



SUPERIOR No. 50TS



NON-HALIDE, ORGANIC FLUX

- Formulated for soldering Stainless Steel and High-Chrome Alloys.
- Excellent across a broad range of base metals, solders, and temperatures.
- Exhibits excellent capillary action.

APPLICATIONS

Superior No. 50TS is a water-based, general purpose, phosphoric acid based flux formulated for soldering stainless steel and other industrial metals. The flux contains activators that are active at room temperature where it begins to clean metals and remove oxides. The flux exerts a strong scavenging action to remove oxide coatings and other impurities from the metal surface to produce strong joints. Pre-cleaning is not necessary under most conditions.

DESCRIPTION

Superior No. 50TS is an organic, water-soluble flux that is entirely free of chlorides and bromides. It employs a special phosphate activator to strip off the metal oxides, without attacking the underlying metals. **Superior No. 50TS** has many of the excellent operational characteristics of halide-containing organic fluxes, while exhibiting negligible corrosive effects.

DIRECTIONS

Superior No. 50TS may be used in dipping, drag soldering, spraying, swabbing, brushing and many other operations where organic fluxes are used. Because of its low corrosiveness, components need not be soldered immediately after fluxing; hours can pass without any effect on solderability. Residues are water-soluble and should be washed well with de-ionized or distilled hot water using a non-ionic surfactant. Remaining traces of this flux should prove less corrosive than those of halide-containing organic fluxes.

PHYSICAL PROPERTIES

Form	Clear Light Yellow Liquid
Specific Gravity	1.205 ± 0.075 @ 20°C
PH	1.20 ± 0.5
Flash Point	None
Evaporation Rate	About 1/3 that of H ₂ O
Lower Explosion Limit	None
Freezing Point	-2°C (28°F)
Freezing Effects	None
Soldering Range	200 – 270°C/392 - 518°F
Inorganic Content	None
Residues	Completely Water-Soluble

THIS PRODUCT IS RoHS COMPLIANT

Superior manufactures quality fluxes. Our business is solving problems.



**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

SAFETY PRECAUTIONS

Superior No. 50TS contains phosphoric acid and an organic acid phosphate. The flux is corrosive and can cause burns. Handle with caution. Avoid contact with flux in eyes, on skin or on clothing. Solder in a well ventilated area and avoid breathing mist when soldering as phosphine gas is emitted at temperatures above 370°F. Wash any items that contact flux thoroughly after handling. In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes, while removing contaminated clothing and shoes. Wash clothing before reuse. If swallowed, drink plenty of water and call a physician immediately. Keep out of reach of children.

Refer to the Material Data Safety Sheet (MSDS) for further information.

Superior No. 50TS 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.



**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