



# SUPERIOR No. 601B/3411



## BORON-MODIFIED SILVER BRAZING PASTE FLUX

- Formulated as a general-purpose, silver brazing flux.
- Brazes copper, brass, nickel, carbon steel, stainless steel, and precious metals.
- Residues are water-soluble.

### DESCRIPTION

**Superior No. 601B/3411** is a creamy, black silver brazing paste flux that is active and protective to 925°C/1,700°F. It was formulated for the majority of brazing operations, and is recommended for use with copper and copper-based alloys, steel, stainless steel, nickel, carbides, precious metals and heat-resistant alloys. **Superior No. 601B/3411** is available in dispensable form suitable for spraying or other automatic application methods. The flux will not harden or crystallize, retaining its creamy texture up to two (2) years.

### APPLICATIONS

**Superior No. 601B/3411** is a general purpose brazing flux used in a wide variety of joining applications for many different finished products including; appliances, automotive, carbide tools, dental tools, orthodontia, farm machinery, heat exchanger, heat equipment, maintenance, mining tools, musical instruments, plumbing fixtures, refrigeration and air conditioning, ship repair, steel furniture and welding equipment.

### PHYSICAL PROPERTIES

Form	Creamy Paste
Color	Black
Specific Gravity	1.6
Water Content	Less than 35%
pH	8.23 ± 0.325
Flash Point	None
Freezing Effects	None
Active Temperature Range	540-925 °C/1,000–1,700°F

**THIS PRODUCT IS RoHS COMPLIANT**

*Superior manufactures quality fluxes. Our business is solving problems.*



## SPECIFICATIONS

- AMS 3411
- AWS A5.3I-91, TYPE FB3C
- Federal Specification 0-F-499, Type B

## APPROPRIATE FILLER METALS

- BAg
- BCuP

## DIRECTIONS

**Superior No. 601B/3411** may be used in concentrated form or diluted with water to a thinner consistency. Heating the flux to 60°C/140°F – 82°C/180°F makes it less viscous and more reactive. Heat the flux slowly to reduce spattering or excessive bubbling. The raw flux and residues are soluble in hot water (at least 140°F/60°C). Chipping or grinding is not necessary.

- ❶ Remove any oil, grease, or other contaminants from the surface to be brazed.
- ❷ Apply flux to joint by dipping, swabbing or brushing area being brazed. The flux may be used as supplied or diluted.
- ❸ Apply heat, by torch, induction or other means to area being brazed after flux has been applied to activate the flux.
- ❹ Feed the braze alloy into the joint, unless a brazing preform is already in place.
- ❺ Clean flux residues from brazed joint using hot water (60°C ± 5°C /140°F ± 10°F) for best results. If unavailable, room temperature water may also be used.

## SAFETY PRECAUTIONS

**Superior No. 601B/3411** contains potassium bifluoride (CAS #7789-29-9) and potassium fluoborate (CAS #14075-53-7) and should be handled with care.

Avoid contact with skin, eyes or clothing, using NIOSH approved safety goggles, rubber gloves and rubber apron. As an added precaution, wash hands thoroughly after use. Brazing should be done with adequate ventilation.

Disposal of raw flux and flux residues must be carried out in accordance with local and federal environmental guidelines.

**Superior No. 601B/3411** has a two (2) year shelf life when stored properly.

Refer to MSDS for additional safety information.

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.

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& Mfg. Co.**

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