



# RS 6040 Resist Stripper

## DESCRIPTION

RS6040 RESIST STRIPPER is an aqueous solution formulated to strip aqueous dry film photo-resist and alkaline soluble screen printing inks. RS6040 contains copper brightening agents for a uniform clean copper appearance. RS6040 has excellent stripping capacity and a rapid strip rate for high-speed horizontal applications. RS6040 can also be used in a batch mode. There are anti-tarnish additives that inhibit copper attack to facilitate A.O.I inspection. As RS6040 becomes saturated with resist, it may become necessary to add a suitable de-foamer such as BB200.

## OPERATING PARAMETERS

Make-Up	5-15% by volume diluted with water
Temperature	125-140°F (52-60°C)
Immersion Time	30 seconds- 2 minutes in batch mode. Two tanks recommended. Set the break point to 50% or lower 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.

## PHYSICAL PROPERTIES

Specific gravity	1.00 to 1.03
Appearance	Clear to light amber liquid
pH	>12
Odor	Amine odor
Flash Point	>200F



## CONTROL PROCEDURES

Replenishment can be done by pH control, analysis for concentration, or loading level. PH controllers should be set at a replenishment point between a pH of 10 and 11.

## ANALYSIS

### Reagents and equipment needed

0.1N HCl  
Bromothymol Blue Indicator  
1 ml pipet  
50 ml buret  
250 ml Erlenmeyer Flask

### Procedure

1. Pipet a 1.0 mL sample of the bath into a 250 mL flask and add 75-100 mLs of DI water.
2. Add 3 - 5 drops of Bromothymol blue indicator.  
Note: the endpoint color change is from blue to yellow.
3. Titrate with 0.1N hydrochloric acid to the yellow endpoint.
4. Calculation: RS6040 Concentration (% by vol.) = (ml of 0.1N HCl) x 0.7

## SAFETY AND STORAGE

RS6040 is caustic and should be handled with care. Avoid open flames. Do not store in direct sunlight, high temperature or below freezing.

## WASTE TREATMENT

The recommended procedure for treating spend resist stripper is as follows:

1. Add 2-3% of WT300 for fully aqueous resist. Add around 6% for semi-aqueous resist.
2. Add 2-3% of WT430 for fully aqueous resist. Add around 6% for semi-aqueous resist.
1. pH adjust with Sulfuric Acid to a pH of 6-7. Dilute Sulfuric Acid works better in minimizing the clumping of the photo-resist.
2. Precipitate any residual metal cations (Copper, Lead, and Tin) with WT130 or WT170. Add roughly 1%. Adding a drop of either WT130 or WT170 will change the supernatant color if there is any residual metal left in solution.
5. Add a small amount of polymer (WT200, WT206) to the desired flocculation.
6. Send to the filter press.

Please refer to the WT300 technical bulletin regarding details of waste treatment of spent photo-resist stripper solution.

Please ask a Florida CirTech technical sales representative for more information regarding waste treatment of this chemistry and our complete line of waste treatment line if additional help or information is desired.

## MISCELLANEOUS

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