

Sn-807 Bright Acidic Tin Plating Additive

Sn-807 bright tin plating additive can produce a mirror-bright coating. The anti-tarnish coating has excellent corrosion resistance and weldability, and is suitable for rack plating and barrel plating. Sn-807 bright acid tin plating additive bath is highly stable and easy to maintain.

Salient features:

1. The plating solution is highly stable and easy to control.
2. The coating is bright and has excellent solderability and corrosion resistance.
3. Wide process range, easy to operate and maintain.
4. The amount of additives used is small and the cost is low.

Bath composition

	Range	Best
Stannous sulfate	24-35 g/l	30 g/l
Sulfuric acid	90-110ml/l	100ml/l
Sn-807A softener	20-40ml/l	30ml/l
Sn-807B brightener	2-6ml/l	3ml/l

Operating conditions

	Rack plating	barrel plating
Temperature	20-30°C	25°C
Cathode current density	0.5-3.5A/dm ²	0.5-1.0A/dm ²
Anode current density	1.0-2.0A/dm ²	1.0A/dm ²
Filtering	is recommended for filtering	
Stirring	Cathode rod movement	
Anode	99.99% pure tin	

Solution Make-up

- 1、 Add clean water, 3-5% by volume sulfuric acid and 1.0 ml/L of Sn-807A softener to the plating tank, settle overnight, and then rinse thoroughly with clean water.
- 2、 Fill the plating tank with half of distilled water or deionized water, and add 10% volume of chemically pure sulfuric acid to the plating tank.
- 3、 While stirring, add appropriate amount of stannous sulfate and distilled water. Add water to make up the water level and cool to room temperature.
- 4、 Add appropriate amount of Sn-807A softener and Sn-807B brightener. At this time, the preparation of the plating solution is completed and can be used for production.

Solution Control & Maintenance

The concentrations of tin metal and sulfuric acid are as follows:

	Range	Best
Tin metal		
Rack plating	10-20g/l	15g/l
Barrel plating	7.5-16g/l	10g/l
Sulfuric acid		
Rack plating	70-100ml/liter	90ml/liter
Barrel plating	80-120ml/liter	100ml/liter

Low tin content is suitable for barrel plating to reduce the loss of plating solution. The addition amount of Sn-807A softener and Sn-807B brightener depends on the required brightness requirements, loss and operating temperature.

Sn-807B brightener 100-200ml/1000AH

Sn-807A softener 200-300ml/1000AH

Sn-807A softener is used in barrel plating more than rack plating.