



## EK Series KATILAC™ Pre-Catalyzed Lacquers

The EK series Katilac™ products are a line of solvent borne, one component, pre-catalyzed, alkyd/amino resin based conversion coatings. They are water-white, yellowing resistant coatings that are specifically designed for high quality interior wood finishing. They are particularly well suited to interior trim & millwork, office furniture, household furniture and cabinets.

They can be used in a self-sealing system or in conjunction with KCI's EK6 Pre-Cat Sealer or EK8 Vinyl Sealer.

### KEY PERFORMANCE FEATURES

- non-yellowing
- excellent clarity
- fast dry
- easy sanding
- self-sealing
- gun ready for all spraying systems
- ultra low formaldehyde
- mar and scratch resistance
- chemical and moisture resistance
- excellent flow and leveling

### RELATED PRODUCTS

EK6 Pre-Cat Sealer  
EK8 Vinyl Sealer  
B7406 Rich Wiping Stain Base  
B7645 Classic Spray Stain Base

### PHYSICAL PROPERTIES

Available Sheens	15,25,40 & 90
Weight Solids	27% ±2
Volume Solids	20% ±2
Viscosity	20-25" @ 25°C Ford 4
Specific Gravity	0.94500 +/- 0.01 gms/cc @ 25°C
VOC	701 g/l
Typical coverage	6-8 m <sup>2</sup> / ltr @ 1 mil dry

### ADDITIONAL CHARACTERISTICS

Catalyzation:	n/a
Pot-Life:	n/a
Reduction:	T4409 as required; T4424 for faster flash
Retarder:	n/a
Clean-up:	T4420 215 Gun Wash Universal
Shelf-life:	1 year from date of manufacture

Dry Times	
26°C (~78°F) 50%RH	
To Touch	10 minutes
To Sand	30-60 minutes
To Stack/Pack	18-24 hours

Note: Drying times will decrease at higher temperatures/lower humidity and will increase at lower temperatures/high humidity

**COATING PREPARATION** - Ensure product is stirred well and brought to room temperature before use. Product may be sprayed by conventional, airless and air-assisted airless spray and is gun ready. If reduction is required, use T4424 at 5% by volume.

**SURFACE PREPARATION** - Wood surface should be clean, dry and free from any oil or grease. Moisture content of the wood should be 7-9%. Stains, colour coats, glazes etc. should be applied according to manufacturer's directions should be dried prior to application of sealers/topcoats. Multi-step colourant systems should be avoided unless they are thoroughly tested for adhesion and compatibility. All colour systems should be examined for colour fastness / fade resistance prior to use. For best results use Katilac stains, toners or colourant systems. Contact a Katilac Tech Service Representative for colour system recommendations.

**APPLICATION** - This product is designed to be applied in ambient conditions of 12-32°C (~55-90°F) and below 50% relative humidity.

Apply product in full uniform coats ideally applied at a rate of 3 to 4 mils wet. Total film thickness of the finished system should

not exceed 4 dry mils. A normal finishing system consists of a sealer coat and 2 coats of topcoat. EK Series can be used as self-sealing or in conjunction with EK6 Vinyl Sealer or EK8 Pre-Catalyzed Vinyl Sealer. Coating should be thoroughly dried and sanded smooth between coats. Sand with 240-320 grit professional finishing stearated, silicon carbide sandpaper. It is recommended that the finished item be conditioned for 24 hours at room temperature prior to stacking and packing.

**SAFETY** - During application, always wear eye protection, gloves and appropriate work clothing to minimize contact. Use a respirator and safety glasses at all times when spraying. Explosion proof ventilation is required with special consideration for enclosed or confined areas. Use caution when handling flammable liquids and eliminate sources of ignition and uncovered containers from the work place. Vapours formed from this product may travel or be moved by air currents and ignited by pilot lights, light switches, other flames, smoking, sparks, heaters, electrical equipment, static discharges or other ignition sources at locations distant from the product.

## EK Series KATILAC™ Pre-Catalyzed Lacquers (cont'd)

### PERFORMANCE TESTING / FILM CHARACTERISTICS

All performance testing is based on a composite of ASTM, AWI, ANSI and KCMA Standards

#### Household Chemical Resistance (ASTM D1308)

- test samples consist of 1 mil dry film on glass
- aged 7 days at room temperature prior to testing
- testing was performed by placing 1 milliliter of reagent on the surface of the dry film, under a watch glass for time as noted

Distilled Water (D1308.6.1.1)	24 hrs	No effect
Ethyl Alcohol (D1308.6.1.3)	24 hrs	No effect
Coffee @ 180F (D1308.6.1.13)	24 hrs	No effect
Vinegar (D1308.6.1.4)	24 hrs	No effect
Mustard (D1308.6.1.12)	2 hrs	Slight discoloration, recovers @ 24 hrs
Vegetable Oil (D1308.6.1.11)	24 hrs	No effect
Dish Detergent (D1308.6.1.8)	24 hrs	No effect

Note: A complete list of resistance tests with industrial and household chemicals can be found under ADDITIONAL STAIN TESTS

#### Hot Print Resistance (ASTM D 2091-96)

- test samples consisted of 1 mil dry film aged for 24 hours at room temperature prior to print testing
- duck cloth under a weight of 4 psi was then placed on dry film surface for a defined temperature/time
  - 72F (18 hrs) 4 psi...pass
  - 120F (1 hr) 4 psi.....pass
  - 140F (1 hr) 4 psi.....pass

#### Hot/Cold Cycling Test (ASTM D 1211-97)

- test samples were coated on red oak at 4 mils dry and aged 21 days at room temperature prior to testing.
- one cycle consisted of:
  - 120F / 70% RH for 1 hour room temperature for 1 hour
  - -5F for 1 hour
- specimens examined for discoloration, blistering, cold cracking and film failure
- No signs of failure at 10 cycles

#### Flammability Testing (ASTM E 84- 08a) Surface Burn Rating

- test samples consisted of fiberglass reinforced cement board coated with 4 mils dry of EK Series
- samples were aged for 21 days at room temperature prior to testing
- Flame Spread Index.....5.0 Class 1 / Class A
- Smoke Development.....5.0 Class 1 / Class A

#### AWMAC / AWI (NAAWS Performance Standards Testing)

System # 2 Lacquers - Pre-Catalyzed (Clear):

- Standard Score - 99/135
- EK Series score - 106/135

#### KCMA Testing (ANSI/KCMA A161.1.1.2000)

- not valid for this class of coating
- see KATIVAR KV / KATIVAR PLUS D / AQUAKAT PLUS for KCMA data

#### Additional Stain Tests

Testing conducted according to AWI, ASTM & KCMA Standards

- test samples consist of 1 mil dry film on glass
- aged for 21 days at room temperature
- testing was performed by placing 1 milliliter of reagent on the surface of the dry film, under a watch glass for time as noted

Ketchup	24 hrs	5
Palmolive Solution	16 hrs	5
50% Ethanol	24 hrs	4
4% Sodium Hydroxide	1 hrs	4
Olive Oil	24 hrs	5
Tomato Juice	16 hrs	5
2% Ammonia	24 hrs	5
Nail Polish Remover	1 hr	3
Lemon Juice	24 hrs	5
Red Wine	24 hrs	5
Coffee @ 180°F	24 hrs	5
Windex	24 hrs	5
Mustard	1 hr	5
Acetone	1 hr	3
Water	24 hrs	5
Boiling Water	16 hrs	5
Motor Oil	16 hrs	5
Grease/Cooking Oil	16 hrs	5
Lighter Fluid	16 hrs	4
Vinegar	24 hrs	5
1% Tide Solution	16 hrs	5

Rating: 1-poor 2-fair 3-good 4-very good 5-excellent

**DISPOSAL** - Disposal of chemicals and their solutions should be done according to local, provincial and federal regulations. Product Material Safety Data Sheets are available and should be consulted when handling products. These products are for Industrial and professional use only; Application directions must be followed.

**WARRANTY** – Katilac Coatings Inc. warrants that its products are free from defects in manufacture for a period of one (1) year from date of purchase, if used prior to expiration date and applied and used in accordance with Katilac Coatings' most current published specifications applicable to such products. Katilac Coatings Inc. expressly disclaims all other warranties, express or implied, including the implied warranties of merchantability and fitness for purpose. Katilac Coatings Inc. disclaims all liability for incidental, consequential or indirect damages of any nature whatsoever. This warranty cannot be changed or modified whether by course of dealing, custom or trade or otherwise, unless agreed to in writing by Katilac Coatings Inc.