




## FP7 Series PUREGUARD™ Formaldehyde Free White Pre-Catalyzed Lacquer

The FP7 Series PUREGUARD™ White Pre-Catalyzed Lacquers are a line of white, formaldehyde free, solvent borne, pre-catalyzed, alkyd/amino resin based lacquers. They are high hiding topcoats that feature fast dry and high build. Utilizing KCI's GREENCURE™ technology, these advanced products feature a unique cross-linking mechanism that does not contain or liberate formaldehyde during the drying or curing process. They are designed be used in conjunction with KCI's FP14 PUREPRIME™ Formaldehyde Free White Pre-Catalyzed Primer.

<p><b>SUGGESTED APPLICATIONS</b></p> <ul style="list-style-type: none"> <li>• Interior trim and millwork</li> <li>• Office furniture</li> <li>• Household furniture</li> <li>• Cabinets</li> </ul> <p><b>KEY PERFORMANCE FEATURES</b></p> <ul style="list-style-type: none"> <li>• Formaldehyde Free</li> <li>• Excellent hiding</li> <li>• High build</li> <li>• Fast dry</li> <li>• Scratch and mar resistant</li> <li>• Chemical and moisture resistant</li> <li>• Excellent flow and levelling</li> </ul> <p><b>RELATED PRODUCTS</b> FP14 PUREPRIME™ Formaldehyde Free White Pre-Catalyzed Primer 844 Series Colourants</p> 	<p><b>PHYSICAL PROPERTIES</b></p> <table border="0"> <tr><td>Available Sheens</td><td>10, 20, 40</td></tr> <tr><td>Weight Solids</td><td>42% ± 2</td></tr> <tr><td>Volume Solids</td><td>30% ± 2</td></tr> <tr><td>Viscosity</td><td>35-45" @ 25°C Ford 4</td></tr> <tr><td>Specific Gravity</td><td>1.0814 ± 0.01 gms/cc @ 25°C</td></tr> <tr><td>VOC</td><td>627 g/l</td></tr> <tr><td>Typical coverage</td><td>6-8 m<sup>2</sup> / ltr @ 1 mil dry</td></tr> </table> <p><b>ADDITIONAL CHARACTERISTICS</b></p> <table border="0"> <tr><td>Catalyzation</td><td>n/a</td></tr> <tr><td>Pot-Life</td><td>n/a</td></tr> <tr><td>Reduction</td><td>as required up to 20% by volume with T4409 Lacquer Thinner or for faster flash T4424 Lacquer Thinner Fast</td></tr> <tr><td>Retarder</td><td>n/a</td></tr> <tr><td>Clean-up</td><td>CA4420 Gun Wash</td></tr> <tr><td>Shelf-life</td><td>1 year from date of manufacture</td></tr> </table> <p><b>Dry Times</b> 26°C (-78°F) 50% RH</p> <table border="0"> <tr><td>To Touch</td><td>10 minutes</td></tr> <tr><td>To Sand</td><td>30-60 minutes</td></tr> <tr><td>To Stack/Pack</td><td>24 hours</td></tr> </table> <p><small>Note: Drying times will decrease at higher temperatures/lower humidity and will increase at lower temperatures/high humidity</small></p>	Available Sheens	10, 20, 40	Weight Solids	42% ± 2	Volume Solids	30% ± 2	Viscosity	35-45" @ 25°C Ford 4	Specific Gravity	1.0814 ± 0.01 gms/cc @ 25°C	VOC	627 g/l	Typical coverage	6-8 m <sup>2</sup> / ltr @ 1 mil dry	Catalyzation	n/a	Pot-Life	n/a	Reduction	as required up to 20% by volume with T4409 Lacquer Thinner or for faster flash T4424 Lacquer Thinner Fast	Retarder	n/a	Clean-up	CA4420 Gun Wash	Shelf-life	1 year from date of manufacture	To Touch	10 minutes	To Sand	30-60 minutes	To Stack/Pack	24 hours
Available Sheens	10, 20, 40																																
Weight Solids	42% ± 2																																
Volume Solids	30% ± 2																																
Viscosity	35-45" @ 25°C Ford 4																																
Specific Gravity	1.0814 ± 0.01 gms/cc @ 25°C																																
VOC	627 g/l																																
Typical coverage	6-8 m <sup>2</sup> / ltr @ 1 mil dry																																
Catalyzation	n/a																																
Pot-Life	n/a																																
Reduction	as required up to 20% by volume with T4409 Lacquer Thinner or for faster flash T4424 Lacquer Thinner Fast																																
Retarder	n/a																																
Clean-up	CA4420 Gun Wash																																
Shelf-life	1 year from date of manufacture																																
To Touch	10 minutes																																
To Sand	30-60 minutes																																
To Stack/Pack	24 hours																																

**COLOUR DEVELOPMENT** – FP7 Series PUREGUARD™ products can be tinted up to 5% by volume with 844 Series Colourants. Intermix 1:1 with KP Series PUREGUARD™ Clear Pre-Catalyzed Lacquers for development of mid to deep tone colours.

**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. Thin as required up to 20% by volume with above specified lacquer thinners.

**SURFACE PREPARATION** - Wood surface should be clean, dry and free from any oil or grease. Sand surface smooth with 150-180 grit sandpaper.

**APPLICATION** - This product is designed to be applied in ambient conditions of 12-32°C (~55-90°F) and below 50% relative humidity. For easier primer application, seal routed MDF areas with a Katilac pre-catalyzed sealer or topcoat. Allow to dry 30-60 minutes at room temperature and sand coated areas with 240-320 grit sandpaper. Prime the entire substrate with FP14 PUREPRIME™ and allow to dry 30-60 minutes and sand entire

surface with 240-320 grit sandpaper. Apply FP7 PUREGUARD™ in a full uniform coat at a rate of 4 to 5 mils wet. Dry for 1-2 hours at room temperature and sand the entire surface with 240-320 grit sandpaper. Apply a second thin coat of PUREGUARD™ at 3 to 4 wet mils.

Proper sanding is critical to produce a smooth finish and promote adhesion between the primer and the topcoat.

Total film thickness of the finished system (primer and topcoat) should not exceed 5 dry mils.

**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 workplace. 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.

# FP7 Series PUREGUARD™ Formaldehyde Free White Pre-Cat Lacquer (cont'd)

## PERFORMANCE TESTING / FILM CHARACTERISTICS

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

### 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
Orange Juice	Pass
Ketchup	Pass
Olive Oil	Pass
Mustard	Pass
Lemon Juice	Pass
Grape Juice	Pass
Coffee	Pass
100 Proof Alcohol	Pass

#### 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 cracking or any film failure

### 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 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 FP7 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 (Opaque):

- Standard Score - 99/135
- FP7 Series score - 100/135

### Section A: Chemical Resistance Testing ASTM D1308

Vinegar	5	Red Wine	3
Lemon Juice	4	Windex	3
Orange Juice	4	Fantastic 409	4
Ketchup	3	Lysol	4
Coffee	3	33% Sulphuric Acid	2
Olive Oil	5	77% Sulphuric Acid	1
Boiling Water	3	28% Na <sub>4</sub> OH	4
Cold Water	4	Gasoline	4
Nail Polish Remover	3	Murphy's Oil Soap	4
Household Ammonia	4	Vodka 100% Proof	3
VM&P Naphtha	4	1% Detergent	5
Isopropyl Alcohol	3	10% TSP	4

Rating: 1: Poor 2: Fair 3: Good 4: Very good 5: Excellent

### Section B: Wear Resistance / ASTM D4060 Abrasion Resistance

Rating: 4/5

### Section C: Cold Check Resistance / ASTM D1211

Rating: 5/5

### Section D: Cross Hatch Adhesion / ASTM D3359

Rating: 5/5

**TOTAL SCORE: 100/135**

**DISPOSAL** - Disposal of chemicals and their solutions should be done according to local, provincial and federal regulations. 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.



Ver09/20 Supersedes all previous versions.  
© 2020 Katilac Coatings Inc