KU Series KATILAC ULTRA™ Pre-Catalyzed Conversion Coatings

The KU Series Katilac Ultra™ is a line of solvent borne, one component, pre-catalyzed, alkyd/amino resin based conversion coating. It is a water-white, yellowing resistant, HAPs-Free coating specifically designed for high quality interior wood finishing.

It can be used as a self-sealing system or in conjunction with EK6 Katilac™ Pre-cat Sanding Sealer or EK8 Vinyl Sealer.

SUGGESTED APPLICATIONS

- Interior trim and millwork
- Office furniture
- School and commercial furniture
- Institutional furniture
- Kitchen and bath components

KEY PERFORMANCE FEATURES

- **HAPs Free**
- non-yellowing
- excellent clarity
- fast dry
- easy sanding
- self-sealing
- gun ready for all spraying systems
- ultra low formaldehyde
- excellent mar and scratch resistance
- excellent chemical and moisture resistance
- excellent flow and leveling
- conforms to KCAM/AWI System #2 standards

RELATED PRODUCTS

EK6 Vinyl Sealer, EK8 Pre-Catalyzed Vinyl Sealer

EN Vinyl Sealer

B7406 Rich Wiping Stain

B7645 Classic Spray Stain

PHYSICAL PROPERTIES

Available Sheens 0,15,25,40 & 90

Weight Solids 30% ±2 Volume Solids 23% ±2

20-30" @ 25°C Ford 4 Viscosity

Specific Gravity 0.9401 +/- 0.01 gms/cc @ 25°C

VOC 680 g/l

8-10 m² / ltr @ 1 mil dry Typical coverage

ADDITIONAL CHARACTERISTICS

Catalyzation: n/a Pot-Life:

Reduction: T5525 HAPs Free Lacquer Thinner

as required

Retarder: n/a

T4420 215 Gun Wash Universal Clean-up: 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.

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. KU Series Katilac Ultra™ can be used as self-sealing or in conjunction with EN6 Vinyl Sealer, 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 handing 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.

KU Series KATILAC ULTRA™ Pre-Catalyzed Conversion Coatings (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	No effect
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:
 - o 120F / 70% RH for 1 hour room temperature for 1 hour
 - -5F for 1 hour
- specimens examined for discolouration, 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 KU 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

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.

KCMA Testing (ANSI/KCMA A161.1.1.2000)

Test samples consist of solid red oak coated at 4 mils dry and aged for 21 days at room temperature

A. Chemical Testing

· Vertical position for 24 hrs, water washed, dried, examined

Vinegar	Pass	Lemon Juice	Pass	
Orange Juice	Pass	Grape Juice	Pass	
Ketchup	Pass	Coffee	Pass	
Olive Oil	Pass	100 proof alcohol	Pass	
Mustard	Pass *very slight stain, recovers 12hr			

- B. Detergent & Water Resistance Test
 - PASS no signs of blistering, whitening, delamination, swelling
- C. Heat Resistance Test
 - PASS no signs of discolouration, whitening, delamination or swelling
- D. Hot/Cold Cycle Test
 - PASS 10 cycles with no signs of discolouration, blistering, cold checking or any film failure

AWMAC Section #5 Finishing Testing / Performance Standards
Testing conducted according to AWI, ASTM & KCMA Standards

Section A: Chemical Resistance Testing ASTM D1308

VM&P Naphtha Isopropyl Alcohol	5	1% Detergent 10% TSP	5 5
Household Ammonia	5	Vodka 100% Proof	5
Nail Polish Remover	5	Murphy's Oil Soap	5
Cold Water	5	Gasoline	4
Boiling Water	5	28% Na₄OH	4
Olive Oil	4	77% Sulphuric Acid	5
Coffee	5	33% Sulphuric Acid	5
Ketchup	5	Lysol	5
Orange Juice	5	Fantastic 409	5
Lemon Juice	5	Windex	5
Vinegar	5	Red Wine	5

Rating: 1-poor 2-fair 3-good 4-very good 5-excellent Section B Wear Resistance / ASTD D4060 Abrasion Resistance Rating 4/5

Section C Cold Check Resistance / ASTM D1211 Rating 5/5

Section D Cross Hatching Adhesion /ASTM D3359 Rating 5/5

Total Score: 127/135 for KU Series Katilac Ultra[™] finished according to System #2 standards.

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.