

# **RS 6040T Resist Stripper**

# DESCRIPTION

RS6040T RESIST STRIPPER is an aqueous solution formulated to strip aqueous dry film photo-resist and alkaline soluble screen-printing inks. RS6040T contains copper brightening agents for a uniform clean copper appearance. RS6040T has excellent strip capacity and a rapid strip rate for high-speed horizontal applications. RS6040T can also be used in a batch mode. There are anti-tarnish additives that inhibit copper attack to facilitate A.O.I inspection. As RS6040T becomes saturated with resist, it may become necessary to add a suitable de-foamer such as BB300.

# **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.<br>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 |
| рН               | >12                         |
| Odor             | Amine odor                  |
| Flash Point      | >200F                       |

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#### **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

Pipet a 1.0 mL sample of the bath into a 250 mL flask and add 75-100 mLs of DI water.
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: RS6040T Concentration (% by vol.) = (ml of 0.1N HCl) x 0.82

## SAFETY AND STORAGE

RS6040T 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.