

TECHNICAL DATA SHEET

AF71 Series**
HYDROPLUS™ WATERBORNE CLEAR

5 Gloss AF7105000

20 Gloss AF7120000

40 Gloss AF7140000

60 Gloss AF7160000

90 Gloss AF7190000

Gloss level:	05, 20, 40, 60, 90 gloss
Area of use:	Interior wood products such as residential furniture, cabinetry, architectural woodworking
Method of use:	Conventional, Airless, Air Assisted Airless, HVLP
Mixing Procedure:	Ready to use. If necessary, thin with deionized water.

Technical Characteristics

Solids content (%):	Weight Solids 28.4 ± 1 / Volume Solids 25.3 ± 1
Specific gravity:	1.04
Viscosity 5,20,40,60 Gloss (Zahn #5 at 77°F):	17-22 seconds
Viscosity 90 Gloss (Zahn #5 at 77°F):	14-20 seconds
Recommended wet film thickness:	3.0 – 4.0 mils
Recommended dry film thickness (per coat):	0.75 – 1.0 mils
Recommended total system dry film thickness:	4.0 mils
Spread Rate:	405 average sq. ft/gal @ 1.0 mils DFT, No loss
Drying time (at 77°F):	Dust free 30 minutes Touch dry 30 minutes Sandable 30 – 45 minutes Recoat 30 – 45 minutes Stackable 24 hours
Forced drying (80 g/m²):	Flash-off 15 minutes Hot air @ 95°F 45 minutes Cooling 15 minutes
Shelf-life:	18 months After long periods of storage, always check homogeneity and stir well before use to eliminate any possible sediment.
VOC (Theoretical as packaged, maximum):	1.77 lb/gal, 213 g/L (less exempt solvents)
VHAPS (as packaged, maximum):	0.15 lb/lb of solids
Flash Point	N.A.
An Environmental Data Sheet is available from your local servicing facility, or at www.paintdocs.com .	

General Characteristics

HYDROPLUS™ Waterborne Clear is a self-sealing, waterborne acrylic finish for interior wood products. Properly applied, this finish passes KCMA test requirements for finishes when applied catalyzed or uncatalyzed. HYDROPLUS™ Waterborne Clear is low in VOC content and is UL GREENGUARD Gold Certified for low chemical emissions.

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Catalyzing

For increased film hardness and chemical resistance, Hydroplus Waterborne Clear may be catalyzed at 1% by volume with a 50/50 blend of Waterborne (aziridine) Crosslinker XA4081 and deionized water. Stir the blend well. Additional catalyst volumes will not improve performance properties. When catalyzed, Hydroplus Waterborne Clear has a 24 hour pot-life. If no fresh material is added, you may catalyze the unused portion one time for an additional 24 hours of pot-life for one cycle only. Unused material must be disposed of after the second 24 hour period. To extend catalyzed material into the next day, it is recommended to add 50% of the Hydroplus Waterborne Clear. Catalyze the entire amount of material, not just the newly added material. Catalyzed material must not be carried over the weekend and should be properly disposed of. **Thoroughly review product label and Safety Data Sheet (SDS) for safety information and cautions prior to using these products.**

Tinting

Can be tinted using KEM AQUA® colorants or Chroma-Chem® 896 colorants up to 8 oz. per gallon maximum.

Substrate Preparation

Wood (interior only): Must be clean, dry and finish sanded. Substrate should be free of grease, oil, dirt, fingerprints and any contamination to ensure optimum adhesion and coating performance properties. Moisture of the wood should be 6-8%.

Wood Finishing System

1. **Seal** – Apply first coat of Hydroplus Waterborne Clear at 3.0-4.0 mils wet. Allow to dry for 30-45 minutes. Sand with 320 grit sand paper and remove sanding dust or debris. For best sanding results, use steared sand paper.
2. **Topcoat** – Apply second coat of Hydroplus Waterborne Clear at 3.0-4.0 mils wet. Allow to dry for 30-45 minutes. Repeat sanding and cleaning step.
3. **Topcoat** – Apply additional coat of Hydroplus Waterborne Clear Topcoat to achieve build or depth. Do not exceed 4.0 mils total dry film thickness for the complete finishing system.

Special instructions:

- Keep from freezing. Do not store at temperature below 41°F.
- Do not apply at temperature below 59°F.
- Stir the product well before application in order to disperse any possible sedimentation. This operation is essential to ensure even matting on the substrate.
- Because of the variety of materials used to manufacture wood furniture, when moving to a waterborne system from a solvent based system, it is very important to check with the supplier the suitability of equipment and components used, with particular attention to electrostatic guns, pumps, seals, silicones, glues, products for booth water treatment, packing materials, sanding papers, putties, etc.
- The use of coating devices not in perfect order (defective gaskets, too high pressures) or of pumps with low capacity may cause major defects in the coating film (air bubbles).
- Waterborne Crosslinker (XA4081000) is a aziridne product. Thoroughly review product label and Safety Data Sheet (SDS) for safety information and cautions prior to using these products.
- Once the can has been opened, the coating may rot because of the attack of bacteria commonly present in the air. This phenomenon is easily detectable because of the bad smell and by an increase of viscosity of the product stored in the can. Avoid leaving containers open for long periods of time and reclaiming used coating into fresh product.

Testing: The information, data, and recommendations set forth in this Product Data Sheet are based upon test results believed to be reliable. However, due to the wide variety of substrates, substrate properties, surface preparation methods, equipment and tools, application methods, and environments, the customer should test the complete system for adhesion, compatibility and performance prior to full scale application.

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Application Equipment Settings			
Conventional		Air Assisted Airless	
Air Pressure:	45 – 55 psi	Air Pressure:	15 - 20 psi
Fluid Pressure:	5 - 10 psi	Fluid Pressure:	450 – 850 psi
Cap/Tip Size:	.046 - .055	Cap/Tip Size:	.011 - .013
Airless		HVLP	
Pressure:	1500 - 1900 psi	Air Pressure @ Cap:	6 - 8 psi
Tip Size:	.011 - .015	Fluid Pressure:	4 - 8 psi
		Cap/Tip Size:	.046 - .055

For airless and air assisted airless application, box coating technique may be required to achieve desired appearance.

FOR INDUSTRIAL SHOP APPLICATION ONLY

Thoroughly review product label and Safety Data Sheet (SDS) for safety information and cautions prior to using this product. To obtain the most current version of the Environmental Data Sheet (EDS), Product Data Sheet (PDS), or Safety Data Sheet (SDS) please visit your local facility or www.paintdocs.com. Please direct any questions or comments to your local servicing facility.

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