

# SAFETY DATA SHEET

## SUPERIOR NO. 601

DATE REVISED: January 28, 2020

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### SECTION 1 -- IDENTIFICATION

**Product Name/Part number:** Superior No. 601

**Recommended use:** Silver brazing paste flux

**Manufacturer:** Superior Flux & Mfg. Co.  
6615 Parkland Blvd  
Cleveland OH, 44139

**Emergency Contact:** CHEMTREC

**Emergency Phone: 1-800-424-9300**

**For other info:** (440) 349-3000

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### SECTION 2 – HAZARD(S) IDENTIFICATION

**Classification of the substance or mixture**

**GHS Classification in accordance with OSHA HCS (29 CFR 1910)**

Skin irritation (Category 2) H315

Serious eye damage (Category 1) H319

Specific target organ toxicity – Single exposure, Respiratory system (Category 3)  
H335

Reproductive toxicity (Category 2) H361

*See below for full text of H-Statement*

**GHS Label Elements, including precautionary statements**

**Pictogram(s):**



**Signal Word:** Warning

**Hazard Statement(s)**

H315 Causes skin irritation  
H319 Causes serious eye irritation  
H335 May cause respiratory irritation  
H361 Suspected of damaging fertility or the unborn child

**Precautionary statement(s)**

P202 Do not handle until all safety precautions have been read and understood  
P261 Do not breathe dust or fumes  
P264 Wash skin thoroughly after handling  
P280 Wear protective gloves or protective clothing and eye protection  
P302+P352 IF ON SKIN: Wash with plenty of soap and water  
P304+P340+P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a doctor 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.  
P308+P313 If exposed or concerned: Get medical advice  
P332+P313 If skin irritation occurs: Get medical advice  
P337+P313 If eye irritation persists: Get medical advice  
P405 Store locked up  
P501 Dispose of contents or container to an approved waste disposal plant

**Hazards not otherwise classified or not covered by GHS:**

Boric acid Included in the Candidate List of Substances of Very High Concern (SVHC) according to Regulation (EC) No. 1907/2006 (REACH)

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### SECTION 3 – COMPOSITION INFORMATION

Components	CAS Number	%
Potassium Flurohydroborate	12228-71-6	20-40
Potassium Tetraborate	1332-77-0	15-25
Boric acid	10043-35-3	35-40

Unlisted percentages are non-hazardous stabilizers, and water.

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### SECTION 4 – FIRST AID MEASURES

#### Description of first aid measures

**General advice:** Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

**Inhalation:** If breathed in, move to fresh air. If not breathing, give artificial respiration. Consult a physician.

**Eyes:** Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

**Skin:** Wash off with soap and plenty of water. Consult a physician.

**Ingestion:** Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

#### **Most Important Symptoms and effects, both acute and delayed**

The most important known symptoms and effects are described in section 2 (labeling)

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### SECTION 5 – FIREFIGHTING MEASURES

**Suitable Extinguishing Media:** Water spray, alcohol-resistant foam, dry chemical or carbon dioxide

**Special Hazards:** Will release small amounts of borane/boron oxides

**Advice for firefighters** Wear self-contained breathing apparatus for firefighting if necessary

**Further information** No data available

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### SECTION 6 - ACCIDENTAL RELEASE MEASURES

**Personal Precautions and Equipment and emergency procedures:** Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

*See section 8 for personal protection.*

**Environmental Precautions:** Prevent further leakage or spillage if safe to do so.

**Methods and materials for containment and cleaning up** Pick up and arrange disposal without creating dust. Mop or sweep up and shovel. Keep in suitable, closed containers for disposal.

*For disposal, see section 13.*

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## SECTION 7 - HANDLING AND STORAGE

**Precautions for safe handling:** Avoid contact with skin, eyes, and clothing. Wash thoroughly after use. Provide appropriate exhaust ventilation.

*For precautions, see section 2.*

**Conditions for safe storage, including any incompatibilities** Keep in plastic containers tightly closed in a cool area. Do not store in glass or porcelain.

*For full precaution statements see Section 2*

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## SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

**OSHA Permissible Exposure Limit (PEL):** 2.5 mg/m<sup>3</sup>

**ACGIH Threshold Limit Value (TLV):** 2.5 mg/m<sup>3</sup>

**General Precautions:** Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of the workday.

**Engineering Controls:** Use local exhaust ventilation to maintain air concentrations of dust, vapors and fumes below occupational exposure standards.

**Respiratory Protection:** Where risk assessment shows air-purifying respirators are appropriate, use a full-face respirator as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (USA) or CEN (EU).

**Protective Gloves:** Handle with gloves. (Nitrile Rubber recommended) Gloves must be inspected prior to use. Use proper glove removal techniques (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good lab practices. Wash and dry hands after handling.

**Eye Protection:** Use appropriately fitting safety goggles with side-shields conforming to EN166.. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (USA) or EN 166 (EU)

**Body Protection:** Impervious clothing – The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Control of environmental exposure:** Prevent further leakage or spillage if safe to do so.

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

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## SECTION 9 - PHYSICAL AND CHEMICAL CHARACTERISTICS

<b>Appearance</b>	White paste
<b>Odor</b>	No data available
<b>Odor threshold</b>	No data available
<b>pH</b>	8.12 @ 20-25°C
<b>Melting point/Freezing point</b>	Approx. 500°C
<b>Initial boiling point and boiling range</b>	No data available
<b>Flash point</b>	Not applicable
<b>Evaporation rate</b>	No data available
<b>Flammability (Solid, gas)</b>	No data available
<b>Upper flammability or explosive limits</b>	Upper explosion limit: Not applicable
<b>Lower flammability or explosive limits</b>	Lower explosion limit: Not applicable
<b>Vapor pressure</b>	No data available
<b>Vapor density</b>	No data available
<b>Relative density (Water = 1)</b>	1.6
<b>Solubility(ies)</b>	Soluble in water
<b>Partition coefficient: n-octanol/water</b>	No data available
<b>Auto-ignition temperature</b>	No data available
<b>Decomposition temperature</b>	No data available
<b>Viscosity</b>	No data available

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## SECTION 10 - STABILITY AND REACTIVITY

**Reactivity:** No data available

**Stability:** Product is stable under recommended storage conditions

**Possibility of hazardous reactions:** No data available

**Conditions to Avoid:** Excessive heat, exposure to moisture

**Incompatible Material:** Potassium, acid anhydrides, strong oxidizers

**Hazardous Decomposition Products** No data available

*In the event of fire: See Section 5*

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## SECTION 11 - TOXICOLOGICAL INFORMATION

**Likely Route(s) of Exposure:** Inhalation, ingestion, skin and eye contact

**Symptoms (Immediate and Chronic) from**

**Acute Exposure** No data available

**Prolonged or Repeated Exposure** No data available

**Measure(s) of toxicity**

No data available

**IARC:** No component of this product is present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

**NTP:** No component of this product is present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

**OSHA:** No component of this product is present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA

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## SECTION 12 - ECOLOGICAL INFORMATION

**Toxicity**

No data available

**Persistence and degradability**

No data available

**Bioaccumulative potential** No data available

**Mobility in soil** No data available

**Other adverse effects**

*An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.*

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## SECTION 13 - DISPOSAL CONSIDERATIONS

**Waste treatment methods**

**Product** Offer surplus and non-recyclable solutions to a licensed disposal company.  
Contact a licensed professional waste disposal service to dispose of this material.

**Contaminated packaging** Dispose of as unused product.

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## SECTION 14- TRANSPORTATION

**D.O.T. (USA)** Not regulated

**IMDG** Not regulated

**IATA** Not regulated

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## SECTION 15 - REGULATORY INFORMATION

**SARA 302 Components** No Chemicals in this material are subject to the reporting requirement of SARA Title III, Section 302.

**SARA 313 Components** No chemicals in this material are subject to the reporting requirement of SARA Title III, Section 313.

**SARA 311/312 Hazards** Acute Health Hazard

### **California Prop. 65 Components**

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

### **EPA TSCA Inventory (Environmental Protection Agency Toxic Substances Control Act)**

The product is comprised of components that are listed on the US EPA TSCA Chemical Substance Inventory and can be used for commercial purposes in the US without limitation or restriction. All components of this product have an "Active" TSCA Inventory status designation.

**THIS PRODUCT IS ROHS 3 COMPLIANT**

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## SECTION 16 - OTHER INFORMATION

### **Further information:**

Judgments as to the suitability of information herein or the purchaser's purposes are necessarily the purchaser's responsibility. The above information does not represent any guarantee of the properties of the product. It is believed to be correct, but does not purport to be all inclusive and should be used only as a guide. Reasonable care has been taken in the preparation of this material, and is based on the present state of our knowledge.

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### **Preparation information**

Superior Flux & Mfg. Co.  
440-349-3000

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