GuardCoat™ TCP

Tarnish and corrosion protection for brass and copper

GuardCoat™ TCP is a water-based, non-flammable solution, which produces a clear, high gloss acrylic finish. GuardCoat™ TCP contains no organic solvents. The cured finish will not dissolve in water, and the resulting finish has good resistance to scuffing and scratching.

GuardCoat™ TCP is a true water-soluble lacquer, which does not depend on co-solvents such as alcohol or ketones. As the lacquer dries, there are no solvent emissions. The lacquer can be removed in cleaning cycles typically employed in electroplating, eliminating the need for hazardous paint strippers.

The excellent adhesion, hardness and flexibility of GuardCoat™ TCP leaves a surface that can withstand subsequent forming and assembly operations with minimal damage. GuardCoat™ TCP provides an excellent base for decals, silk screening and other painting operations.

Coating Properties

Sward Hardness:	24
High Gloss:	90 + at 60°
Salt Spray:	Cold Rolled Steel Substrate: 48 hours with 1/8" creep
	Iron Phosphate: 72 hours with 1/8" creep
	Zinc Plated Substrate: 48 hours with no corrosion
Humidity Test (100% at 100°F)	Brass: 300 hours with no discolouration
Excellent adhesion and flexibility:	Pass Conical Mandrel Test

Operating Conditions

Concentration:	20 - 50 % b.v.	Higher Concentrations give less iridescence.
Temperature:	20 - 65°C (70-150°F)	Higher temperature promotes faster drying.
pH:	7.5 - 12.0	Higher pH give better salt spray results.

Make-Up solution with water. Concentration is easily controlled by the appearance of the finish. pH is maintained with ammonia. Acid drag-in prevents good film adhesion, and should be avoided. The film can be stripped in a hot alkaline cleaner.

Equipment

Steel tanks and heating coils are suitable.

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Analytical Procedure - Refractometer Method

1. Ensure the solution is between 18 - 35ºC. A temperature above 65° may damage the instrument.

2. Lift the cover plate to expose the prism and place 2-3 drops of GuardCoat™ TCP sample on the face of the prism.

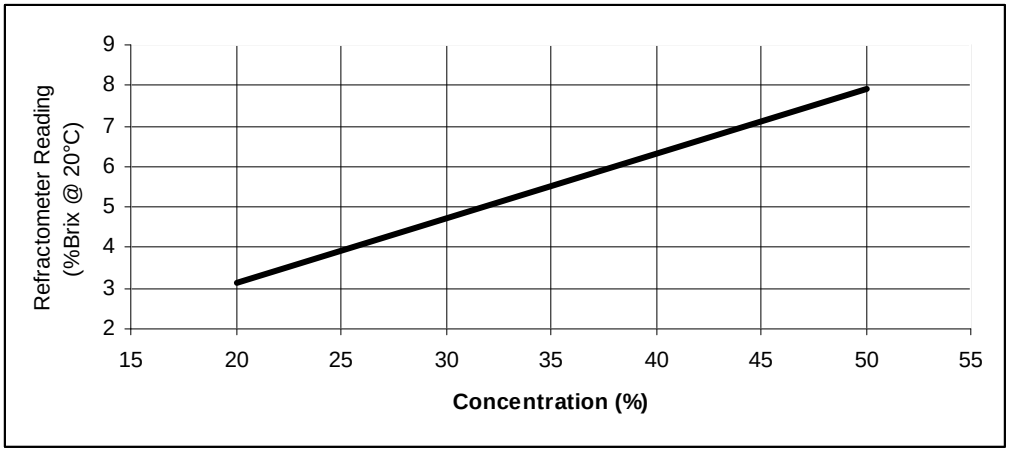
3. Close the cover plate over the prism immediately after placing the GuardCoat™ TCP solution on the prism's face. Make sure that the sample spreads across the entire surface of the prism without any air bubbles or dry spots.

4. Hold the cover plate in contact with the prism and point the instrument towards a light source and look through the eye-piece and take the reading at the point where the dividing line between light and dark crosses the scale.

5. Compare reading on scale to the chart in-order to determine the percent by volume of GuardCoat™ TCP or, use the following factor;

   Concentration of GuardCoat™ TCP (%) = °Brix x 6.33

6. Use a soft cloth or soft tissue paper moistened with water for wiping the prism and cover plate.



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READ THE SDS BEFORE USING THIS PRODUCT