



# Product Information

## Opticlear 275 - 431-39XX

### PRODUCT DESCRIPTION

431-3920	Low gloss
431-3940	Satin Gloss
431-3960	Semi-Gloss
431-3990	Full Gloss

Opticlear 275 is a one-component high solids precatalyzed Reactive Amino Coating (RAC). This product has been formulated to meet 275g/l VOC regulations. Opticlear 275 is recommended for office and household furniture, kitchen cabinets, as well as many other interior wood applications.

### FEATURES

Opticlear 275 demonstrates very good moisture, household wear, household chemical, and mar resistance.

Labor saving through the elimination of a coating step or two is generally realized due to the high solids in the product.

Opticlear 275 is supplied at a ready to spray viscosity. This coating will dry quickly and sand easily.

Opticlear 275 may be catalyzed to further enhance its durability.

Special Recognition: Meets Kitchen Cabinet Manufacturer Association (KCMA) Standards.

Recommended: American Woodworking Institute Precatalyzed Lacquer System (8<sup>th</sup> Ed).

**Note:** Opticlear 275 must not be polluted with oil, varnish or the like and must not be sanded with steel wool between the coats. Opticlear 275 must not be used and dried at temperatures below 64°F or relative humidity above 65%. During hardening the coating must not be exposed to ammonia vapors. Ammonia cleaners should not be used for cleaning the finished surface. This may accelerate discoloration.

### SPECIFICATION VALUES

Gloss:	As required
Flash Point:	-18°C (0°F)
Specific Gravity:	0.94
Weight per Gallon:	7.84
Solids by Weight:	27.5%
Solids by Volume:	21%
Viscosity at 25°C (77°F):	21"Z#2
VOC:	274 g/l
Lbs. VOC/Gallon:	0.66
Lbs. VOC/Lbs. Solids:	0.32
Lbs. VHAPs/Lbs. Solids:	0.00

Values at Application if Catalyzed:  
VOC: 266 g/l

If additional reducers or additives are used, compliance values must be recalculated.

### SPECIFICATION INFORMATION

**Shelf Life:** Three months recommended if unopened and stored between 15°C - 25°C (59° - 77°F).

Always rotate stock.

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

**Coverage:** Coverage is 320 sq. ft/gal at 1 mil dry and at 100% transfer efficiency. Coverage will vary depending on method of application or coating thickness.

**Mixing Ratio:** When used as a two-component product use 100 parts by volume of Opticlear 275 431-39XX to 1 part by volume of Hardener 873-1900.

**Reduction:** This product is to be applied unreduced. Use Reducer 803-1384 for viscosity reduction and extra flow. This reducer does not increase VOC's. Use Chemcraft® Retarder 800-5915 to slow the cure and keep the film open longer. Do not use over 3%. This blend will affect VOC's.

**Sealers:** Optiseal 275 546-5900 is recommended. However, if desired this product may be used as a self-seal product.

**Surface Preparation:** Substrate must be sanded using 120, 150 or 180 grit steared paper prior to staining or coating. Sealers, if used, should be sanded prior to being coated with 280/320 grit steared paper. The sealer should be topcoated within eight hours of being sanded. Appropriate sealers are Chemcraft precatalyzed sealers, or self-seal. When recoating, the previous coat of Opticlear 275 must be sanded and the next coat applied within eight hours. Opticlear 275 cannot be used on metal, old oil or cellulose lacquers. Stain systems used under acid catalyzed systems should be acid stable. Chemcraft recommends using 825-39XX series stains or 824-29XX series waterbased stains.

**Directions for Use:** Agitate material before use. Opticlear 275 must be agitated thoroughly at all times to ensure product consistency and consistent gloss. Always mix Opticlear 275 while adding hardener and reducers in the recommended mixing ratios.

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. The second and subsequent coats must be applied the same day as the previous coat is sanded.

Maximum film build of Opticlear 275 should not exceed 3 mils dry. Maximum film build of total coating system must not exceed 3 mils dry. Contact with metal surfaces should be avoided.

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.

Please note that, as with any other precatalysed product, this material contains, and has the potential to emit, formaldehyde (CAS# 50-00-0). As per the US Department of Labor Standard 29 CFR 1910.1048 covering formaldehyde, section (d)(1)(i) states that "Each employer who has a workplace covered by this standard shall monitor employees to determine their exposure to formaldehyde." Please refer to the OSHA web site at [www.osha.gov](http://www.osha.gov) for further information.

## APPLICATION

Method of Application:	Viscosity	Wet Film	Dry Film
Spray - Conventional	Z #2/21"	3-5 mils	0.6-1.0 mils
- Airless	Z #2/21"	3-5 mils	0.6-1.0 mils
- HVLP	Z #2/21"	3-5 mils	0.6-1.0 mils

All measurements recommended are based on results at temperatures of 20°C (68°F). Viscosity will vary depending on the temperature of the liquid.

### Drying Times:

At 20°C (68°F)	(Minimum Required)	At 50°C (122°F)	(Minimum Required)
Tack Free:	20 minutes	Tack Free:	Flash off before entering oven
Dry to Sand:	1-1.5 hour	Dry to Sand:	30-45 minutes
Dry to Stack:	2-3 hours	Dry to Stack:	60-90 minutes

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 18°C (64°F) must be maintained throughout the curing cycle to achieve the film integrity as stated in product features.

**Clean-Up:** Use Acetone (800-5500) for clean-up.

Chemcraft Coatings Technology 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.