packing Group:** NA
Type D.O.T Label Required Information: NA
Waste Disposal Method: Dispose of in Accordance with EPA Regulations.

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