Stripol CBR

Stripol CBR is a dry powder used for stripping electroplated nickel from copper and copper alloys when mixed with water and sulfuric acid. The work may be stripped either in bulk (barrel or basket) or on racks.

Stripol CBR will not strip a nickel-iron electroplate or chrome plate. The chrome plate must be stripped in an alkaline, anodic cleaner and then processed through the Stripol CBR solution.

The original surface finish of the stripped parts will not be affected by the Stripol CBR solution when used in accordance to the recommendations given.

Features & Benefits

No base metal attack	Parts are easily re-processed
No electrical current required	Reduced process cost
Long bath life and fast stripping rate	Improved production process

Typical Applications

Removal of electroplated nickel from copper alloys

Operating Conditions

Concentration of Stripol CBR	16 oz/Gal (120 g/L)
Concentration of Sulfuric Acid (66be')	3% (volume)
Operating temperature range	145°F – 175°F
Preferred temperature	150°F
Ventilation	Required 100 cfm per square foot of solution surface

When stripping bulk parts in a basket, leave at least 5 to 6 inches clearance between the tank bottom and bottom of the basket to prevent the parts from encountering the metallic sludge which accumulates there.

Also remove, if possible, parts that have fallen off racks or from baskets, into the Stripol CBR solution.

Solution makeup procedure

1. Fill 2/3 of the tank with cold water.
2. Slowly add the sulfuric acid - note: do not make large sudden additions.
3. Heat the above solution to 130°F.
4. Add, with agitation, the 1 lb./Gal Stripol CBR to the above solution - agitate until the Stripol CBR is dissolved.
5. Bring above solution to the final volume and heat to 160°F.

Equipment	Tanks: Koroseal, rubber, Polyethylene. Do not exceed 150°F (66°C) if Koroseal is used. Heating coil: Quartz, Tantalum, or lead.
Agitation	Propeller type agitation is preferred rather than air.
Racks & Baskets	Plastisol covered steel, Copper, Bronze and Polyethylene or Polypropylene.

Stripping Cycle

1. Immerse in Stripol CBR solution until parts become black or brown colored.
2. 1-minute cold water rinse.
3. 1-minute cold water rinse.
4. 30 second immersion in 2 to 3 oz/Gal of sodium cyanide at room temperature (removes black coating).
5. 1-minute water rinse.

Stripping Rate

The stripping rate is rather rapid, but it varies with the temperature of the solution, concentration of sulfuric acid, concentration of Stripol CBR, and the age of the Stripol CBR solution.

The stripping rate drops linearly with the amount of nickel dissolved. Approximate rates of a freshly prepared solution are as follows:

At 160°F, the Stripol CBR solution will dissolve 0.004 inches of nickel per hour.

At 175°F, the Stripol CBR solution will dissolve 0.007 inches of nickel per hour.

Troubleshooting

Problem	Cause	Remedy
Low strip rate	Improper make-up	Check product bulletin
	Low temperature	Increase temperature
	Exhausted stripper	Discard and renew
	High metal content	Discard and renew
	Excessive plate thickness	Longer strip time
	Chrome not stripped	Strip chrome
Low Capacity (Many of the factors causing low rate will also affect the capacity. Check table above)	High loading factor (A large number of small parts can quickly exhaust a small volume of stripper)	Discard and renew
Etching of brass	Excessive strip time	Minimize exposure
	High temperature	Lower to 145°F
	Excessive activator	Minimize additions

To increase stripping rate of a "used solution" when it is at operating range, the following steps should be taken:

1. Add sulfuric acid. The volume may be increased up to 8% (vol).
Note: cool bath to 120°F before addition of acid is made.

Also, a corresponding addition of Stripol CBR must be made approximately 2.4 oz/Gal for each 1% (vol) of sulfuric acid.

Caution

Solutions of Stripol CBR are acid and should be handled with caution. 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.

Waste Disposal

Neutralize the solution to a pH between 6.0 to 8.0 with either soda ash or caustic soda. Add caustic slowly with caution. Wear goggles and protective clothing. Nickel hydroxide or carbonate will precipitate and can be separated from the solution. The solution can then be discharged to the sewer.

Our people. Your problem solvers.

For more information on this process please call us at
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