

# **SUPERIOR No. 701**



# ZINC-BASED INORGANIC FLUX

- > General Purpose Flux for Copper, Brass, Steel, Nickel, Steel and Stainless Steel
- High Acid Content Gives Rapid Oxide Removal Properties
- > High Zinc Content Gives Great Heat Stability
- Does Complete Soldering of Parts With a Single Pass
- > Completely Water-based Formulation, No Solvents and No Alcohols
- Conforms to IPC ANSI J-STD-004, Type INH1.

# DESCRIPTION

*Superior No. 701* is a zinc-based, strong, inorganic acid type formulation having outstanding cleaning and fluxing action. It is recommended for use as a general purpose flux for difficult-to-solder metals. Normal flux application procedures can be used, and soldering can be done with an iron, torch, oven, induction coil or resistance tool.

## APPLICATIONS

**Superior No. 701** is most active flux in this series and can be used for soldering all common metals except aluminum and magnesium. This flux is also the most corrosive of these formulations and should be used only when exceptional activity is required. Normal flux application such as total immersion or by brush is recommended.

## DIRECTIONS

- Superior No. 701 is normally applied at room temperature. It can be diluted up to four parts water to one part flux by volume.
- Preheating the part after flux application is recommended to bring the part temperature close to the solder melt temperature before applying the solder.
- Post-soldering residues are water-soluble and can normally be removed in a hot water wash. A wash temperature range of 60-80°C/140-176°F has been found to be most effective.

#### PHYSICAL PROPERTIES

Form Specific Gravity Density Flash Point Freezing Effects Free Acid Odor Recommended Soldering Range **THIS PRODUCT IS RoHS COMPLIANT** 

#### Clear, Colorless to yellow liquid 1.371 $\pm$ 0.015 @ 20-25°C/68-77°F 11.44lb/gal, 1.37Kg/L @ 20-25°C/68-77°F None None 8.40 $\pm$ 1.0% HCl Moderately Acid 260– 427°C/ 500 – 800°F

#### PREPARATION AND HANDLING

**Superior No. 701** is shipped as a concentrate, mix well if diluting. Once thoroughly mixed, the solutions will not separate on standing. For greater strength, lower dilution ratios should be used. The solution will not separate on standing.

#### SAFETY AND PRECAUTIONS

Since **Superior No. 701** attacks many metals to some extent, it is recommended that polyethylene, PVC or fiberglass reinforced polyester containers be used. Any machinery or construction materials, which might be exposed to direct contact with the flux, should also be able to withstand acids. This product, during handling or use, may be hazardous to health or the environment.

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

Superior No. 701 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.

#### Superior manufactures quality fluxes. Our business is solving problems.



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