



Finishing Procedure for Milesi KHR1 White Glossy Pigmented Polyurethane Topcoat

General Information - White and Neutral Glossy Pigmented Topcoats

Milesi white and neutral glossy polyurethane topcoats are the best choice for producing outstanding gloss and ease of polishing. These products do have the potential to slight yellow over time. Milesi white and neutral glossy polyurethanes use specific non-yellowing catalysts to minimize yellowing.

Milesi white and neutral polyurethane topcoats can be tinted with the Milesi KMT colorants, though the neutral topcoat has a much higher tint load and is recommended for deep colors. The Milesi KMT colorants contain polyurethane resins that enable them to crosslink with the catalyst. This insured the most durable and highest performance coating

Generally white and neutral gloss polyurethane topcoats use larger than normal quantities of slow reducers to insure good flow out and leveling thus reducing wet sanding and polishing times.

Milesi white and neutral gloss topcoats are designed to be buffed and should have 2 topcoats applied wet on wet. This creates a chemical burn-in between coats that will eliminate halos is the top coat is burned through during the wet sanding or polishing process. They may be buffed directly or clear coated.

General Information - Catalysts

While acrylic polyurethanes use only 1 catalyst, the standard polyurethanes can often use a variety of catalysts. This is to tailor performance characteristics of the product.

For standard glossy polyurethanes:

- LNB110: better resistance to yellowing, better flexibility
- LNB50: better filling power

General Information - Reducers

Milesi polyurethane reduces use virgin solvents and are designed specifically for Milesi products. If problems like lack of flow out or bubbles/pinholes occur it is usually a reduction problem. Either add more reducer or a slower reducer.

Most glossy polyurethane clear and pigmented topcoats use slow reducers to get optimal flow out and leveling. Typically these are the LZC8543 and LZC70. For very warm temperatures up to 5% of LTZ40 retarder can be added to these reducers instead of switching to a slower reducer.

Warmer temperature may require using slower than normal reducers or the addition of the LCZ40 retarder.

RECOMMENDED APPLICATION: Pigmented Polyurethane sealers and Topcoats			
	Tip sizes	Atomization pressure	Product pressure
Conventional air spray	1.8 – 2.1 0.070-0.086	-	30-40 psi
Airless spray	0.009 – 0.011	-	1800 – 2100 psi
Air assisted spray	0.009 – 0.011	15 – 20 psi	600 – 900 psi

KHR1 White Glossy Pigmented Polyurethane Topcoat

Primer Sand

After through drying sand with 320 grit Silicon Carbide sandpaper

- For glossy finishes additional sanding up to 600 grit will help eliminate the possibility of sanding scratches from telegraphing through to the topcoat.

NOTE: It is wise to make extra "Test" panels as you go through these processes. They will help you determine optimal dry times before moving on to the next step.

Topcoat Application

KHR1 White Glossy Topcoat

- Catalyze 50% by weight with LNB110
- Reduce 30% by weight (minimum) with LZC8643 reducer
- Reducer is always measured as a percentage of the Part A resin only
- For very warm temperatures up to 5% of LTZ40 retarder can be added to the LZC8643
- Viscosity: 15 seconds #4 Ford cup.
- Potlife is 3 hours. Less in hot weather.
- Apply 5 - 6 wet mils

Recoat

Wait 1 to 3 hours maximum. Apply next coat wet on wet – no sanding between coats.

- This is very important because it allows for a chemical burn in between the 2 coats.
- If you miss this recoat window wait at least 6 hours *and then sand well with up to 600 grit silicon carbide sandpaper*. Recoat following the above mixing and drying procedures. Note: *You then run the risk of a "halo" appearing if the last coat is burned through during the polishing process.*

Note: Sanding the final coat of primer up to 600 grit will help eliminate the possibility of sanding scratches from telegraphing through to the topcoat.

Note: If a clear glossy topcoat is desired over the pigmented finish you may need only 1 coat of the pigmented topcoat, depending on hiding. Depending on how much dust entrapment there is you may need to let the last coat dry completely and sand the last coat up to 600 grit before clear coating. Otherwise recoat with the clear within 1-2 hours. 2 coats wet on wet

Dry Time

Dry 1 to 3 days before wet sanding and buffing.

- Longer dry time is always better.
- *Use your "Test" panels to determine the when products are ready to buff.*

Clean Up

- Clean up equipment immediately after use with acetone
- Dispose of all cleaning materials and solvents in proper manner

ADDITIONAL INFORMATION

- PU hardeners are moisture sensitive; always keep containers tightly closed
- Always be sure to use the product with the appropriate and recommended hardener and with right percentage.
- Always be sure to use the recommended catalysts and PU thinners to reduce viscosity.
- Pot-life is stated at 68°F, we recommend to use the prepared quantitative before 1h, to obtain best results of sheen and flow out.
- Ammonia cleaners should not be used for cleaning the finished surface. This may cause discoloration.

For best results, the optimum conditions for application are:

- Ambient temperature between 18 and 22°C (64 - 72 °F)
- Ambient relative humidity between 65 and 70%
- Substrate moisture content between 8 and 14%

The conditions to be followed scrupulously are:

- Solvent-based products should be stored indoors at temperatures not below 0 °C / 32°F or above 35 °C /95°F, in a properly ventilated place, not exposed to sunlight
- Always agitate well the products and other components such as catalysts, accelerators and thinners before and after blending
- Application must not take place at a temperature lower than 15 °C / 59°F or above 30°C / 86°F
- Drying should not take place at a temperature below 15 °C / 59°F
- Ambient relative humidity during drying should be between 50% and 70%

Note: Product Data Sheets are periodically updated to reflect new information relating to the product. It is important that the customer obtain the most recent Product Data Sheet for the product being used

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