



# Florida CirTech, Inc.

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## Technical Bulletin IS-175 Silver Anti-Tarnish

### I. DESCRIPTION

IS175 is a highly effective anti-tarnish for immersion silver. This solution coats the silver with an invisible tarnish inhibiting layer. Anti-tarnish coated silver exhibits good solderability. This bath can be run as the last step of an immersion silver process. If the immersion silver coating is tarnished, then the tarnish should be removed before application of this anti-tarnish.

### II. OPERATING PARAMETERS

Make-Up	10% by volume of IS175 diluted with DI water
Temperature	90 to 110°F (32 to 43°C)
Immersion Time	1 to 2 minutes
Process	Batch Tank
Agitation	Will speed chemical action
Ventilation	Advised
Tanks	Polypropylene, Polyethylene
Racks/Baskets	Plastisol Covered Steel
Heaters	Quartz, Teflon Coils

### III. PHYSICAL PROPERTIES

Specific gravity	0.97 – 1.0
Appearance	Clear liquid
pH	6.0 – 8.0
Odor	Sweet glycol ether odor
Flash Point	>200F

### IV. CONTROL PROCEDURES

The normal process for using IS175 is to immerse silver coated circuit boards in this solution, followed by two DI water rinses, and thorough drying.

A working solution of IS175 Silver Anti-Tarnish should be dumped and remade after 600 square feet of circuit board area is processed per working gallon of bath. This dump and remake point assumes that the circuit boards are covered with about 10% silver area.

### V. ANALYSIS

Analysis of the IS175 bath is not required for use.

## **VI. SAFETY AND STORAGE**

IS175 is a concentrate containing organic compounds dissolved in water. Avoid breathing vapors. Use in a well-ventilated area. When handling concentrate or working solution wear protective clothing, gloves, and chemical safety goggles. In case of skin contact, remove contaminated clothing and flush affected area with plenty of cold water. In case of eye contact, flush immediately with plenty of cold water and seek medical attention immediately.

Store IS175 in its original container. Keep away from direct sunlight and temperature extremes. Protect from freezing.

## **VII. WASTE TREATMENT**

Consult with local officials for further waste disposal regulations.

## **VIII. MISCELLANEOUS**

Available in 5 gallon pails and 55 gallon drums.

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