



SUPERIOR NO. 580T



ZINC-FREE BROMIDE RADIATOR BAKE OVEN FLUX

- Zinc-Free, Bromide-Based Flux for Copper-Brass Radiator Core Baking and Heater Core Soldering
- Creates Strong Solder Bonds for Fin to Tube and Heater Core Soldering
- Does Not Cause Green Corrosion After Soldering
- Highly Concentrated Formulation to Permit Great Dilution
- Zinc-Free Composition Greatly Reduces Metals to be Removed in Waste Water Streams
- 100% Bromide, No Clean Formulation Uses No Corrosive Chloride

DESCRIPTION

Superior No. 580T is a zinc-free, bromide-based, inorganic salt type flux, specifically designed for copper-brass radiator core baking and heater face dipping soldering. The high concentration of the **Superior No. 580T** flux allows for a great amount of dilution resulting in huge savings for the production operation. **Superior No. 580T** leaves very little residue and will not turn the brass green after soldering.

APPLICATIONS

Superior No. 580T was formulated specifically for clean soldering of radiator core baking and heater core face dipping. The **Superior No. 580T** formulation works well with all soft solders used for radiator assembly from very high lead-based solders to lead-free solders. Normal flux application is total immersion of the radiator core or heater core.

DIRECTIONS

- ➊ **Superior No. 580T** is normally applied at room temperature using flux immersion.
- ➋ In core baking operations **Superior No. 580T** flux works well in both continuous or batch style ovens leaving no residues that will hinder later soldering operations.
- ➌ In heater face dipping operations after fluxing with **Superior No. 580T** dip the assembly directly into the molten solder bath.
- ➍ There is no cleaning needed after soldering since there are very little post-soldering residues using **Superior No. 580T**. The post-soldering residues will not turn brass green.

Superior manufactures quality fluxes. Our business is solving problems.



PHYSICAL PROPERTIES

Appearance	Clear, Colorless to Yellow
Specific Gravity @ 20°C (68°F)	1.255 ± 0.015
Density @ 20°C (68°F)	10.4 Lbs./Gallon
Free Acid	6.9 ± 1.0% HBr
Surface Tension	32 dynes/cm minimum
Recommended Soldering Range	500-800°F (260-427°C)
Odor	Mild
Flash Point	None
Freezing Point	None

PREPARATION and HANDLING

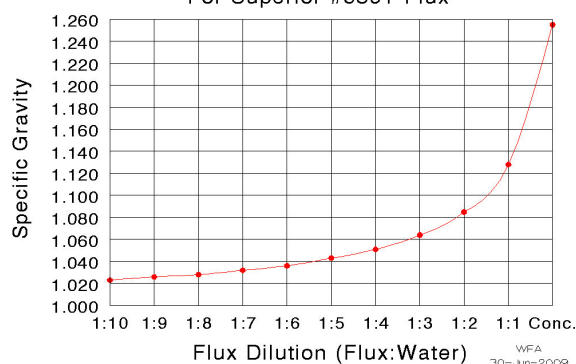
Superior No. 580T is shipped as a concentrate to be diluted:

- For core-baking, dilute 1:6 – 1:10 (flux : water)
- For heater face dipping, dilute 1:5 – 1:7 (flux : water)

For greater strength, lower dilution ratios should be used. Mix well when diluting and check specific gravity with a hydrometer before use. The solution will not separate on standing.

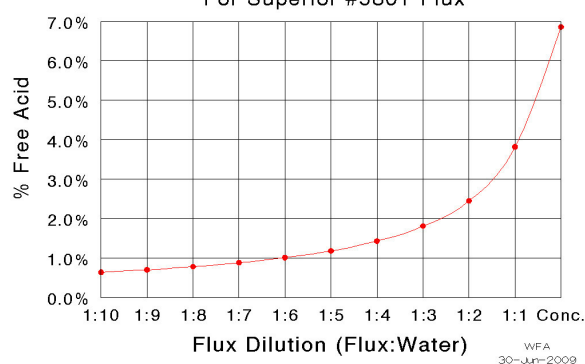
Concentration vs Specific Gravity

For Superior #580T Flux



Concentration vs %Free Acid

For Superior #580T Flux



SAFETY PRECAUTIONS

Since **Superior No. 580T** 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. Read the Material Safety Data Sheet and warning label before using this product.

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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