### Superior Flux & Mfg. Co.



# **SUPERIOR No. 430MB**



## ORGANIC ACID, NON-HALIDE TINNING FLUX

- Water-based, non-halide organic acid flux fitting IPC-ANSI-J-Std-004, Type ORH0.
- Developed for electronic applications where halide type fluxes are not acceptable.
- Specially formulated for applications involving Alloy 42, Kovar, Nickel, EN, and Copper.
- Applications include components, IC's, and semiconductors, cerdips, and connectors.

#### **DESCRIPTION**

Superior No. 430MB is a water-soluble flux that is entirely free of chlorides, bromides, and phosphates. It employs unique organic activators to strip off metal oxides and tarnish, without attacking the underlying metals. This flux has many of the excellent operational characteristics of halide-containing organic fluxes while being much less corrosive.

#### **APPLICATION**

#### COMPONENT TINNING

Superior No. 430MB is supplied in concentrated form and provides most effective oxide removal as supplied. The flux may be used as supplied, or diluted, in dip, drag, and other processes common to component tinning. Due to the flux having a low degree of corrosivity, components need not be soldered immediately after fluxing. To remove residues a water temperature of 60°C/140°F, distilled or de-ionized water, using a non-ionic surfactant is recommended.

For optimum soldering results, use the following guidelines:

- Make certain that component leads and surfaces are free of any oil, grease, or other impurities.
- 2 After leads are fluxed, preheat the leads. A temperature range of 93-115°C/200-240°F will provide optimum flux activation and yield the best lead finish or joint.
- Add fresh flux to maintain proper flux level in flux tank.
- 4 Replace flux daily if self-contained storage is not available. Otherwise, replace after every forty (40) hours operation.
- Regularly clean the fluxing equipment to prevent buildup of impurities which can make flux less effective.
- Flux is supplied in concentrated form and may be diluted with distilled water or isopropyl alcohol.
- All parts must be cleaned after soldering. Post-solder residues will cause corrosion if not removed. Clean leads/parts using hot (60°C/140°F) de-ionized or distilled water. The addition of a non-ionic surfactant can help lower the surface tension of the water and yield a guicker, more effective post-solder cleaning.



#### PHYSICAL PROPERTIES

Form Clear, straw-colored liquid

Specific Gravity 1.275 ± 0.035 @ 20-25°C/68-77°F Density 10.66 Lbs/Gal @ 20-25°C/68-77°F Ha 2.22 ± 0.375 @ 20-25°C/68-77°F

Spread Factor 80 Minimum

Flash Point None

**Evaporation Rate** Approximately 1/3 that of water

200-280°C/390-540°F Optimum Soldering Range

**Inorganic Content** None

Residues Completely water-soluble

Shelf Life Two (2) years

THIS PRODUCT IS ROHS COMPLIANT.

#### SAFETY PRECAUTIONS

Superior No. 430MB 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. 430MB, adequate exhaust ventilation should be provided. Avoid contact with eyes, skin, and mucous membranes. Always wear NIOSH approved safety goggles or glasses, gloves, and other protective gear working with chemicals.

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

Store in plastic containers away from heat in an area with controlled temperature between 18-25°C/64-77°F.

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.

