Chemcraft International Inc.

Product Information

Opticlear 900 – 431-80XX

PRODUCT DESCRIPTION

431-8020	Low Gloss
431-8035	Satin Gloss
431-8050	Semi-Gloss
431-8090	Full Gloss

Opticlear 900 is a one-component high solids precatalyzed Reactive Amino Coating (RAC). This product meets the German "E-1" classification for the emission of formaldehyde as tested by an accredited laboratory using North American test methods. This is a fast building precatalyzed RAC due to its high solid content (26% volume). Opticlear is recommended for office and household furniture, kitchen cabinets, as well as many other interior wood applications.

FEATURES

Opticlear 900 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 900 is supplied at a ready to spray viscosity. This coating will dry quickly and sand easily.

Opticlear 900 may be catalyzed to further enhance its durability. Contact your coating supplier for a recommendation.

Special Recognition: Meets Kitchen Cabinet Manufacturer Association (KCMA) Standards. Recommended: American Woodworking Institute (AWI). T.R.2.

Note: Opticlear 900 must not be polluted with oil, varnish or the like and must not be sanded with steel wool between the coats. Opticlear 900 must not be used and dried at temperatures below 18°C (64°F) or relative humidity above 65%. During hardening the enamel 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:	-17°C (0°F)
Specific Gravity:	0.92
Weight per Gallon:	7.65
Solids by Weight:	32%
Solids by Volume:	26%
Fire Hazard Class:	3
Health Hazard Class:	2
Viscosity at 25°C (77°F):	25" Z#2
VOC:	597 g/l (5.00 lb/gal)
Lbs. VOC/Gallon:	4.25 lb/gal
Lbs. VOC/Lbs. Solids:	1.70
Lbs. VHAPs/Lbs. Solids:	<0.01

Values at Application if Catalyzed:

Lbs. VOC/Lbs. Solids:	1.80
Lbs. VHAPs/Lbs. Solids:	<0.01

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

SPECIFICATION INFORMATION

Shelf Life: Six 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 417 sq. ft/gal (9-11 m^2/L)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 431-80XX Opticlear 900, 3 parts by volume of 873-0870 Hardener.

Reduction: This product is to be applied unreduced. Use slow reducer 803-1325 for hot climates and extra flow. Use fast reducer 803-1329 for temperate climates. Use Chemcraft® Retarder 800-5328 to slow the cure and keep the film open longer.

Sealers: This product is intended as a self-seal product; however, if a sealer is desired Optiseal 431-1902 is recommended.

Opticlear 900 431-80XX

DIRECTIONS FOR USE

Surface Preparation: Substrate must be sanded using 120, 150 or 180 grit stearated paper prior to staining or coating. Sealers, if used, should be sanded prior to being coated with 280/320 grit stearated 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 900 must be sanded and the next coat applied within eight hours. Opticlear cannot be used on metal, old oil or cellulose lacquers. Stain systems used under acid catalyzed systems should be acid stable. Chemcraft® recommends using 825-70XX Easywipe stains or 891-73XX N.G.R. stains.

Directions for Use: Agitate material before use. Always mix Opticlear 900 while adding hardener and reducers in the recommended mixing ratios. Opticlear 900 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. The second and subsequent coats must be applied the same day as the previous coat is sanded.

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

APPLICATION

Method of Application:		**Viscosity**	**Wet Film**	**Dry Film**
Spray	- Conventional	Z #2/20-25"	3-5 mils	0.8-1.2 mils
	- Airless	Z #2/20-25"	3-5 mils	0.8-1.2 mils
	- HVLP	Z #2/20-25"	3-5 mils	0.8-1.2 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 (68ºF)	(Minimum Required)	At 50°C (122ºF)	(Minimum Required)
Tack Free:	10-15 minutes	Tack Free:	Flash off before entering oven
Dry to Sand:	1 hour	Dry to Sand:	30-45 minutes
Dry to Stack:	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 64°F/18°C must be maintained throughout the curing cycle to achieve the film integrity as stated in product features.

Clean-Up: Use 803-1298.

Chemcraft International Inc. views safety as a top priority. Please refer to Material Safety Data Sheet for information on the safe use of this product.

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