### Superior Flux & Mfg. Co.



# **SUPERIOR No. 552**



## VOC-FREE BATTERY FLUX

- Specially formulated for battery soldering applications.
- Wide active temperature range.
- Completely free of Zinc Chloride and other chlorides.
- High fluxing activity.
- > Special VOC-Free formulation to reduce spattering.
- Residues are completely water-soluble.

#### **DESCRIPTION**

Superior No. 552 is a water-based, water-soluble flux with extended temperature capability that begins to clean metals at room temperature. This inorganic flux is chloride-free. Residues are nonhygroscopic and non-corrosive and are water-soluble. This flux is a VOC-Free flux that incorporates an electronics flux formulation to reduce spattering and yield a better bond in the Cast-on-Strap process.

Superior No. 552 is specially formulated for battery soldering applications, but can also be used for soldering radiators and other industrial soldering processes involving mild stainless steel, Copper, and non-ferrous alloys. Since it contains no chlorides, Superior No. 552 will not discolor brass due to dezincification, and helps make post-solder metal finishing a guicker, cleaner process.

#### **DIRECTIONS**

Superior No. 552 is formulated for dipping, drag soldering, spraying, brushing, swabbing, and many other fluxing operations. Air-drying or moderate pre-heating of the part will reduce or eliminate spattering upon contact with hot solder. The residues are non-hygroscopic and non-corrosive. however post solder cleaning is required. Residues are water-soluble and are best removed with hot (60°C/140°F) de-ionized or distilled water. If these water-types are not available, room temperature water may also be used.

The following steps are recommended for optimum soldering results:

- Remove any oil, grease, or other contaminants from the surface to be soldered.
- Apply flux to joint by dipping, dragging, swabbing or brushing to area being soldered.
- Preheat or air-dry area to be soldered after flux has been applied to activate the flux and yield optimum soldering characteristics and reduce or eliminate spattering.
- Apply solder, dip part, place torch or iron to area being soldered.
- Clean flux residues from soldered area using de-ionized, distilled, RO, and in some cases tap water heated to a temperature of 60°C±5°C/140°F±10°F for best results. Room temperature water may also be used.

Superior manufactures quality fluxes. Our business is solving problems.



#### PHYSICAL PROPERTIES

Form Red. clear liquid

Specific Gravity 1.14 ± 0.01 @ 20-25°C/68-77°F Density 9.424 lbs./gallon @ 20-25°C/68-77°F

350-450 @ 20-25°C/68-77°F Μv

Chloride Content None Flash Point None Freezing Effects None

Residues Water-soluble

Recommended Soldering Range\* 200-345°C/390-650°F

This Product is RoHS Compliant

#### SAFETY PRECAUTIONS

Superior No. 552 is a corrosive product and should be handled with care and the normal precautions taken when working with chemical products.

When soldering with Superior No.552, adequate exhaust ventilation should be provided. Avoid contact with eyes, skin, and mucous membranes. Always wear NIOSH approved safety equipment when working with chemicals. Store in plastic containers away from heat.

Refer to Material Safety Data Sheet (MSDS) for additional safety information.

Store flux in an area with controlled temperature between 18-25°C/64-77°F.

Superior No. 552 has a two (2) year shelf life.

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.



<sup>\*</sup> This flux can be used for higher temperature cast-on-strap processes.