



MATERIAL SAFETY DATA SHEET SUPERIOR No. 604B/3411

DATE REVISED: January 29, 2004



Product Name: Superior No. 604B/3411

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. 604B/3411

Chemical Family: Silver Brazing Paste 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 | 12228-71-6 | 30-35 | 2.5 mg/m ³ |
| Potassium Tetraborate | 1332-77-0 | 10-20 | 5.0 mg/m ³ |
| Boric Acid | 10043-35-3 | 15-30 | 10 mg/m ³ |

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

Inhalation: Remove to Fresh Air

Eyes: Flush with Water for 10 Minutes. Call Physician.

Skin: Wash Thoroughly with Water.

Ingestion: If Patient is Fully Conscious, Give Two Glasses of Water and Induce Vomiting. Obtain Medical Attention Immediately.

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): 2.5 mg/m³

ACGIH Threshold Limit Value (TLV): 2.5 mg/m³

Superior manufactures quality fluxes. Our business is solving problems.



SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flash Point: (Method Used): None
Extinguishing Media: Not Needed
Special Fire Fighting Procedures: Normal Caution When Using 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 Paste and Flush Remaining Material with Lots of Water.

SECTION VI - STABILITY AND REACTIVITY

Stability: Product is Stable
Incompatibility: Glass or Porcelain
Hazardous Decomposition Products: Fluorides with High Heat.
Hazardous Polymerization: Will Not Occur
Conditions to Avoid): Excess Heat
(Conditions to Avoid): NA

SECTION VII - CONTROL MEASURES

Ventilation: Yes
Protective Gloves: Recommend, NIOSH Approved
Mechanical (General): Yes
Respiratory Protection (Type): NIOSH Approved Respirator.
Other Protective Clothing or Equipment: Rubber Apron
Local Exhaust: Yes
Eye Protection: Safety Goggles

SECTION VIII - HANDLING AND STORAGE

Precautions to be Taken in Handling and Storage: Store in Plastic Containers in Cool Area. Do Not Store in Glass or Porcelain Container. Wash Thoroughly After Use.
Work/Hygienic Practices: Avoid Contact with Skin, Eyes and Clothing.
Other Precautions: Keep Container Away From Excessive Heat.

SECTION IX - PHYSICAL AND CHEMICAL CHARACTERISTICS

Boiling Point: NA
Vapor Pressure (mm Hg): NA
Vapor Density (Air = 1): NA
Melting Point: 500°C
Reactivity in Water: None
Specific Gravity (Water = 1): 1.6
Percent Volatile by Volume: 30%
Evaporation Rate (Butyl Acetate = 1): 0.3
Solubility in Water: Moderate
Appearance and Odor: Black, Odorless Paste

SECTION X - TRANSPORTATION AND DISPOSAL CONSIDERATIONS

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

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