SUPERIOR No. 435

ORGANIC ACID, NON-HALIDE TINNING FLUX

- Alcohol-based, non-halide, organic-acid flux.
- Developed for electronic applications where halide type fluxes are not acceptable.
- Specially formulated for Nickel alloys, Kovar, EN, and Copper and other lead metals.
- Applications include components, IC's, and semiconductors, cerdips, and connectors.

DESCRIPTION

Superior No. 435 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. 435 is supplied in an alcohol-base to assist in reducing solder-balls, and provides most effective oxide removal as supplied. The flux may be used in dip, drag and other processes common to component tinning. After applying flux to leads, it is recommended that soldering be done shortly after flux application. To remove post-solder residues, a water temperature of 60°C±10°C/140°F±20°F is recommended for distilled or de-ionized water. A non-ionic surfactant may be added.

For optimum soldering results, use the following guidelines:

❶ Make certain that component leads and surfaces are free of any oil, grease, or other impurities.

❷ After leads are fluxed, preheat the leads. A temperature range of 200-240°F/93-115°C will provide optimum flux activation and yield the best lead finish or joint.

❸ Add fresh flux to maintain proper flux level in flux tank.

❹ Replace flux daily if self-contained storage is not available. Otherwise, replace after every forty (40) hours operation.

❺ Regularly clean the fluxing equipment to prevent buildup of impurities which can make flux less effective.

❻ Flux is supplied with an alcohol-base and specific gravity may change over time. Add ***Superior No. 95T*** Flux Thinner to maintain proper specific gravity.

❼ All parts must be cleaned after soldering. Post-solder residues will cause corrosion if not removed. Clean leads/parts using hot (60°C±10°C/140°F±20°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.

Superior Flux & Mfg. Co.
6615 Parkland Blvd. • Cleveland, OH 44139 • Phone: 440-349-3000 • Fax: 440-349-3003
www.superiorflux.com • e-mail: info@superiorflux.com

PHYSICAL PROPERTIES

Form	Clear, straw-colored liquid
Specific Gravity	1.045 ± 0.02 @ 20°C/68°F
Density	8.72 Lbs./Gal @ 20°C/68°F
pH	2.90 ± 0.2
Spread Factor	80 Minimum
Flash Point	12°C/53°F TCC Method
Optimum Soldering Range	200-280°C/390-540°F
Inorganic Content	None
Residues	Completely water-soluble

SAFETY PRECAUTIONS

Superior No. 435 is an alcohol-based product that requires storage in an area approved for flammable materials, and should be handled with care and the normal precautions taken when working with chemical products.

When soldering with ***Superior No. 435***, 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.

Store in plastic containers away from heat, sparks, or open flames in an area with controlled temperature between 18°C/64°F – 25°C/77°F.

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

Superior Flux & Mfg. Co.
6615 Parkland Blvd. • Cleveland, OH 44139 • Phone: 440-349-3000 • Fax: 440-349-3003
www.superiorflux.com • e-mail: info@superiorflux.com