

CrystalVar™ 680

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WATER-CLEAR CONVERSION VARNISH

Product Code: **310661**

CrystalVar™ 680 Conversion Varnish is a water-clear, two-part conversion varnish ideal for interior wood cabinetry where a flawless finish is required.

Sheens

310661-FL	Flat	10 Sheen
310661-ST	Satin	20 Sheen
310661-SG	Semi-Gloss	40 Sheen

Ideal For

- Kitchen cabinets
- Bathroom cabinets
- Wood placed in high moisture areas
- Residential table and bar tops
- Exceeds KCMA performance tests
- AIM compliant 680 g/l VOC
- NESHAP compliant—JJ (furniture)
- NESHAP compliant—QQQQ (doors & windows)

Benefits

- Water Clear
- Non-yellowing
- Exceptional abrasion resistance
- Excellent water and chemical resistance
- 24 hour pot life
- Excellent flow and leveling
- High build
- Excellent sanding properties
- May be used as a self-seal system
- Super-Low HAP

APPLICATION DATA

SURFACE PREPARATION: “White sand” wood with maximum 150 grit aluminum oxide sandpaper. Remove all sanding dust. Keep free of dirt, grease, silicone oils, lubricants and other contaminates.

APPLICATION EQUIPMENT: This product is designed for spray application through all types of equipment. Mixing or pumping equipment that is in constant contact with Conversion Varnish should be constructed of stainless steel or other anti-corrosive material. Recommended settings below are with trigger pulled.

Airless	No thinning required. Spray at 1000 or 1200 psi 411 or 513 tip
Air Assist	No thinning required. Spray at 700 to 900 psi fluid pressure 10-12 psi air cap 411 or 513 tip
HVLP	No thinning required. Spray at 28 psi through a 1.4 fluid nozzle

THINNING: This product is designed to spray at package viscosity with most application equipment. Thinning requirements may vary with changes in temperature and spray room conditions. If thinning is desired, use 650870 Lacquer Thinner, 652081 VOC Exempt Lacquer Thinner, 652210 No-HAP Lacquer Thinner, or Acetone.

Note: Thinning will reduce film build and may increase VOCs or HAPs, unless using VOC exempt or HAP-free solvents.

AGITATION: This product must be kept under slow, constant agitation, to ensure proper mixing.

CLEAN UP: Use lacquer thinner compliant with local air quality rules and regulations.

FINISHING SYSTEM

MIXING DIRECTIONS: Add 3% (4 fluid ounce) of Rudd 03-143 Catalyst per gallon. Stir well during and after adding catalyst.

POT LIFE: 1 day (24 hours) @ 65—70°F.

STAIN: When staining wood, use Rudd Colortools™ Dye Stain, Colortools™ Spray Only Stain or Colortools™ Wiping Stain.

SEAL: Apply one coat (3-5 mils wet) of CrystalVar 680 as its own sealer or one coat (3-5 mils wet) of 310645 CrystalVar 550 Sealer. Allow to dry 25-35 minutes*. Sand with 220/320 grit silicon carbide sandpaper before finishing.

FINISH: Apply one or two coats (3-5 mils wet) of CrystalVar 680. Sand between all coats with 220/320 grit silicon carbide sandpaper.

If desired, additional coats may be applied up to a total dry film of 5.0 dry mils. * Dry times may vary with film thickness, temperature, humidity, and air movement.

SAFETY PRECAUTIONS

Avoid breathing vapors, use a NIOSH approved cartridge respirator. Use pre-filters to avoid breathing spray particles or sanding dust.

Flammable Liquid and Vapor: Keep away from heat, sparks and flame. Ensure adequate ventilation during use. Clean up spills with non-sparking tools and inert absorbent material. Store solvent and lacquer soaked rags and filters in water-filled, closed containers prior to disposal. Dispose of in safe, approved manner.

Read Material Safety Data Sheet and label before using.

FINISH PERFORMANCE TESTING**KCMA**

Vinegar	No Visual Effect
Lemon Juice	No Visual Effect
Orange Juice	No Visual Effect
Grape Juice	No Visual Effect
Catsup	No Visual Effect
Olive Oil	No Visual Effect
100 Proof Alcohol	No Visual Effect
Hot Coffee	No Visual Effect
Edge Soak	Passed 24 hr KCMA test with no softening, discoloration or film defects
Cold Check	Passed 20 cycles @ 5 mils dry film

OTHER

MEK Resistance	125+ single rubs showed no removal of finish
Hot Water Ring	No marking at 190° F after 1 hour
Pencil Hardness	Pass F
Mar Resistance	Very Good
Adhesion	Excellent

SPECIFICATIONS

Coverage	371 square feet per gallon @ 1 mil dry film
Viscosity	22-28 Seconds (#2 Zahn @ 75°F)
Sag Resistance	4 mils vertical @ 65-70°F
Solids*	28.9-30.8 % by weight 2.2-2.37 lbs per gallon
VOC* (Volatile Organic Compounds)	Calculated: 611-620 g/l (5.09-5.2 lb/gal) Catalyzed: 608-618 g/l ((5.06-5.15 lb/gal)
HAP* (Hazardous Air Pollutants)	Pounds HAP per Gallon: 0.0609—0.0610 Pounds HAP per Pounds Solids: < 0.8 (actual 0.0255—0.0274) Pounds HAP per Volume Solids: < 0.48 (actual 0.2575—0.2730)
Dry to Sand	25 minutes @ 65-70°F
Block Free	24 hours @ 5 mils wet
*Variations depend on gloss CAUTION: Thinning will reduce film build and increase VOCs.	

*** Contact your Sales Representative for available stock sheens and package sizes.***

APPLICATION PRECAUTIONS

- CrystalVar 680 Clear Conversion Varnish may be used as a self seal system or as a topcoat over 310645 CrystalVar 550 Sanding Sealer.
- Do not use alkaline based products to clean surfaces finished with CrystalVar 680.
- This product MUST be sanded between all coats to ensure proper adhesion. This product MUST be re-coated within 8 hours of being sanded.
- This product is not recommend for exterior use.
- Finish, substrate and curing temperatures should remain above 60°F, extremes of temperature and humidity may affect product performance.
- Total film build of system must not exceed 5.0 dry mils.
- This product has been tested on a limited number of substrates and over a limited number of coatings. The user is responsible for testing suitability and performance for their specific application.
- For best results, use within 12 months of manufactured date.
- Designed for professional use and spray application only.

Shipping & Storage Information

Flash Point: -4°F Pinsky-Martin

OSHA Flammability Class: Flammable Liquid—Class IB

DOT Class: Paint, 3, UN 1263, PG II



RUDD COMPANY, INC

Manufacturers of Quality Coatings Since 1912

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