



# SUPERIOR No. 32



## VOC-Free, OA Water-Soluble Flux

- Excellent for copper and difficult-to-solder metals including Alloy 42, Alloy 51, and Nickel alloys
- Effective on bare copper, OSP, HASL, or plated surfaces.
- May be applied in either foam or spray systems.
- Solders single- and double-sided circuit boards.

### DESCRIPTION

**Superior No. 32** is a high activity, organic acid (OA) foam flux formulated for difficult-to-solder surfaces where activated rosin fluxes and less active OA fluxes cannot be used. This flux combines a unique activation system with a VOC-Free base that is compatible with all latex-peelable solder masks, does not leave a post-solder white residue, and is an ideal choice for high volume soldering operations.

The solderability and cleanability of **Superior No. 32**, along with excellent foaming characteristics and heat stability, provide a moderately low “solids” flux adaptable to a wide variety of board styles, sizes, and thicknesses.

### APPLICATION

#### Wave Soldering:

To ensure optimum flux activity, a topside temperature of 190-240°F is recommended. Residues from **Superior No. 32** are completely water-soluble and can be removed in batch or in-line aqueous cleaning systems. For best cleaning results, wash residues immediately after soldering. A water temperature of 120-140°F is recommended for optimum results. However, excellent results are routinely achieved at lower water temperatures. The organic base of **Superior No. 32** is non-toxic and low foaming. Rinse waters are completely biodegradable. Consult local authorities for disposal regulations.

Best results can be obtained by following these guidelines:

- ❶ Make certain that the PCB surfaces are free of any oil, grease, or other impurities.
- ❷ Maintain a consistent foam head by narrowing the flux chimney, or using dual flux stones.
- 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 of operation.
- ❺ Regularly clean the fluxing equipment. Never leave foaming stone in flux when pressure is not applied.
- ❻ Clean fluxing stone in hot DI water or using **Superior No. 95T** alcohol-based flux thinner.
- ❼ Adjust the specific gravity to the nominal level with a hydrometer. Use DI water to adjust the flux.

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



## PHYSICAL PROPERTIES

Form	Clear Blue Liquid
Specific Gravity	1.043 ± .0075g/ml @ 20-25°C/68-77°F
Density	8.67 Lbs/Gallon @ 20-25°C/68-77°F
pH	1.2 ± 0.3 @ 20-25°C/68-77°F
Soldering Range	200-260°C/390-500°F
Flash Point	None
Freezing Effects	None
Halide Content	1.4%
Solids Content	13.9%

**THIS PRODUCT IS RoHS COMPLIANT**

## SAFETY PRECAUTIONS

**Superior No. 32** is a non-hazardous product, but should be treated as an industrial chemical. Store in plastic containers away from heat, sparks, or open flame. Do not store or place flux in contact with metals.

Adequate ventilation is necessary to remove flux fumes along with vapors and fumes from hot solder. Avoid breathing vapors and contact with skin, eyes and mucous membranes. Wear NIOSH approved gloves, goggles, and respirators.

**Superior No. 32** has a two (2) year shelf life.

Refer to the 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.

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