



D9MAX Series Summit™ HAPs Free White Conversion Varnish Topcoats

The D9Max Summit™ Series are a line of white pigmented, solvent borne, HAPS-free, two component, alkyd/amino resin based conversion varnishes. They are yellowing resistant, high hiding topcoats that feature outstanding chemical resistance and exceptional build. They are specifically designed to be used in combination with D28 Duraprime™ or D28HH Duraprime™ High Hide white post-catalyzed primers in a high quality interior wood finishing system.

<p>SUGGESTED APPLICATIONS</p> <ul style="list-style-type: none"> interior trim and millwork office furniture household furniture cabinets kitchen and bath components high demand furniture <p>KEY PERFORMANCE FEATURES</p> <ul style="list-style-type: none"> HAPs Free, low VOC non yellowing excellent hiding high build outstanding mar and scratch resistance ultra-low formaldehyde outstanding chemical and moisture resistance excellent flow and levelling conforms to AWMAC System #5 Conversion Varnish Standards <p>RELATED PRODUCTS</p> <p>D28 Duraprime™ White Post-Cat Primer D28HH Duraprime™ High Hide White Post-Cat Primer 844 Colorants</p>	<p>PHYSICAL PROPERTIES</p> <table> <tr><td>Available Sheens</td><td>25,40,90</td></tr> <tr><td>Weight Solids</td><td>76% ± 2</td></tr> <tr><td>Volume Solids</td><td>62% ±2</td></tr> <tr><td>Viscosity</td><td>220" @ 25°C Ford 4</td></tr> <tr><td>Specific Gravity</td><td>1.32410 +/- 0.01 gms/cc @ 25°C</td></tr> <tr><td>VOC</td><td>296 g/l</td></tr> <tr><td>Typical coverage</td><td>10-12 m² / ltr @ 1 mil dry</td></tr> </table> <p>ADDITIONAL CHARACTERISTICS</p> <table> <tr><td>Catalyzation:</td><td>10% by volume of 1CAT catalyst</td></tr> <tr><td>Pot-Life:</td><td>10-12 hrs at room temp.</td></tr> <tr><td>Reduction:</td><td>10% by volume T5247 High Flow Reducer</td></tr> <tr><td>Retarder:</td><td>n/a</td></tr> <tr><td>Clean-up:</td><td>T4420 215 Gun Wash Universal</td></tr> <tr><td>Shelf-life:</td><td>1 year from date of manufacture</td></tr> </table> <p>Dry Times</p> <table> <tr><td>26°C (~78°F) 50% RH</td><td></td></tr> <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>18-24 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	25,40,90	Weight Solids	76% ± 2	Volume Solids	62% ±2	Viscosity	220" @ 25°C Ford 4	Specific Gravity	1.32410 +/- 0.01 gms/cc @ 25°C	VOC	296 g/l	Typical coverage	10-12 m ² / ltr @ 1 mil dry	Catalyzation:	10% by volume of 1CAT catalyst	Pot-Life:	10-12 hrs at room temp.	Reduction:	10% by volume T5247 High Flow Reducer	Retarder:	n/a	Clean-up:	T4420 215 Gun Wash Universal	Shelf-life:	1 year from date of manufacture	26°C (~78°F) 50% RH		To Touch	10 minutes	To Sand	30-60 minutes	To Stack/Pack	18-24 hours
Available Sheens	25,40,90																																		
Weight Solids	76% ± 2																																		
Volume Solids	62% ±2																																		
Viscosity	220" @ 25°C Ford 4																																		
Specific Gravity	1.32410 +/- 0.01 gms/cc @ 25°C																																		
VOC	296 g/l																																		
Typical coverage	10-12 m ² / ltr @ 1 mil dry																																		
Catalyzation:	10% by volume of 1CAT catalyst																																		
Pot-Life:	10-12 hrs at room temp.																																		
Reduction:	10% by volume T5247 High Flow Reducer																																		
Retarder:	n/a																																		
Clean-up:	T4420 215 Gun Wash Universal																																		
Shelf-life:	1 year from date of manufacture																																		
26°C (~78°F) 50% RH																																			
To Touch	10 minutes																																		
To Sand	30-60 minutes																																		
To Stack/Pack	18-24 hours																																		

COLOUR DEVELOPMENT – D9MAX Series Summit™ Post-Cat Topcoats can be tinted with 844 Series colorants up to a maximum of 5% by vol. For the development of mid to deep colours D9 Summit™ can be intermixed up to 1:1 with DHS Series Summit™ Clear Post-Cat Topcoats. Mid to deep base intermixes can be tinted up to 10% by vol. with 844 series colorants.

COATING PREPARATION - Ensure product is stirred well and brought to room temperature before use. Add 10% 1CAT Catalyst by volume slowly under agitation (prior to reduction). Pot-life is 10-12 hrs at room temp. Product may be sprayed by conventional, airless and air-assisted airless spray and is gun ready. D9 Summit™ requires 10% reduction with T4409 Lacquer Thinner to spray.

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

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 KCI post-catalyzed sealer or topcoat. Allow to dry 30-60 minutes at

room temperature and sand coated areas with 240-400 grit sand paper. Primer the entire substrate with D28 Duraprime™ and allow to dry 30-60 minutes and sand entire surface with 240-320 grit sand paper.

Apply D9MAX Summit™ 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 300-400 grit sand paper. Apply a second thin coat of D9MAX at 3 to 4 wet mils. Proper sanding is critical to produce a smooth finish and promote adhesion between the primer coat 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 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.

D9MAX Series Summit™ White Conversion Varnish Topcoats (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 discolouration, 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 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 D9MAX 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		

B. Detergent & Water Resistance Test

- Test panel edge immersed in KCMA detergent solution 24hrs
- Removed, dried and examined
- PASS – no signs of blistering, whitening, delamination, swelling

C. Heat Resistance Test

- Test panel placed in test chamber @ 120F/70% RH for 24hrs
- PASS – no signs of discolouration, whitening, delamination or swelling

D. Hot/Cold Cycle Test

- One cycle consists of 1 hr @ 120F / 30 min room temp / 1 hr - 5F
- PASS – 10 cycles with no signs of discolouration, blistering, cold checking or any film failure

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	Windex	24 hrs	5
Palmolive Sol.	16 hrs	5	Mustard	1 hr	5
50% Ethanol	24 hrs	5	Acetone	1 hr	5
4% NaOH	1 hrs	5	Water	24 hrs	5
Olive Oil	24 hrs	5	Boiling Water	16 hrs	5
Tomato Juice	16 hrs	5	Motor Oil	16 hrs	5
2% Ammonia	24 hrs	5	Grease/Oil	16 hrs	5
Nail Polish Rem.	1 hr	5	Lighter Fluid	16 hrs	5
Lemon Juice	24 hrs	5	Vinegar	24 hrs	5
Red Wine	24 hrs	5	1% Tide Sol.	16 hrs	5
Coffee @ 180°F	24 hrs	5			

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

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.