Cleaner PC 1

Cleaner PC 1 is a water soluble liquid acidic cleaner formulated for removing light oils, oxides, fingerprints, and resist residues from the circuit boards prior to copper plating or printing.

Cleaner PC 1 will not dissolve copper per se, but just the oxides of copper. Consequently, the immersion time in the Cleaner PC 1 is not a critical factor in this regard.

Features & Benefits

Stable product-long life	Low cost operates
No odors or fumes	Safer work environment
Wide operating temp. range	More forgiving, lower reject rate; higher productivity

Operating Conditions

Concentration	5% – 15%
Temperature	Ambient – 150°F (66°C)

The operating temperatures are dependent upon the soil and immersion time. For most applications the operating temperatures may fall between 110°F to 120°F (43°C to 49°C).

Titration Method

1. Pipette a 10 mL sample of Cleaner PC 1 solution into a 250 mL Erlenmeyer flask.
2. Add 50 mL of water to the Erlenmeyer flask.
3. Add 3 to 4 drops Phenolphthalein indicator.
4. Swirl flask to insure mixing.
5. Titrate with 1.0 N Sodium Hydroxide until the solution turns pink.
6. Record mL used.

Calculation

Concentration = mL 1.0 N NaOH x 0.93

Test Kit Method

1. Use 1/2 mL sample and fill bottle 1/4 full of water.
2. Add 2 to 3 drops Phenolphthalein indicator.
3. Titrate 0.72 N Sodium Hydroxide, counting the drops until the solution turns pink.
4. Record the number of drops used.

Calculation

Concentration = # Drops 0.72 N NaOH x 1.30

Waste Disposal

Neutralize Cleaner PC 1 solutions to a pH between 6.0 to 8.0 with either soda ash, lime or caustic soda. Discharge the neutralized solution to sewer or settling lagoon. Copper must be removed from used solutions by raising the pH sufficiently to precipitate copper as hydroxide. Copper salts cannot be discharged to sewer.

Caution

Cleaner PC 1 is an acidic product and should be handled accordingly. Avoid skin, eye and oral contact. Wear protective clothing, gloves and goggles when handling the product. Flush exposed areas immediately with clean, cold water. Contact a doctor immediately in case of injury.

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Our People. Your Problem Solvers.

For more information on this process,
please call us at 203.756.5521 or email: techservice@hubbardhall.com

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