

Opticlear 900 Low VOC – 431-83XX

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- Opticlear 900 Low VOC is a one-component, pre-catalyzed reactive amino coating especially developed for surface treatment of furniture where a beautiful appearance with good resistance properties is desired. Opticlear is fast drying and well suited for spraying as well as coating by roller and curtain coating. The material is used for an open or semi-open grain finish on all types of wood for interior use. This pre-catalyzed lacquer has very low odor during the curing process while maintaining its rapid dry and cure properties. To augment the chemical resistance of the product, Opticlear 431-83XX may be catalyzed with 3% of 873-0870.

Opticlear 900 Low VOC has been tested by an Accredited Laboratory using North American test methods to determine formaldehyde emissions after drying. It has been determined that a close correlation exists between the North American test standards and the German “E-1” classifications, with the figure of 0.3 mg/L or less being equivalent to “E-1” rated material. The formaldehyde emission values for the Opticlear 900 in this test are <0.3 mg/L. Deviation from this test method in application, substrate or curing may vary the formaldehyde emission and customer applied systems should be tested to ensure compliance to the E-1 regulation.

Special Recognition: Opticlear 431-83XX, when applied as specified, will meet required performance for the ANSI/KCMA A161.1 1990 9.0 Finish Tests. Opticlear 431-83XX can be classified as “E-1” equivalent, when the product is applied as specified, in the test method for lacquers in accordance with agreement with the Swedish Paint Manufacturers Association.

Note: Opticlear 900 Low VOC must not be polluted with oil, varnish, or the like and must not be sanded with steel wool between coats. Opticlear 900 Low VOC must not be used and dried at temperatures below 65° F. or relative humidity above 65% as the hardening may otherwise become incomplete. During hardening, the lacquer must not be exposed to ammonia vapors. Ammonia cleaners should not be used for cleaning the finished surface.

Gloss:	As required
Flash Point:	-1.0° F.
Weight per Gallon:	7.42
Solids by Weight:	23.24%
Solids by Volume:	18.04%
Fire Hazard Class:	3
Health Hazard Class:	3
Viscosity:	25 sec, Zahn #2 @ 77°
VOC (minus exempt)	5.21lb./gal.
HAPS:	<0.1%
Lbs. VHAPs/Lbs. Solids:	0
Lbs. VOC per lbs. Solids:	1.94

Shelf Life: Six months recommended if unopened and stored in a cool, dry area. Always rotate stock.

Pot Life: When catalyzing, only mix enough material for a maximum of eight hours use.

Mixing Ratio: When use as a two-component product, mix in 3% 873-0870 hardener by volume.

Reduction: N/A

Surface Preparation: Wood substrate must be sanded using 120, 150 or 180 grit steared prior to staining or coating. Sealers should be sanded with 280/320 grit steared paper prior to topcoating. Appropriate sealers are Chemcraft precatalyzed sealers of self-sealing. When recoating, the previous coat of Opticlear 900 Low VOC must be sanded and the next coat applied within eight hours. Stain systems under acid containing coatings should be acid stable. Opticlear 900 Low VOC cannot be used on metal, old oil or cellulose lacquers.

Directions for use: Agitate material before use. Always mix Opticlear 900 Low VOC while adding hardener in the recommended mixing ratio. Opticlear 900 Low VOC must be agitated thoroughly at all times to ensure product consistency and consistent gloss.

Apply at 3-5 mils wet on sanded substrate. Further coats may be applied after complete drying followed by sanding with 280/320 grit steared paper.

Contact with metal surfaces should be avoided.

Maximum film build of Opticlear 900 Low VOC should not exceed 4 mils dry. Maximum film build of total coating system must not exceed 4 mils dry.

The customer is responsible for following the recommended application procedures. Failure to adhere to the recommendations given in this Technical Data Sheet will likely result in unsatisfactory film appearance or film failure.

The completed coating system should be checked for required properties prior to start-up of production.

Application:		Viscosity	Wet Film	Recommended Dry Film
Method				
Spray	- Conventional } - Airless } - HVLP }	Z #2 20-25"	3 – 4 mils	0.8-1.2 mils
Curtain Coater:		Z #2 25"	3 – 5 mils	0.8-1.2 mils

Note: All measurements recommended are based on results at temperatures of 68°F.

Drving Times:

Note: Temperatures are based on actual board temperature. This may vary depending on length of time for boards to reach these temperatures.

At 68°F (Minimum Required)		At 122°F (Minimum Required)	
Tack Free:	10-15 mins	Tack Free:	Flash off before entering oven
Dry to Sand:	~1 hours	Dry to Sand:	30-45 minutes
Dry to Stack:	~ 3 hours	Dry to Stack:	60-90 minutes

Cleanup: Use 803-1325 or 803-1329 Thinner.