



Product Bulletin

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ELECTROBLACK SG

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New Cyanide Electroplating Process is ideal for both decorative and functional antique and black finishes. **ELECTROBLACK SG** is dependable, rapid, consistent and economical designed to meet the most exacting requirements.

ANTIQUÉ FINISHES

Pewter, Flemish, Old English, Brown to Black on Brass, Bronze, Copper, Silver and Gold items (i.e.) Lamp Parts, Costume Jewelry, Hardware, Specialty Products, etc.

BLACK FINISHES

Uniform rich, resistant, decorative black finish easily obtained on bright Nickel, Brass, Bronze, Copper, Silver and other metals.

ELECTROBLACK SG PROCESS is an alkaline cyanide based electroplating process developed [O produce a uniform, rich black finish on all basis materials which will accept an electroplate. The process produces an adherent coating in forty-five (45) seconds to two (2) minutes plating time. The deposit has good corrosion resistance, excellent shelf-life and good wear and abrasion characteristics. The deposit can be used as a final black decorative finish or can easily be relieved to give a variety of antique finishes. Since the deposit is only a "flash" plate it will retain the character of the surface being plated; bright work remains bright and satin finishes are held. The tone of the deposit is enhanced and deepened by subsequent lacquering.

ELECTROBLACK SG PROCESS is applicable to barrel plating. The process is not an arsenic plating solution and offers many advantages when compared to the arsenic black plating baths, black nickel plating baths, and the conventional sulfide oxidizing systems. The finish is uniform, adherent. easily controlled and is produced in a single step. The process does not remove metal but plates an additional coating which results in appreciable saving when silver is being antiqued.

SOLUTION PREPARATION

The solution is prepared by dissolving one (1) pound **ELECTROBLACK SG** per gallon of water. The plating tank is filled 2/3 with warm water (120 F). The required amount of **ELECTROBLACK SG** is added slowly with stirring (Note: Heat is generated in mixing.) Water is added to working level of solution.

DO NOT ADD CYANIDE WHEN STARTING A NEW SOLUTION .

Tanks: Plain steel or stainless steel.

Anodes: Plain steel, stainless steel or the tank may be made anodic.

Temperature: 150-170 F. Heating may be accomplished by plain steel, stainless steel coils OJ thermo panels; by plain steel electric immersion heaters or direct gas fired heating.

Power: 2-6 volts D.C. 5-60 amperes per square foot.

ELECTROBLACK SG

CONTROL, LIMITS AND MAINTENANCE

The solution is extremely stable and operating limits very wide.

Free Cyanide: 3.0-5.5 ozs/gallon

pH: 12.0-13.0

ELECTROBLACK SG

Concentration: 12.0-19.0 ozs/gallon

Imbalances in solution composition might result in certain variances in the plating characteristics of the bath. The conditions which might result and their corrections are as follows:

1. Poor coverage in low current densities.
 - a. Low **ELECTROBLACK SG** concentration.
 - b. Low free cyanide
 - c. pH too high.
1. Slow plate.
 - a. High free cyanide
 - b. Low **ELECTROBLACK SG**
2. Brownish to grayish cast in high current densities.
 - a. Low free cyanide
 - b. Low **ELECTROBLACK SG** concentration.

Analytical determination of "free cyanide" is accomplished by the conventional methods. Maintenance of the bath will naturally depend on the work load and drag-out. Normal maintenance additions will run 0.5-2.0 ozs. Per gallon of sodium cyanide and equivalent amount of **ELECTROBLACK SG** per week.

WARRANTY

THE QUALITY OF THIS PRODUCT IS GUARANTEED ON SHIPMENT FROM OUR PLANT. IF THE USE RECOMMENDATIONS ARE FOLLOWED, DESIRED RESULTS WILL BE OBTAINED. SINCE THE USE OF OUR PRODUCTS IS BEYOND OUR CONTROL, NO GUARANTEE EXPRESSED OR IMPLIED IS MADE AS TO THE EFFECTS OF SUCH USE, OR THE RESULTS TO BE OBTAINED.