

Product Code:

431-9110	Flat
431-9120	Low Gloss
431-9135	Satin
431-9150	Semi-Gloss
431-9190	Full Gloss

VISCOSITY:	Zahn #2 signature cup 33 sec at 25°C
FLASH POINT:	14°C (57°F)
DENSITY (Kg/L):	0.93
SOLID (% by weight):	32%
SOLID (% by volume):	25%
SHELF LIFE (months):	6

Product Description: Opticlear is a one component, pre-catalyzed lacquer especially developed for surface treatment of furniture where a beautiful appearance with good resistance properties is desired. To augment the chemical resistance of the product, Opticlear 431-91XX may be catalyzed.

Uses: 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.

Environmental Data (as supplied):

VOC less exempt lb/gal:	5.28
VOC lb/gal:	5.28
VOC less exempt g/l:	632
VOC g/l:	632
VOC lb/lb Solid:	2.10
VHAPs lb/lb Solid:	0.006

See individual compliance sheets for specific data

Application Data:

SUGGESTED USES:	Clear Pre-Catalyzed Lacquer
MIXING RATIO:	3% 999-017 if catalyzed
POT LIFE:	8 hours if catalyzed
APPLICATION VISCOSITY:	Zahn #2 signature cup 20-25 seconds
REDUCER:	121-802 or 121-803
RETARDER:	121-014
CLEAN-UP SOLVENT:	Lacquer Thinner
APPLIED FILM THICKNESS:	3-5 wet mils

Directions for Use

Opticlear Pre-Cat Clear TC
431-91XX

Surface Preparation:

Wood substrate should be sanded with 120, 150 or 180 grit paper prior to staining or coating. Sealers should be sanded with 280/320 grit stearated paper prior to topcoating. The sealer should be topcoated within eight hours of sanding. An appropriate sealer is 390-001 Chemseal or self seal. When recoating, the previous coat of Opticlear must be sanded and the next coat applied within eight hours. Stain systems under acid containing coatings should be acid stable. Opticlear can not be used on metal, old oil or cellulose lacquers.

General information:

Agitate material before use. Always mix Opticlear while adding hardener and reducers in the recommended mixing ratios.

Opticlear 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 stearated paper. Contact with metal surfaces should be avoided.

Opticlear must not be used and dried at temperatures below 18°C or relative air humidity above 65% as the hardening may otherwise become incomplete. During hardening, the lacquer must not be exposed to ammonia vapours. Ammonia cleaners should not be used for cleaning the finished surface.

Maximum film build of Opticlear 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 DATA SHEET WILL LIKELY RESULT IN UNSATISFACTORY FILM APPEARANCE OR FILM FAILURE. THE COMPLETE COATING SYSTEM SHOULD BE CHECKED FOR REQUIRED PROPERTIES PRIOR TO THE START-UP OF PRODUCTION.

Drying Times:

	At 20°C (Minimum Required)	At 50°C (Minimum Required)
Tack Free Time:	15 minutes	Flash off before entering oven
Dry to Sand:	2 hours	30 minutes
Dry to Stack:	3 hours	1 hour

Note: Dry times are greatly affected by film build, porosity of substrate, air movement as well as heat and humidity. Temperatures are based on actual board temperature. This may vary depending on length of time for boards to reach these temperatures. Minimum curing temperatures of 64°F/18°C must be maintained throughout the curing cycle to achieve the film integrity as stated in product features.

These products are designed for industrial use only. AkzoNobel views safety as a top priority. Please refer to Material Safety Data Sheet for information on the safe use of this product.

Values shown are calculated estimates and should not be construed as product specifications. We cannot anticipate all conditions under which this information and our products or the products of other manufacturers in combination with our products may be used. We accept no responsibility for results obtained by the application of this information or the safety and suitability of each such product or product combination for their own purposes. Unless otherwise agreed in writing, we sell the products without warranty, and users assume all responsibility and liability for loss or damage arising from the use of our products whether used alone or a combination with other products. Use of unapproved or reclaimed solvent blends may reduce film properties and is not recommended.

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