

# Product Information

## E-Var 80 – 421-80XX

### PRODUCT DESCRIPTION

421-8020	Low Gloss
421-8035	Satin Gloss
421-8050	Semi-Gloss
421-8090	Full Gloss

E-Var 80 is a high quality, acid curing Reactive Amino Coating (RAC). This is a fast building product due to its high solid content (43% volume). This product is recommended for kitchen cabinets, high build office or residential furniture as well as other interior wood applications.

### FEATURES

421-80XX E-Var 80 demonstrates excellent resistance to marring, dry heat, moisture, household and office liquids, etc.

421-80XX E-Var 80 has very good light stability based on the choice of resin used in the product.

When this product is used as its own sealer, its special formulation ensures excellent filling and easy sanding properties with superior holdout for subsequent coating.

421-80XX E-Var does meet regulations regarding photochemical reactive material (PRM).

Special Recognition: Meets Kitchen Cabinet Manufacturer Association (KCMA) Standards.  
Recommended: American Woodworking Institute (AWI). T.R.4.

**Note:** E-Var 80 must not be polluted with oil, varnish or the like and must not be sanded with steel wool between the coats. E-Var 80 must not be used and dried at temperatures below 64°F or relative humidity above 65%. During the curing process, 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:	7°C (45°F)
Specific Gravity:	0.98
Weight per Gallon:	8.16
Solids by Weight:	49% +/- 1
Solids by Volume:	42% +/- 1
Fire Hazard Class:	3
Health Hazard Class:	2
Viscosity at 25°C (77°F):	18" 2#Z at 77°F.
VOC:	495 g/l (4.1 lb/gal)
Lbs. VOC/Gallon:	4.1 lb/gal
Lbs. VOC/Lbs. Solids:	1.03
Lbs. VHAPs/Lbs. Solids:	0.17

#### Values at Application if Catalyzed:

Lbs. VHAPs/Lbs. Solids:	0.16
Lbs. VOC/Lbs. Solids:	1.03

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

### SPECIFICATION INFORMATION

**Shelf Life:** Twelve months recommended if unopened between 15°C - 25°C (59°F – 77°F). Always rotate stock.

**Pot Life:** Mix only enough for one days use for optimum product performance. Use of material, which has been catalyzed for more than 12 hours, may cause failure in film integrity.

**Coverage:** Coverage is 722 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:** 100 parts of 421-80XX E-Var 80 to 3 parts of 873-1205 or 10 parts 873-0870 Catalyst.

**Reduction:** Generally no reduction is required however under humid conditions it may required to use Chemcraft Retarder 800-5328 to slow the cure and keep the film open longer.

**Sealers:** This product can be used as a self-sealer if reduced 20-30%. It can also be used with sealers such as Catalyzed Vinyl Sealer 546-7023, 546-8002 Chemvinyl, or Danseal 432-1220. Consult with your coatings supplier for specific recommendations.

## DIRECTIONS FOR USE

**Surface Preparation:** Substrate must be sanded using 120 or 150 grit steared paper prior to staining or coating. Sealers, if used, should be sanded prior to being coated with 240, 280 and 320 grit steared paper. The substrate as well as the sealers should be topcoated within eight hours of being sanded. Appropriate sealers are Catalyzed Vinyl Sealer 546-7023 with 3% Catalyst 873-0870, or Chemvinyl 546-8002. E-Var 80 cannot be used on metal, old oil or cellulose lacquers. Stain systems used under acid catalyzed systems should be acid stable. Chemcraft recommends using 825-80XX Easywipe, or 891-73XX N.G.R. stains.

**Directions for Use:** Catalyze and reduce the material as recommended. E-Var 80 is applied in one to three coats on all kinds of wood meant for indoor use. On open pored woods, the best self-sealing is obtained by adding a minimum of 25% Reducer 803-1325 to thee-Var 80 after catalyzing. Thorough sanding between the coats is a must for good adhesion. The second and subsequent coats must be applied the same day as the previous coat is sanded.

E-Var 80 must be thoroughly stirred, while adding catalyst and reducer in the recommended ratio. Total recommended film build of E-Var 80 and sealer should not exceed 4 mils dry.

Contact with metal surfaces should be avoided once the E-Var 80 has been catalyzed. To ensure proper sheen, the catalyzed material should be agitated at all times.

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 #2/20-22"	3-4 mils	1.2-1.6 mils
- Airless	Z #2/22-25"	3-4 mils	1.2-1.6 mils
- HVLP	Z #2/17-20"	3-4 mils	1.2-1.6 mils

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

**Drying Times:**

At 68°F	(Minimum Required)	At 122°F	(Minimum Required)
Tack Free:	15 minutes	Tack Free:	Flash off before entering oven
Dry to Sand:	2 hours	Dry to Sand:	45 minutes
Dry to Stack:	Overnight	Dry to Stack:	3 hours

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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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.