SAFETY DATA SHEET SUPERIOR No. 601B/3411

DATE REVISED: March 24, 2020

Product Name/Part Number: Superior No. 601B/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

SECTION 1 -- IDENTIFICATION

Common Name: Superior No. 601B/3411

Chemical Family: Boron Modified Silver Brazing Paste Flux

CAS Number: N/A Chemical Name: N/A1 Formula: See Section 3

SECTION 2 – HAZARDS IDENTIFICATION

Classification of Substance or Mixture:

GHS Classification:

Skin irritation (Category 2) H315
Eye damage (Category 2) H318
Reproductive toxicity (Category 2) H361
Specific target organ toxicity, Respiratory
system - Single Exposure (Category 3) H335

See below for full text description of H-Statements

Hazard Statement(s)

H315 Causes skin irritation

H318 Causes serious eye damage

H335 May cause respiratory irritation

H361 Suspected of damaging fertility or the unborn child.

Precautionary statement(s)

P201 Obtain special instructions before use

P202 Do not handle until all safety precautions have been read and understood.

P261 Avoid breathing fumes

P264 Wash skin thoroughly after handling

P280 Wear protective gloves, eye protection, face 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 to an approved waste disposal plant

Label Elements

Pictogram(s):

Signal Word: Warning

SECTION 3 – COMPOSITION INFORMATION

Components	CAS Number	%
Potassium Fluorohydroborate	12228-71-6	20-40
Potassium Tetraborate	12045-78-2	15-25
Boric Acid	10043-35-3	30-45

None of the materials in this product are listed in NTP, IARC, or OSHA as carcinogens.

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: Remove to fresh air.

Eyes: Flush with water for fifteen (15) Minutes. Remove contacts if present and easy to do so.

Call physician.

Skin: Wash thoroughly of soap and water.

Ingestion: Rinse mouth with water. Never give anything by mouth to an unconscious person.

Consult a physician immediately

Most Important Symptoms and effects, both acute and delayed

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

Medical Conditions Generally Aggravated by Exposure: Any weakness of the lungs, kidneys or liver will be aggravated.

OSHA Permissible Exposure Limit (PEL): 2.5 mg/m³ **ACGIH Threshold Limit Value (TLV):** 2.5 mg/m³

SECTION 5 – FIREFIGHTING MEASURES

Extinguishing Media: Not applicable Special Hazards: No data available

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

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Personal Precautions and Equipment: Use personal protective equipment.

See section 8 for personal protection.

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

In Case Material is spilled: Pick up and arrange disposal. Sweep up and shovel. Keep in suitable, closed containers for disposal. Flush remaining material with plenty of water.

SECTION 7 - HANDLING AND STORAGE

Storage Requirements: Store in plastic containers in cool area. Keep containers in a well-ventilated place. Do not store in glass or porcelain. Keep container away from excessive heat.

Handling Precautions: Avoid contact with skin and eyes. Provide appropriate and adequate ventilation for or fumes when brazing.

For precautions see Section 2

SECTION 8 - CONTROL MEASURES

Respiratory Protection: For nuisance exposures use type P95 (US) particle respirator. For higher level protection use type OV/AG/P99 respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Ventilation: Yes Mechanical (General): Yes Local Exhaust: Yes

Protective Gloves: Yes – Nitrile rubber. Use equipment tested and approved under NIOSH standards. **Eye Protection:** Safety glasses conforming to EN166. Use equipment tested and approved under NIOSH standards.

Other Protective Clothing or Equipment: Rubber apron recommended.

These recommendations are advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of the anticipated use. It should not be construed as offering an approval for any specific use scenario.

SECTION 9 - PHYSICAL AND CHEMICAL CHARACTERISTICS

Appearance: Paste, brown

Odor: No data available pH: 8.12 @ 20-25°C

Melting/Freezing Point: 500°C

Boiling Point/Range: Not applicable **Flash Point:** Not applicable

Evaporation Rate: 0.3 (Butyl Acetate = 1)

Flammability (solid/gas) Not applicable Upper/lower flammability No data available

or explosive limits

Vapor PressureNo data availableVapor DensityNo data availableRelative Density1.6 (Water = 1)Bulk DensityNo data available

Water Solubility Moderate

Partition coefficient: No data available

n-octonol/water

Auto-ignition TemperatureNo data availableDecomposition TemperatureNo data availableViscosityNo data availableExplosive PropertiesNo data availableOxidizing PropertiesNo data available

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 Incompatibility: Glass, porcelain

Hazardous Decomposition Products Fluorides with high heat

In the event of fire: See Section 5

SECTION 11 - 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

SECTION 12 - ECOLOGICAL INFORMATION

This material has not been tested for environmental effects.

SECTION 13 - DISPOSAL CONSIDERATIONS

Waste Disposal Method: Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material

SECTION 14- TRANSPORTATION

D.O.T. Proper Shipping Name: Non-hazardous

Identification Number:NAHazard Class:NAType D.O.T Label Required Information:NAPacking Group:NA

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.

THIS PRODUCT IS ROHS 3 COMPLIANT

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.

Superior Flux & Mfg. Co. shall not be held liable for any damage resulting from handling or from contact with the above product.

Preparation information

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