

# Product Application Sheet



## LGA23X Clear Polyurethane Topcoat – Various Sheens

### General Information - Clear Polyurethane Topcoats

Milesi polyurethane systems are the best choice for medium to dark color woods or when higher film build on the wood is desired. These products have the potential to slight yellow over time. This is mainly influenced by the choice of catalyst.

Generally polyurethane topcoats use medium to slow reducers to insure good flow out and leveling.

More than 1 coat of sealer may be used, but most Milesi polyurethane systems require only 1 topcoat. The exception is gloss topcoats that are designed to be buffed. They should have 2 topcoats applied wet on wet.

### 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 polyurethanes:

- The LNB42 catalyst: faster drying and harder but is more brittle and more yellowing. Not recommended in systems that require more than 3 total coats.
- The LNB20 catalyst: slower drying, more flexible and resists yellowing.

### General Information – Reducers

Milesi polyurethane reducers 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 polyurethane clear and pigmented topcoats use medium to slow reducers to get optimal flow out and leveling. Typically these are the LZC1051, LZC8543 and LZC70. There are some exceptions.

For very warm temperatures up to 5% of LTC40 retarder can be added to these reducers instead of switching to a slower reducer.

<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

## LGA23X Clear Polyurethane Topcoat – Various Sheens

### Topcoat Application

#### **LGA23X** Clear Polyurethane Topcoat – Various Sheens

- Catalyze 50% by weight with LNB20 or LNB42 - depending on desired properties
- Reduce 20% by weight (minimum) with LZC1026 or LZC8643 reducer
- Reducer is always measured as a percentage of the Part A resin only
- Use the LZC1026 for normal or mild temperatures and the LZC8643 for warm to hot temperatures.
- For very warm temperatures up to 5% of LTC40 retarder can be added to the LZC8643
- Viscosity 15 seconds #4 Ford cup
- Potlife is 5-6 hours– less at high temperatures
- Apply 5 -6 wet mils

### Recoat

Normally only 1 topcoat is required. Film build should be done with sealers

- If additional build is required recoat with the LGA23X topcoat.
- For wet on wet application: Wait 1 - 2 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 320 grit silicon carbide sandpaper and recoat following the above mixing and drying procedures.

### Dry Time

Dry 12 hours minimum before stacking

### Clean Up

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

Available Sheens			
Product	Sheen	Product	Sheen
LGA230	65	LGA233	20
LLGA232	30	LGA234	10

Product Code	Milesi Catalyzation Chart	Catalyst	% Catalyst		Pot Life	% Reduction	
			By Vol	By Wt		By Vol	By Wt
LGA23X	Clear Polyurethane Topcoat	LNB42/20**	51	50	5-6 Hr	23	20

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

- 
- 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*

**DISTRIBUTED BY:**  
**Pro Wood Finishes**  
**14622 Southlawn Lane**  
**Rockville MD 20850**  
**Ph: (301) 424-3033**



[WWW.MILESI.US](http://WWW.MILESI.US)