

# **SUPERIOR No. 432**



## ORGANIC ACID, NON-HALIDE FLUX

- > Water-based, non-halide organic acid flux.
- > Developed for electronic applications where halide type fluxes are not acceptable.
- > Especially designed for dipping applications, soldering Alloy 42, Kovar, Nickel, and Copper.
- > Applications include wire, cable, braid, components, IC's, and semiconductors.
- > Water-based, non-halide organic acid flux fitting IPC-ANSI-J-Std-004, Type ORH0.

## DESCRIPTION

**Superior No. 432** 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.

## DIRECTIONS

### **COMPONENT TINNING:**

**Superior No. 432** is concentrated and can be diluted with equal amounts of water and/or methyl alcohol. Use in dipping, drag soldering, spraying, swabbing, brushing and other operations where organic fluxes are used. Because of its low degree of corrosiveness, components need not be soldered immediately after fluxing.

- Make certain that component leads and surfaces are free of any oil, grease, or other impurities.
- 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.
- 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.
- The flux is supplied in a concentrated form and may be diluted with equal parts of water or alcohol (Isopropanol or methanol).
- 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 quicker, more effective post-solder cleaning.

#### PHYSICAL PROPERTIES

- Form Specific Gravity Density pH Spread Factor Flash Point Evaporation Rate Optimum Soldering Range Inorganic Content Residues Shelf Life **This Product is RoHS Compliant.**
- Clear, straw-colored liquid  $1.26 \pm 0.02 @ 20-25^{\circ}C/68-77^{\circ}F$   $10.51 Lbs/Gal @ 20-25^{\circ}C/68-77^{\circ}F$   $3.30 \pm 0.50 @ 20-25^{\circ}C/68-77^{\circ}F$ 80 Minimum None Approximately 1/3 that of water  $200-280^{\circ}C/390-540^{\circ}F$ None Completely water-soluble Two (2) years

#### SAFETY PRECAUTIONS

**Superior No. 432** 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. 432**, 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.

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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