

Neutralizing Skyco Ospho:

Ospho is the only rust treatment we recommend **IF** needed under epoxy primer.

Apply Ospho as needed and leave it on as long as you like.

When you are ready to neutralize the dry Ospho, apply one more coat of Ospho over the area to be neutralized and let it set for 5 minutes. Using a clean towel and water, wash off the wet Ospho like you are washing a car then dry with a clean towel.

A dry acid film cannot be neutralized or sanded off.

Neutralizing a soda blasted vehicle:

Thoroughly wash every square inch of the vehicle using Dawn Original Formula, Purple Power Degreaser, or Simple Green mixed with water and a clean towel. Wash every square inch of the vehicle like you are washing a car. Rinse off with clean water then dry.

Media blasted vehicles:

Unlike sandblasting, some other forms of media blasting do not leave a coarse enough surface for the epoxy so sand the vehicle with 80 grit on a DA sander. All we need is a decent scratch, so this process shouldn't take more than 60 minutes to do the entire exterior of a typical vehicle.

Important Notes:

Use the activator within 1 year of opening.

Remove any cup strainers or filters before spraying.

Do not regulate air pressure at the wall, only at the gun.

You have 7 days to apply 2k Primer or body filler over epoxy without sanding first.

Between 7 and 14 days it must be sanded with 180 grit first.

After 14 days the epoxy must be sanded with 180 grit and reapplied before applying another coating over the epoxy primer.

If the vehicle does not leave the booth, you can apply any premium quality basecoat or single stage up to 24 hours after the epoxy without sanding first.

NEVER use SPI Epoxy Primer over acid etch/wash primers or rust converters- it will not work and we strongly suggest if you want to use a rust converter that you use the rust converters paint system instead of SPI.

Acid treatments should not be used unless you know the proper way to neutralize them. Again, call us to be safe as acid films can cause an adhesion loss.

We only recommend using Ospho's acid treatment if you even need one.

For bare metal or aluminum DO NOT use any other cleaner except for SPI's 700-1 Waterborne Wax and Grease Remover.

Activator Shelf Life

All times are based on *Activators* stored inside at a stable temperature of 55 degrees or higher.

Epoxy Primer Activator:

Good 3 years unopened

Good up 1 year after opening

2K Primer/Sealer Activators:

Good 2 years unopened

Good 30 days from opening

Clearcoat Activators:

Good 2 years unopened

Good for 6 months after opening

Epoxy Primer Induction:

Not required over bare metal, aluminum, or fiberglass but

30-minute induction is ideal

If adding urethane reducer, induce at least 15 minutes

Must induce 4 hours to get the most UV protection out of it if using it on the exterior of a vehicle.

General Paint Gun Adjusting Guidelines

Do not regulate / restrict air pressure between the source and the gun regulator.

Remove any internal cup filters or strainers.

Fan control: 90% open

Fluid control: Back out 2 $\frac{3}{4}$ turns from the closed position.

1.4-1.5 fluid cap guns like 26-32 psi at the gun regulator (when the trigger is pulled)

1.2-1.3 fluid cap guns like 24-28 psi at the gun regulator (when the trigger is pulled)

Make sure the air compressor psi is as high as it will go (120 psi or better). If air psi is restricted (turned down) at the compressor, at an air dryer or a regulator on the wall, it will kill the SCFM which will cause adverse spraying issues. Modern day paint guns are SCFM pigs. The only place air psi is restricted is at the regulator on the gun.

Most modern paint guns are used 5-6" away from the panel. Further away causes dry spray among other issues.

Once the above basic adjustments have been made, place a piece of masking paper on the wall. Hold the gun the 6" from the paper and do a quick squeeze of the trigger then observe the pattern. The pattern should be nice and even in the center of the pattern.

If the pattern shows dry spray in the center, turn the fan in (closing some) starting with 5% up to 10%.

Once again, these are general guidelines, and fine tuning may be needed.

Iwata LPH400 Series Color-Coded Caps:

Silver (LV) – Clears

Orange (LVX) – Basecoats

Purple (LVB) – Difficult metallic and pearl basecoats.

How to Fine Tune Your Paint Gun

This may sound trivial to an experienced painter, but the fact is very few painters know how to adjust their paint gun. This one item separates a sprayer from a painter more than anything else. The fact is a painter that knows how to fine tune his paint gun will turn a lot more hours and have a lot less problems because he is controlling the paint and is not letting the paint control him. Therefore 80-90% of the painters today hate to spray High Solids clears. They vision runs or orange peel and if you do not adjust the gun properly this is what you will get make no doubt about it.

First, the number one question I get is what tip should I use? My personal feeling is for basecoat a 1.3 or 1.4 and for clear 1.4. The exception on the 1.4 for spraying clear would be certain HVLP guns where a 1.5 is made for spraying clear. Guns like the SATA 5000 are another exception.

What happens with an improperly adjusted paint gun?

If you are applying basecoat chances are you're applying it way too heavy and your blends are showing, your metallic are not lying down or standing out like they should so your color matches are a problem, and the base is drying slower between coats than it should. The number one clue the basecoat is going on too heavy is if you are having a dieback problem with the clear after setting overnight (trapped solvents). With a High Solids clear you try to spray it wet enough that the orange peel will flow out but hope that it does not flow so much that it runs on you. The next day you tend to have a clear that looks cloudy or milky because of the trapped solvents and it requires a lot of wet sanding. The benefits of adjusting the paint gun properly will be faster application of paint and you will know what the final job will look like when you spray it and not have to guess.

How do I properly adjust my gun?

Place a piece of masking paper on the wall, then set the fan how you like it. Adjust the air pressure to the rate that you plan to spray with. Screw in the fluid adjustment all the way. Hold the gun from the paper the distance that you would normally spray (usually 5-6 inches) and give the trigger a quick squeeze and release. If anything comes out of the gun it should be very little and dry. Turn the fluid out one full turn and repeat this procedure half a turn at a time until you are getting an even pattern and the paint is even in build. If it is metallic the metallic should spray even as well. At this point go to a rocker or bottom of a fender on the car and make a 12-inch pass. You will most likely have to back the fluid out one-half to one full turn to spray at the speed you want then fine tune your air pressure.

Now the gun is very close in adjustment, you should be able to lay the clear orange peel free without running it, and metallic should spray even and wet without much effort. Keep in mind this is not your last adjustment; every base color will spray a little different and may require a half a turn in or out for the new color. If you're going from a high solids clear for an all-over to a spot repair clear you will need to make a minor adjustment again.

Runs and Orange Peel

A simple formula to remember is orange peel is fluid adjustment and run control is an air pressure adjustment.

If you are getting a few runs, verify that you are not regulating air pressure at the wall or compressor, only at the gun. Then try upping the air pressure in increments of 3-5 pounds more.

For orange peel try turning your fluid in clockwise in quarter to half turn increments.

One final note spend the money on a good set of paint guns! This is your career, and the paint gun makes or breaks you as far as labor hours turned. Spend the \$500-1200 for a good base gun and again for a good clear gun, the payback will be faster than you think. You will always get what you pay for with a paint gun!

The Perfect Paint Job

Our goal is to accomplish a paint job that has a solid foundation, maximum gloss and will last for many years. This type of painting is **not practical for the everyday production body shop**, but it will serve you when you do your next restoration or a street rod job. We are going with the assumption that the metal or fiberglass has been stripped of all paint.

All bare metals and aluminum should have 80 grit DA scratches.

Spraying primers:

Bare metal is always best cleaned with 700-1 Waterborne Wax and Grease Remover and then let it sit 60 minutes before applying the epoxy!

After first reading our Epoxy Tech Sheet mix enough SPI Epoxy Primer to spray 2-3 wet coats over the entire car. Spray one wet coat and let flash for about 30 minutes then apply a second wet coat (3rd coat is optional). Let the epoxy sit overnight then apply body filler or glazing putty over the epoxy. **Let the epoxy sit 48 hours before applying polyester primer.**

It is **not necessary to sand the epoxy before applying the fillers** (within the first 7 days of spraying epoxy) as they will bite into the epoxy and feather great. When you have finished sanding all the bodywork you are likely to have some bare metal spots from sanding. Spray one wet coat of epoxy over all filler spots and over any bare metal spots. Now let the vehicle set overnight.

The next day you can start spraying the 2K primer over the epoxy. Once again, it is **not necessary to scuff or sand the epoxy before applying primer**. The most important thing to remember at this point is spray one wet coat of 2K primer and let it sit for 5 minutes before applying the second coat. Follow this procedure between all coats of 2K Primer. This step when abused messes up more paint finishes than anything else!

When all the primer blocking, and any necessary primer repairs are finished it is always best to use the epoxy as a sealer. Mix up enough epoxy to go around the car with one wet coat and add a double shot glass of SPI 885 Urethane Reducer per quart. Let the epoxy sit for 30 minutes. Stir one more time and strain. Spray one full wet coat of epoxy over the entire car. The epoxy should sit for 6 hours before spraying basecoat, the best option is let it sit overnight.

Spraying the basecoat:

Next to rushing the 2K primer, rushing the basecoat is the second cause for the final gloss and depth of a paint job to look bad. It's very important to use the slowest urethane reducer in your basecoat that you can get away with regardless of outside temperature. Even if you spray at 70-75 degrees, use slow reducer in the base. Just allow enough extra time for the basecoat to flash off and dry. The difference between a slow grade and medium grade reducer will show up in the final gloss.

Spray the first coat and let it totally dry before spraying the second coat. It is best to wait 30-45 minutes between coats of base. **Always wait 45 minutes between base colors that contain a lot of black pigment.**

If your basecoat is not perfect:

After two coats of base the vehicle should sit overnight and then do any minor wet sanding with 1500 grit sandpaper to remove any orange peel or trash. Apply the next two coats with 45 minutes of flash time in between coats. Some colors will require additional coats. If this is the case always wait 45 minutes between coats.

Let the basecoat sit overnight.

A word of caution: There are 2-4 basecoat types that cannot be sanded, or you will lose adhesion so avoid those basecoats. Check with your basecoat manufacturer.

Clear Option 1: Applying the clear in a single day

The following day, tack off the vehicle, then apply a wet coat of SPI Universal Clear and let the first coat of clear sit 30 minutes.

Spray the second wet coat of clear and let it sit for 30 minutes. Let the clear sit for 30 minutes before applying each additional coat as well.

DO NOT BAKE! The booth heat can be set at 80°-90° if you wish.

Normally 4-5 coats of clear are applied during this process.

Then proceed with normal wet sanding and buffing when you are ready.

Clear Option 2: Layering multiple coats of clear over multiple days:

Spray 3-4 coats of clear waiting exactly 30 minutes between coats. Do not bake! You can set the booth at 80°-90° and leave it on if you wish. The next day, if possible, let the car sit in the daylight/sun all day regardless of air temperature as all we want is UV light.

The following day or anytime after, wet sand the car with 800 grit and put it back in the sun for at least half a day; a full day would be better. Clean the car with 700 waterborne wax and grease remover. Do it carefully as anything left behind will destroy the paint job. Let it sit for 60 minutes then apply 3-4 more coats of clear waiting 30 minutes in between coats.

DO NOT BAKE! The booth heat can be set at 80°-90° if you wish.

Anytime after the day of last spraying the car give the car one full day in the sun. Wet sand the next day with the grits of your choice, pull the car out for at least half a day in sun then buff it at your leisure.

It's advisable for black, dark blue and dark green paint jobs to have an extra day in the sun with any of the above steps, as blacks dry/release solvents slower and this step will prevent the black from showing fine scratches and it will help you get rid of swirl marks when buffing.

Wait a long time before waxing:

NEVER wax one of these multiple coat jobs for at least six months or you will run the risk of delamination down the road. You can use detail spray to make the bugs wash off easier and to make drying easier as these products are designed to breathe. A breathable pure carnauba wax is also fine.

Notes

- Remove any internal strainers, cup screens or cup filters before spraying primers, epoxy, metallic bases or clears
- Ceramic coatings are used at your own risk; SPI does not recommend it
- Only use pure carnauba wax or a fresh paint safe hand glaze prior to 90 days of sunlight curing
- Only use medium or slow reducer in basecoat, slow if preferred for black and darker colors
- Metal and product temps should be at least 65 degrees prior to application and for 24 hours after applying products
- Metal temps can be up to 5 degrees lower than ambient temperature
- If you decide to wet the floors of your booth, allow plenty of time for the water to evaporate before spraying. Excess moisture can lead to solvent pop