

*chrome*FX

APPLICATION GUIDE



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BASECOAT APPLICATION:

Step 1: Mix an appropriate amount of Basecoat “**B712**” with its supplied hardener “**BH712**” and thinner “**BT712**” at a ratio of (4:1:1). Higher ratios may be used if spray temperatures are higher than 72° F to thicken material to avoid runs and sags. Example: (5:1:1) or (6:1:1).

Step 2: Open your flow control knob on your paint spray gun to approximately 2.5 turns from closed position with a wide spray pattern at 28 psi at the gun (based on a SATA Digital RP but adjustments may vary with other types of spray guns). Apply the Basecoat in a heavy flow coat holding the spray gun approximately 10 to 12 inches from the surface using a criss-cross pattern as you do not apply the basecoat as a regular paint. The basecoat requires **only 1 coat**. If you apply more than 1 coat or too heavy of a coat your basecoat will take much longer to dry, you may experience solvent pop (little tiny dust particles in appearance) and the solvents will not completely escape which will definitely result in fogging of your finished chromed object. You will stop the application once the entire object is fully wetted with some very minor signs of orange peel. This is fine as in a few minutes your basecoat will flow out to a surface smooth as glass (required for the Chrome FX process). Avoid touching or sanding the surface and keep any airborne debris from landing on the freshly basecoated item.

Step 3: Cure the Basecoat for a period of 10 hours @ 130° F.

NOTE: Basecoat must be completely dry before applying Chrome FX metal or fogging will occur as solvents have not completely escaped.

AIR/ SUPPLY LINES :

Air supply lines to your paint spray booth must be free of oil and water (condensation in the line) filtering is very important as contamination of your process will occur and will ruin your chroming. The Chrome FX process is sensitive to extreme humidity in the air entering the spray booth especially the quality of your air supply.

DISTILLED/DE-IONIZED WATER:

You should **always** test your water for impurities before proceeding with the chemical mixing so as not to contaminate your chemicals. Your distilled/de-ionized water should be pure with no minerals or salts. You can test your water in a clean plastic or glass container only (will minimize electromagnetic interference) using a portable TDS (Total Dissolved Solids) meter and your reading should indicate 000ppm although 001ppm is acceptable and anything above that reading should not be used, to achieve maximum results from your Chrome FX system.

CHEMICAL MIXING INSTRUCTIONS:

IMPORTANT: Do not use the Chrome FX process if your shop temperatures are cold or below room temperature. Example: If your Chrome FX mixture has been sitting in your tanks on your shop floor at abnormal temperatures and you then proceed to bring in your Chrome FX machine into a warm spray booth to apply the chrome you may experience problems. The best way is to let the machine sit in a temperature controlled spray booth.

Step 1: Begin by mixing (60 ml) of chemical “**AB**” with every gallon of distilled / de-ionized water then placing it into the container marked “**AB**” in the Chrome FX System.
Quicker chroming reaction may be obtained with 120ml of chemical “AB” for every gallon of distilled water.

Step 2: You will then mix (30 ml) of chemical marked “**B1**” and (30 ml) of chemical marked “**B2**” for every gallon of distilled / de-ionized water. This mix will be placed into the container marked “**B**” in the Chrome FX System.
Quicker chroming reaction may be obtained with 60ml “B1” and 60 ml “B2” for every gallon of distilled water.

CAUTION: WHEN MIXING THESE TWO CHEMICALS DO NOT MIX THEM DIRECTLY WITH EACH OTHER, ALWAYS ADD TO THE WATER OR IT MAY CREATE A VIOLENT REACTION!

Step 3: Mix 5 ounces (148 ml) of the chemical marked “**Activator**” for each gallon of distilled / de-ionized water. This solution will be placed into the container marked “**Activator**” in the Chrome FX System.

Step 4: The final container is labeled as **“Water”** in the Chrome FX System and can be filled completely with distilled / de-ionized water as this is your Rinse gun and will be your most commonly used step.

CHROMING PROCESS:

Step 1: Using the Activator gun thoroughly soak the previously basecoated piece until an even sheen is achieved, no dry spots.

Step 2: Completely rinse the **Activator** from the surface using the Rinse gun.
The Activator must be very well rinsed from any pocket's or rear surfaces of the object being chromed as residual Activator left on the surface will create staining.

Step 3: Using the Chroming gun (dual headed gun) begin applying the chrome (ensuring both sides of the gun have an equal amount of volume coming out) starting from the bottom to the top allowing the chemicals to run down keeping the object constantly wet. Do **not** over apply the metal, stop when you have achieved your chrome color. If you notice any yellowing stop chroming and immediately rinse the part completely with the Rinse gun. Using the Chroming gun begin re-applying on any areas that still appears to have a light bluish tint until the desired chroming look is achieved.

Step 4: Rinse the surface completely using your Rinse gun until no chemicals remain.

NOTE: IT IS EXTREMELY IMPORTANT THAT THE CHROMED PART IS THOROUGHLY RINSED OR ANY RESIDUE LEFT BEHIND WILL CAUSE A YELLOWING EFFECT WITH TIME.

Step 5: Using the air gun / blow gun carefully remove all excess water from the part (taking care not to let any water drops remain as this will cause a stain).

Step 6: Wait until all moisture has fully evaporated from the part before moving on to the Topcoat Application. You may let moisture evaporate from chromed part for 1 hour air dry at 77° F or to speed up the process 10 minutes cure at 130° F.

TOPCOAT APPLICATION:

Step 1: Mix Alsa Clear Polyurethane topcoat **“T520”** at a ratio of (4:1) with its supplied hardener **“TH520”**. At this stage Alsa's Candy Concentrates can also be added to the mixture to achieve a colored chrome effect once applied.

Step 2: Open your flow control knob on your paint spray gun to 3 turns from the closed position and with a wide spray pattern at 28 psi at the gun (based on a SATA Digital RP but adjustments may vary with other types of spray guns)

Step 3: Apply Alsa's T520 Polyurethane topcoat as you would any clearcoat approximately 10 to 12 inches from the surface with minimal orange peel as the small excess that remains will flow out in a few minutes.

Step 4: Cure the topcoat for a period of up to 1 hour at 130° F.

TANKS/GUNS CLEANING:

After all the chroming is completed for the day you must clean out the tanks and guns to prevent corrosion and metal particle build up.

Proceed as follows:

A: Empty residual products from **“ACTIVATOR”**, **“B”**, **“AB”** tanks through the guns.

B: Once draining is completed add a small quantity of distilled/de-ionized water (approx 0.5 gallon) to each of these tanks and run distilled water through the guns until the tanks are empty.

C: The washing is now completed but you will also want to clean your “**AB**” tank once a week by lightly cleaning the interior walls of the container with a clean rag, then discarding it and not reusing twice as not to contaminate the container internally.

PREPARATION OF OBJECTS TO BE CHROMED:

Preparation is the key to the success of this Chrome FX process before applying the chrome FX Basecoat as we are creating a mirror surface and any minor imperfections will appear in the final finish.

METALS:

Prepare metal surfaces as you would for a professional paint application. Sand 320 to 400 grit dry sandpaper or 500 grit to 600 grit wet sandpaper; then proceed to apply an epoxy primer such as Alsa's AEP3027. Let dry according to application of product data (2 hours air dry at 77° F), then proceed in applying a black basecoat such as Alsa's ASB-13 (Jet Black). Apply a minimum of 2 coats preferably 3, and let dry according to application product data. (The reason for using black basecoat over the primer is to be able to see imperfections easily and the application of the Chrome FX basecoat since it is clear in color). You may skip the step of the black basecoat as the Chrome FX will still function properly on any color including the original color of the epoxy primer. Now, once the Jet Black basecoat is thoroughly dry, wet sand the part with 2000 grit wet sandpaper. Then, finish sanding with 3000 grit wet sandpaper. You may avoid the final sanding with 3000 grit sandpaper if you are satisfied with the finished surface of chrome. Now you are ready to apply the Chrome FX Basecoat.

PLASTICS:

For most plastics we may use the same procedure as for the metals, except for polypropylene, polyethylene and others that are difficult in adhesion.

To ensure maximum adhesion, you must use Alsa's PLA-STICK (PS) before applying Alsa's Epoxy Primer AEP-3027. Then, follow the final steps as per the metals preparation section.

For flexible plastics you may use Alsa's Rubber Clear (RC-8420) as a Chrome FX basecoat then apply the Chrome FX metal and finally again the RC-8420 Rubber Clear as a finishing clear. No other clearcoats are to be used on top of the Rubber Clear in order to maintain flexibility.

WOOD:

For application of Chrome FX on wood (especially if it is bare) you must apply a wood sealer then proceed by applying Alsa's Epoxy Primer AEP-3027 reduced as a sealer. Then follow final steps as per the metals preparation section.

CERAMICS AND GLASS:

For ceramics and glass you do not need to use the Chrome FX Basecoat; you can apply the chrome directly to the surface if you have a smooth finish, although the adhesion will be reduced without the Chrome FX Basecoat.

Proceed as follows:

- A: Wash object very well with soap and distilled/de-ionized water to ensure complete removal of grease, oils and other contaminants.
- B: Rinse with distilled/de-ionized water thoroughly.
- C: Dry entire object taking care not to leave finger print marks as hand oils will leave an imprint in the chrome finish; and then you may proceed with the application of the chrome by following the instructions in the chroming process section.