



# SUPERIOR No. 510



## Chloride-Free, Inorganic Acid Flux

- ◆ Specially formulated for Brass, Copper, mild stainless steel and non-ferrous alloys.
- ◆ Wide active temperature range.
- ◆ Low organic content.
- ◆ Completely free of Zinc and chlorides.
- ◆ High fluxing activity.
- ◆ Residues are completely water soluble.

### DESCRIPTION

**Superior No. 510** 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 and reaches peak activity at 260°C/500°F. Residues are non-hygroscopic and non-corrosive and will wash-off with water.

**Superior No. 510** is specially formulated for soldering radiators and industrial soldering applications involving mild stainless steel, Copper, and non-ferrous alloys. Since it contains no chlorides, **Superior No. 510** will not discolor Brass due to de-zincification, and helps make post-solder metal finishing a quicker, cleaner process.

### DIRECTIONS

**Superior No. 510** can be used in 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, but also wash off with room temperature water.

The following steps are recommended for optimum soldering results:

- ① Remove any oil, grease, or other contaminants from the surface to be soldered.
- ② Apply flux to joint by dipping, spraying, dragging, swabbing or brushing to area being soldered.
- ③ 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.
- ④ Apply solder, dip part, place torch or iron to area being soldered.
- ⑤ 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	Clear Pink Liquid
Specific Gravity	1.22
Density	10.17 lbs./gallon
pH	Less than 1.00
Chloride Content	None
Flash Point	None
Freezing Effects	None
Residues	Water Soluble
Recommended Soldering Range	200-270°C/390-520°F

## SAFETY PRECAUTIONS

**Superior No. 510** is a non-hazardous product, but should be treated as an industrial chemical. Store in plastic containers away from heat, sparks, or open flame. Do not store or place flux in contact with metals.

Adequate ventilation is necessary to remove flux fumes along with vapors and fumes from hot solder. Avoid breathing vapors and contact with skin, eyes and mucous membranes.

Refer to the 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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