Florida CirTech
LEADERS IN PCB TECHNOLOGY

Product Data Sheet

RS-3150 Resist Stripper

DESCRIPTION

RS3150 RESIST STRIPPER is a solution formulated to strip semi-aqueous dry film photo-resist and alkaline soluble screen printing inks. RS3150 contains copper brightening agents for a uniform clean copper appearance. RS3150 has excellent stripping capacity and a rapid strip rate for high-speed horizontal applications. RS3150 can also be used in a batch mode. As RS3150 becomes saturated with resist; it may become necessary to add a suitable de-foamer such as BB300.

In addition, RS3150 can also be used as a fully cured solder mask remover. RS3150 will not attack the butter coat or the metals of the printed circuit board. Concentration and temperature should be adjusted as shown below. The RS3150 has also been found to strip fully cured ink jet solder mask.

OPERATING PARAMETERS

	Dry Film Stripper
Make-Up	7-15% by volume diluted with water
Temperature	125-140°F (52-60°C)
Immersion time	30 seconds- 2 minutes in batch mode. Two tanks recommended
Breakpoint	50% or lower break point in horizontal mode
Process	Horizontal or batch
Agitation	Mechanical in batch mode
Ventilation	Advised
Tanks	Polypropylene, Polyethylene, PVC
Racks and Baskets	PVC Coated
Heaters	Stainless Steel or quartz heater. Stainless steel cooling coil recommended
Filtration	Recommended to extend solution life.

	Fully Cured Solder Mask Stripper
Make-Up	50-75% by volume diluted with water. 75-80% for fully cure ink jet solder mask
Temperature	150-180°F (65-82°C)
Immersion Time	15-30 minutes. Solder mask dependent
Process	Batch
Agitation	Mechanical in batch mode
Ventilation	Advised
Tanks	Polypropylene, Polyethylene, PVC
Racks and Baskets	PVC Coated
Heaters	Stainless Steel or quartz heater. Stainless steel cooling coil recommended
Filtration	Recommended to extend solution life.

PHYSICAL PROPERTIES

Specific gravity	1.05-1.07
Appearance	Clear-Amber liquid
pH	>12
Odor	Amine odor
Flash Point	>175F

CONTROL PROCEDURES

Replenishment is normally done through analysis by titration, and addition. Replenishment can also be done by pH control and/or sq. ft./gal. photo-resist dissolved. The pH should be controlled between 10 - 12. When RS3150 is used as a solder mask stripper it is recommended that the following process be used.

Solder mask strip process
1. Immerse panels in a RS3150 dip tank. Use the parameters listed in section II above.
2. Immerse panels in a hot water tank at 100 – 120F for 5 to 10 min.
3. Pressure wash to remove solder mask residues.
4. This process may be repeated if necessary.

ANALYSIS

RS3150 Concentration
Reagents and equipment needed
1.0N HCl

Bromothymol Blue Indicator
10 ml pipette
50 ml burette
250 ml Erlenmeyer Flask

Procedure

1. Pipet a 10-ml sample from the production bath into a 250-ml flask and add 50 - 75 mLs of DI water.
2. Add approximately 10 drops of Bromothymol blue indicator.
Note: the endpoint color change is from blue to yellow.
3. Titrate with 1.0N Hydrochloric acid to the yellow endpoint.
4. Calculation:
RS3150 concentration (% vol) = (mLs of 1.0N HCl used) x 1.70

SAFETY AND STORAGE

RS3150 is alkaline and should be handled with care. Wear chemically resistant gloves and eye protection. Avoid open flames. Do not store in direct sunlight, high temperature or below freezing.

WASTE TREATMENT

Please consult with a Florida Cirtech representative regarding waste treatment.

MISCELLANEOUS

Available in 5-gallon pails and 55-gallon drums. Consult MSDS sheet for additional information.