Superior Flux & Mfg. Co.



SUPERIOR No. 97



NON-ACTIVATED ROSIN FLUX, TYPE R

- A non-activated rosin flux for general-purpose soldering of PCB's, wire, cable, and semiconductors, and hand soldering applications.
- Excellent for a variety of metals including copper, gold, nickel alloys, silver, and tin.
- Can be used for automated and manual soldering operations.
- Flux conforms to IPC-ANSI-J-STD-004, Type ROLO.

DESCRIPTION

Superior No. 97 Type R Flux consists of a homogeneous solution of water-white rosin in an alcohol-base. It is completely free of any activators and leaves a non-corrosive, non-conductive, fungus-proof post-solder residue. The flux is widely used in electronic applications requiring excellent soldering activity and yielding residues with no potential for corrosion. Superior No. 97 Type R Flux becomes active above 175°C/340°F, attaining peak activity in the temperature range 200-260°C/390-500°F, where it promotes excellent solderability. It can also be used for high-temperature soldering applications, such as mag-wire tinning at temperatures in the 400-430 °C/750-800°F range.

APPLICATIONS

Superior No. 97 Type R Flux is an excellent choice for soldering printed circuit boards (PCBs), wire leads, cables, and component tinning. Superior No. 97 Type R Flux can be used to solder many different metals and alloys including copper, brass, and other metals commonly used in electronics applications.

PHYSICAL PROPERTIES

Form Light Brown Liquid

Specific Gravity 0.89175 ± 0.00825 @ 20-25°C/68-77°F

Density 7.44 ± 0.7 lbs./gallon @ 20°C/68°F

Solids Content $40 \pm 2.0\%$ Free Acidity None **Chloride Content** None **Inorganic Cations** None

Recommended Soldering Range 200-260°C/390-500°F

Spread Factor 80 minimum Flash Point (TCC.) 12°C/53°F **Boiling Point** 85°C/180°F Freezing Effects None

Residue Characteristics Non-Corrosive, Non-Conductive

This Product is RoHS Compliant

Superior manufactures quality fluxes. Our business is solving problems.



SPECIFICATIONS

Superior No. 97 Type R Flux meets all the requirements of Mil-F-14256C, Type R. Superior No. 97 Type R Flux meets all the requirements of IPC-ANSI-J-STD-004. Type ROLO.

DIRECTIONS

Superior No. 97 Type R Flux can be applied by foaming, brushing, dipping, rolling and spraying. Soldering need not be carried out immediately after fluxing. The residues are completely non-corrosive, non-conductive and fungus-proof, and need not be removed. However, cleaning is easily accomplished by vapor-degreasing methods, using appropriate solvent systems.

Soldering processes should include the following steps:

- Remove any oil, grease, mold release, or other contaminants from the surface to be soldered.
- Apply flux to joint by dipping, spraying, dragging, swabbing or brushing to area being soldered.
- Preheat or air-dry area to be soldered after flux has been applied to activate the flux and yield optimum soldering characteristics.
- Apply solder, dip part, or place iron to area being soldered.
- Cleaning flux residues from soldered area is optional. Use of solvents to remove residues is commonplace. In aqueous cleaning systems, Superior SyberKleen 2000 Saponifier may be used for residue removal to meet environmental or safety requirements.

The specific gravity of the flux increases with prolonged use as the solvents evaporate. It can be restored to the recommended value by adding **Superior No. 95T Flux Thinner** to the flux and mixing thoroughly.

SAFETY PRECAUTIONS

Superior No. 97 Type R Flux is flammable and should be stored in plastic containers away from heat, sparks or an open flame. Use adequate ventilation to remove flux fumes, along with fumes from the soldering station. Avoid contact with skin and eyes and avoid breathing vapors. Flux has a two (2) year shelf life.

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

Superior No. 97 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.

