

**SUPERIOR NO. 119SFM** 



# **BROMIDE-BASED RADIATOR CORE BAKING FLUX**

- Bromide-Based Flux for Copper-Brass Radiator Core Baking
- Excellent Radiator Soldered Tube to Radiator Copper Fin Bonding
- Highly Concentrated Formulation to Permit Great Dilution
- > Does Not Turn Radiator Cores Green After Core Baking

#### DESCRIPTION

**Superior No. 119SFM** is a concentrated, zinc-free, organic hydrobromide type formulation with excellent wetting and fluxing action. **Superior No. 119SFM** leaves no residue after core baking that requires removal and its unique chemistry eliminates the possibility that parts will turn green after soldering.

#### **APPLICATIONS**

**Superior No. 119SFM** is intended for use in copper/brass radiator core fusing operations using a continuous type baking oven. This formulation has been optimized for good core bonding with a high flux dilution ratio. Normal flux application procedures can be used, with dip immersion or spraying generally recommended. **Superior No. 119SFM** is normally applied at room temperature.

### DIRECTIONS

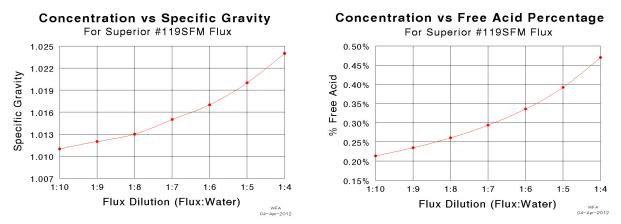
- **Superior No. 119SFM** is normally diluted 1 part water to 8 parts water with mixing. The flux will not separate after mixing.
- Superior No. 119SFM is applied to the radiator core at room temperature using flux immersion or spraying.
- The radiator core is heated in the baking oven to the desired core fusing temperature then allowed to cool. The action of the *Superior No. 119SFM* on the copper fins will turn them slightly red-orange but no more discoloring will occur.
- Superior No. 119SFM leaves no residue after core baking that requires removal and the copper fins will not turn green from the core baking activity.

#### **PHYSICAL PROPERTIES**

Appearance Specific Gravity @ 20 °C (68 °F) Density @ 20 °C (68 °F) Free Acid Surface Tension Recommended Soldering Range Odor Flash Point Freezing Point Clear, Colorless to Yellow  $1.122 \pm 0.010$  9.36 Lbs./Gallon  $2.35 \pm 0.5\% \text{ HBr}$  32 dynes/cm minimum  $400-750 \ (204-398 \ C)$ Mild None None

#### **PREPARATION and HANDLING**

*Superior No. 119SFM* is shipped as a concentrate with a suggested volume dilution ratio of one part flux to eight parts flux. The specific gravity of a 8:1 dilution is 1.013.



## SAFETY PRECAUTIONS

Since *Superior No. 119SFM* attacks many metals to some extent, it is recommended that polyethylene, PVC or fiberglass reinforced polyester containers be used. Any machinery or construction materials, which might be exposed to direct contact with the flux, should also be able to withstand acids.

This product, during handling or use, may be hazardous to health or the environment. Read the Material Safety Data Sheet and warning label before using this product.

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.

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



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