

## Product Application Sheet



### LDA21086 Clear Glossy Polyurethane Topcoat

#### General Information - Clear Glossy Polyurethane Topcoats

Milesi clear 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 clear glossy polyurethanes use specific non-yellowing catalysts to minimize yellowing and you can vary the catalyzing ratio to suit your dry to polish times.

Generally clear 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.

Clear gloss topcoats that are designed to be buffed 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

#### General Information – Catalysts

For standard glossy polyurethanes:

- LNB110: better resistance to yellowing, better flexibility

#### 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 LTC40 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 LTC40 retarder.

<b>RECOMMENDED APPLICATION: Clear Polyurethane Sealers and Topcoats</b>			
	<b>Tip sizes</b>	<b>Atomization pressure</b>	<b>Product pressure</b>
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

*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.*

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### Sealer Sand

After through drying sand with 320 grit Silicon Carbide sandpaper

- *For glossy finishes the last sealer coat can have additional sanding up to 600 grit will help eliminate the possibility of sanding scratches from telegraphing through to the topcoat.*

### Topcoat Application

#### **LDA21086 Glossy Polyurethane Topcoat**

- Catalyze 50 to 100% by weight with LNB110 Catalyst – 80% is usually recommended.
- Reduce 40% by weight with LZC8643 Reducer
- Reducer is always measured as a percentage of the Part A resin only
- Viscosity: 13 seconds #4 Ford cup.
- Potlife is 5 Hours– less at high temperatures
- Apply 5 -6 wet mils
- The greater the ratio of catalyst the sooner the topcoat will be ready to buff.

### Recoat

Wet on wet application: 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.*

### Dry Time

Dry 1 to 3 days before wet sanding and buffing.

- The greater the catalyzing ratio the sooner wet sanding and buffing can begin.
- *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

Product Code	Milesi Catalyzation Chart	Catalyst	% Catalyst		Pot Life	% Reduction	
			By Vol	By Wt		By Vol	By Wt
LDA221086	Clear Glossy Polyurethane Topcoat	LNB110	50 -100	50-100	5 Hr	47	40

### If using equipment for both solvent and water base products:

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- When switching from solvent to water, flush sprayguns with water before using.
- When switching from water to solvent, flush with denatured alcohol or acetone after cleaning with water. This will attract any water left in the system. Then flush with the appropriate solvent to temper the gun.

### Health and Safety

Spray finishing produces mists and these can clog or irritate the lungs. Always wear personal protection.

- Always apply finishes in a properly ventilated spray booth.
- Use of a properly fitted respirator with a fresh organic vapor cartridge is recommended. A full face mask is best.
- Wear safety glasses or goggles if you don't have a full face mask.
- Wear a dust mask while sanding these finishes.

### ADDITIONAL INFORMATION

- PU hardeners are moisture sensitive; always keep containers tightly closed
- Always be sure to use the recommended catalysts and PU thinners to reduce viscosity.
- Accurately measure resins and catalysts.
- Observe pot life times and recoat windows.
- Pot life decreases as temperatures rise.
- Product viscosity increases as pot life expires.
- Always keep catalyst and resin cans closed when not in use.
- 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:*

- Water base 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
- Once the product has flashed off air movement will facilitate drying.
- Ambient relative humidity during drying should be between 50% and 70%

It is the user's responsibility:

- Adhere to the conditions indicated above
- Comply with the rules of hygiene and safety during product application, according to the descriptions given in the safety data sheets

*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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