AQUAFLAMA 430

WATERBASE FIRE-RETARDANT COATING

DESCRIPTION

AQUAFLAMA 430 is a waterbase fire rated coating for use on interior wood products. This product meets and exceeds CAN/ULC-S102 and ASTM E-84 Class A fire retardant coating for interior wood products. Aquaflama 430 is low VOC

APPROVAL

AQUAFLAMA 430 has been tested to the following standards: **ASTM E-84, NFPA 255, UL 723**.

Coating systems Details	Classification	Flame spread Index (FSI)	Smoked Developed Index (SDI)
AQUAFLAMA 430 applied in three coats at 5 wet mils per coat.	Class1/Class A	5	15

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PRODUCT DATA

Color	Clear	**VOC less exempts**	59.68 g/L	0.50 lb/gal
Solids % by Vol	26.59 ± 2%	**VOC actual**	95.63 g/L	0.80 lb/gal
Solids %by Wt	37.99% ± 2%	**Photochemical reactive**	No	
Density	1.02 ± 0.02	**Flash Point (PM/CC)**	No Flash	
Viscosity 23°C/73°F	N/A	**Shelf life**	12 months (at 15-25°C/59-77°F)	
Gloss(On Black glass @60°)	20, 35,50,90/Available in other gloss level	**Theo-coverage @1 mil dry**	400-450 Sq.Ft/gal	8-9 m^2/L

PREPARATION/APPLICATION

Working Temp >18°C/65°F surface, coating and air

Catalyzation N/A

Pot life N/A

Reducer Product is normally applied without reduction. If dilution is necessary, add warm water at 5-10%.

Application

- **Color Wood**-Stain or tone as desired and dry thoroughly.

THREE COATS OF AQUAFLAMA 430 MUST BE APPLIED

- **1ST coat:** Apply AQUAFLAMA 430 at 5.0 wet mils. Air dry 4 hours.
- **Sand:** Sand with 320 grit or equivalent. Remove sanding dust.
- **2nd coat:** Apply AQUAFLAMA 430 at 5.0 wet mils. Air dry 4 hours
- **Sand:** Sand with 320 grit or equivalent. Remove sanding dust.
- **3rd Coat:** Apply AQUAFLAMA 430 at 5.0 wet mils. Air dry 4 hours

Note: If one coat is not topcoated the same day, it should be resanded immediately before topcoating to insure optimum intercoat adhesion.

Surface Preparation Wood surface must be dry and finish sanded with 180 grit sandpaper. Substrate should be clean and free of grease and oil to ensure optimum adhesion and coating performance properties. Moisture content of the wood should be between 6%-8%.

Use Directions For interior use only. stir thoroughly before application and if needed adjust viscosity before application.
Dry time can be directly impacted by many factors, including film thickness. Users are urged to test the system under shop conditions.

App equip Conventional & HVLP Siphon Feed and Airless/Air Assist Equipment.

Tinting Can be tinted up to 10% maximum with AquaTint colorants 100

Cleanup Clean tools/equipment immediately after use with water.

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DRYING TIMES

Method	Drying temperature.	Drying Time (@ 50%RH and thickness @ 4 mil WET)			
Air Drying	23°C/74°F	**Dust free time**	20 minutes	**Dry to sand**	4 hours
		Dry to touch	30 minutes	**Dry to recoat**	4 hours
		Dry to Handle	3 hours	**Dry to stack**	24 hours
Force dry	45 °C/110°F				

Note: Dry times are greatly affected by film build, porosity of substrate, air movement as well as heat and humidity. Minimum curing temperatures of 23°C/74°F must be maintained throughout curing cycle to achieve the film integrity as stated in product features.

APPLICATION RECOMMENDATIONS

APPLICATION EQUIPMENT SETTINGS

Method of Application	Air Pressure (PSI)	Fluid Pressure (PSI)	TIP size (mm / inch)	Dilution %	Thickness Film (Mils)
Conventional spray	40-60	-	2-2.5/0,078-0.098	10-20	5
Airmix Spray	15-30	1100-1600	9-11/0,35-0.43	-	5
Airless	-	1700-2200	9-11/0,35-0.43	-	5

The use of pre-atomizers and pre-heaters, to bring the temperature to 30 – 40 °C, ensures a correct application regardless the room temperature. The drying process should be carried out in environments with adequate air ventilation (the recycle of air in the drying room should be carried out every 15-20 minutes).

Note: All measurements and application equipment settings are based on application at a temperature of 77°F. Viscosity will vary depending on the temperature of the liquid. The above-mentioned application equipment recommendations are guidelines only. The noted settings are starting point recommendations and that adjustment to the settings and equipment may be needed to obtain the desired results. Please refer to your specific equipment manufacturer's recommendations for equipment set-up.

SPECIFICATIONS

- For interior use only.
- Must be stirred before and during using. Avoid vigorous agitation which may cause foaming.
- Use stainless steel spray equipment. Tank, piping, and containers should be lined steel or plastic.
- Very low temperature application (less than 12°C) may cause poor mechanical and chemical film properties.
- Excessive wet film thicknesses (>4.0 mils wet) may sag.
- Very low humidity may cause mud cracking and poor film properties.
- When finishing Redwood, Red or White Oak, Pine and Cedar wood with water-based finishes, tannins may be extracted from the wood by the water and cause staining and/or discoloration of the stain, sealer, and/or topcoat. This tannin bleed is most evident with white or pickled stains and clear topcoats. Users are urged to thoroughly test the system under shop conditions
- Natural Finished Woods (unstained) will change color on aging and exposure to light. This is a natural phenomenon. Clear finishes will not prevent the wood from changing color.
- Do not expose to freezing temperatures. The liquid coating will not handle any freeze/thaw cycles.

CAUTIONS

TESTING

Due to the wide variety of substrates, surface preparation methods, application methods, and environments, the customer should test the complete system for adhesion, compatibility and performance prior to full scale application.

THESE PRODUCT ARE DESIGNED FOR INDUSTRIAL SHOP APPLICATION AND PROFESSIONAL USE ONLY

Thoroughly review Safety Data Sheet (SDS) for safety information and cautions prior to using this product. Please direct any questions or comments to your local representative.

PDS

Product Data Sheets are periodically updated to reflect new information relating to the product. It is important that the customer obtain the most recent Product Data Sheet for the product being used. The information, rating, and opinions stated here pertain to the material currently offered and represent the results of tests believed to be reliable. However, due to variations in customer handling ,preparation and application which are not known or under our control, LORCHEM cannot make any warranties related to the product or the performance of the product. Moreover, we underline the fact that in industrial applications, a tolerance of 5% in the overall results is considered normal and is not caused by the quality of the product.

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