

# PEACOCK LABORATORIES, INC.

## SPRAY INSTRUCTIONS FOR ACRYLIC MIRRORS

Many surfaces may be silvered. We will deal Acrylic surfaces in this text. The basic shop requirements include: (1). Clean, filtered, dry, compressed air supplying approx. 5 cfm at 40-60 psi. This is used for the spraying of silvering chemicals. (2). A spray area with adequate ventilation and a powerful exhaust fan to draw spray fumes away from the operator. (3). Deionized, demineralized, or distilled water is essential to form a bright mirror like finish. The minimum acceptable limit of dissolved solids is 10 ppm.

### PREPARATION OF SOLUTIONS

HE-400S Silver Solution : add 150 ml of HE-400S to a clean, empty gallon container and dilute to one US gallon (3785 ml)with Deionized water.

HE-400R Reducer Solution: add 150ml of HE-400R to a different container and dilute to one US gallon with Deionized water.

#93 Sensitizer Solution: add 150 ml of #93 sensitizer to a third new container and add de-ionized water to make one US gallon.

C-22 Wetting agent: add 150 ml of C-22 to a fourth new container and add de-ionized water to make one US gallon

#77 Degreaser Solution: add 150 ml of #77 cleaner to a fifth new container and add de-ionized water to make one US gallon.

### SILVERING

1. Clean part to be sprayed with #77 cleaner
2. Rinse with distilled/deionized water
3. Clean part to be sprayed with C-22 cleaner
4. Rinse with distilled/deionized water
5. Spray diluted sensitizer solution using Peacock sensitizer Gun
6. Rinse with distilled/deionized water (no water breaks).

*Repeat steps 3 thru 6 three times. How do we know if the surface is hydrophilic? If the water beads up, the surface is hard to wet and not hydrophilic. Before you proceed to Step 7 the surface must not bead up! (Hint: Please visit [www.PChrome.com](http://www.PChrome.com) and view the video to see this and also to see demonstration of spray application of silver. )*

7. Spray silver through Peacock double nozzle Silver Spray gun. Make sure you have an equal distribution of reducer and silver.
8. Rinse with distilled/deionized water.
9. Dry the silver surface thoroughly.

10. Now you are ready to protect the silver from tarnishing by applying a protective coating of Peacock's Black Permalac 2K air dry mirror backing paint.

## **MIRROR PROTECTION**

Peacock's Black Permalac 2K mirror backing consists of (1) a clear two part coating (Permalac 2KA clear basecoat, and Permalac 2KB hardener), (2) # 281 thinner, and (3) Black additive. Mix 150 ml of Permalac 2KA, 150ml of Permalac 2KB, 45ml of #281 thinner and 1 Oz. Of Black additive. Spray this mixture evenly on the Acrylic Mirror ensuring that the entire surface is coated. We estimate that this mixture will allow you to basecoat about 20 Sq. Ft. *This mixture has a pot life of about 2.5 hours and so must be used completely by then.*

The black Mirror backing will air dry to touch in 2 hours. We recommend that you allow it to sit for 24 hours before handling.

## **STRIPPING**

To strip silver from plastic surface, use diluted silver strip solution (dissolve about 6 oz. of silver strip powder in one gallon of water). To reduce wastage and disposal costs, the parts can be dipped in the same solution until stripping action fails. Remove the waste solution for proper disposal, and replenish dip tank with fresh solution.

*These instructions are the result of our development of the process for Acrylic Mirrors. Variations from these instructions will probably be desirable at each installation to fit individual conditions*

### **PEACOCK LABORATORIES, INC.**

#### **Correspondences: Shipping:**

1901 South 54th Street 54th Street & Paschall Avenue  
Philadelphia, PA 19143 Philadelphia, PA 19143

**Telephone:** (215) 729-4400

**Fax:** (215) 729-1380

**[www.peacocklabs.com](http://www.peacocklabs.com)**