



Wood Adhesives

# Advantage 425

**Advantage® 425** is a high performance, two-part crosslinking polyvinyl acetate emulsion adhesive developed specifically for finger jointing. It has a shear thinning rheology for easy application and a low minimum use temperature. When mixed with Aluminum Chloride (Catalyst A) the product surpassed ASTM D-5572 wet use for finger joints in non-structural lumber products. This standard is the basis for Hallmark Certification on glued finger joints. Like all adhesives, proper gluing practices are needed to achieve stated performance.



## PHYSICAL PROPERTIES

**Chemical family description:** Crosslinking polyvinyl acetate emulsion adhesive

**Typical viscosity (cps):** Uncatalyzed: 2000-3000

**Catalyzed:** 2500-3500

**Appearance:** White

**Suggested minimum use temperature:** Catalyzed: 49 °F

**Freeze/thaw stable:** Yes

**pH:** 6.0 – 7.5

**Weight per gallon (lbs):** 9.3

**Uncatalyzed:**

**Weight solids (%):** 49.5 – 56.0%

## MIXING INSTRUCTIONS

The recommended proportion of catalyst to resin is five percent by volume (one quart to five gallons). Place the resin in a mixer and slowly add catalyst under agitation. Continue mixing for five to ten minutes after the catalyst is added to ensure a uniform mixture. The viscosity will increase with the addition of catalyst A.

## APPLICATION GUIDELINES

**Finger Joint:** Sufficient adhesive spread will provide a uniform coverage that should cover 1/2-2/3 the length of the finger on both sides in a thin continuous film. Make sure fingers aren't skipped and that the adhesive is applied to the whole joint, not just the tips of the fingers. For additional questions, please contact Franklin's technical service team.

## PERFORMANCE PROPERTIES

### ASTM D-5572 Wet Use Flexure Test- Modulus of Rupture

<u>Adhesive</u>	<u>2 Cycle Boil</u>	<u>Vacuum/Pressure</u>
ADVANTAGE 425 /5% Cat. A by volume	3567 psi	3066 psi
Hallmark requirement	1400 psi	1400 psi
ASTM requirement	1400 psi	1400 psi

\*Represents average laboratory results on Ponderosa Pine.

**ASTM D5572 Wet Use Tension Test**

<u>Exposure</u>	<u>TEST RESULTS</u>				<u>Requirements</u>		
	<u>Strength (psi)</u>		<u>Wood Failure (%)</u>		<u>Strength (psi)</u>	<u>Wood Failure (%)</u>	
	<u>Average</u>	<u>Minimum</u>	<u>Average</u>	<u>Minimum</u>	<u>Minimum</u>	<u>Average</u>	<u>Minimum</u>
<b>Dry</b>	6263	4715	84	65	2000	60	30
<b>Vacuum Pressure</b>	2468	2042	67	55	1600	50	25
<b>Boil</b>	2088	1821	68	60	1600	50	25
<b>Elevated Temp.</b>	3544	2681	79	70	1000	N/A	N/A

\*Ponderosa Pine - TECO report 08-P-0116 7/15/2008

**Room temperature speed of set:** 0.78 with Catalyst A (Very Slow)

**STORAGE AND HANDLING**

**Shelf life:** Best if used within four months of date of manufacture. Mix before use. Tote style options are limited. Product not sold into California.

**IMPORTANT NOTICE TO CUSTOMER:**

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