

Multibond[®] 2025

PRODUCT DESCRIPTION

Multibond[®] 2025 is a pre-catalyzed, crosslinking polyvinyl acetate emulsion adhesive. It is recommended for hot and cold pressing of veneers and high-pressure laminates to various cores. A special feature is non-bleed through when porous veneers are used. Multibond 2025 is formulated to give longer assembly times than Multibond 2015.

PHYSICAL PROPERTIES

Chemical Family Description: Crosslinking polyvinyl acetate emulsion adhesive

Appearance: Off-white

Freeze/Thaw Stable: Yes

pH: 2.5-3.5

Typical Viscosity (cps): 3,800-4,800

Suggested Minimum Use Temperature: 12°C

Specific Gravity: 1.11

Weight Solids (%): 50-52

APPLICATION GUIDELINES

Tolerances: Gluing stock should be uniform in thickness. Variation in thickness should not exceed ± 0.15 mm. Sanding to thickness should be performed using higher than 50 grit abrasives.

Spread: Generally, 140-245 g/m² of glue line is adequate. Lower adhesive spreads require better stock tolerances and shorter assembly times. Commonly, a mechanical glue spreader is used to apply a uniform spread to the gluing surfaces.

Assembly Time: Assembly time can vary greatly depending on the adhesive used, glue spread, porosity and moisture content of stock, environmental conditions, etc. A small bead of adhesive squeeze-out around the perimeter of the bottom panel in the stack is desirable. Generally accepted assembly times range from 15-20 minutes.

Pressure: Pressure is dependent upon the species or material to be glued. Direct contact of the gluing surfaces must be achieved to obtain maximum strength. Suggested pressures for various substrates are; high pressure laminates 2.1-5.6 Kg/cm²; solid core stock 7.0-10.5 Kg/cm²; all veneer constructions 7.0-17.6 Kg/cm².

Cold Pressing with Multibond 2025

Press Time: Press time is dependent on the gluing stock type, moisture content of the stock and environmental conditions. Typical press times range from 30 minutes to two hours. Press times should be determined under plant conditions.

Minimum Temperature: Curing temperatures should be higher than the minimum use temperature of the adhesive, which is 12°C. This includes the temperature of the stock to be glued, as well as the air and adhesive temperatures.

APPLICATION GUIDELINES (Continued)

Hot Pressing with Multibond 2025

Press Time: Press time is dependent on the adhesive used, gluing stock type, moisture content of the stock and environmental conditions. Typical cold press times range from 30 minutes to two hours and should be determined under plant conditions. RF press times should be determined by in-plant testing on each machine. Hot press cure times can be estimated with this hot press schedule and verified with in-plant trials.

	70°C	75°C	80°C	85°C	90°C	95°C	100°C	105°C	110°C	115°C
Distance to Deepest Glue Line	0.5 mm	1' 25"	1' 20"	1' 15"	1' 11"	1' 07"	1' 03"	1' 00"	0' 56"	0' 53"
	1.0 mm	1' 38"	1' 32"	1' 27"	1' 22"	1' 17"	1' 13"	1' 09"	1' 05"	0' 57"
	1.5 mm	1' 53"	1' 46"	1' 40"	1' 34"	1' 29"	1' 24"	1' 19"	1' 14"	1' 06"
	2.0 mm	2' 10"	2' 02"	1' 55"	1' 48"	1' 42"	1' 36"	1' 31"	1' 26"	1' 16"
	2.5 mm	2' 29"	2' 21"	2' 12"	2' 05"	1' 58"	1' 51"	1' 45"	1' 39"	1' 28"
	3.0 mm	2' 52"	2' 42"	2' 33"	2' 24"	2' 15"	2' 08"	2' 00"	1' 53"	1' 41"
	3.5 mm	3' 18"	3' 06"	2' 56"	2' 45"	2' 36"	2' 27"	2' 19"	2' 11"	1' 56"
	4.0 mm	3' 48"	3' 34"	3' 22"	3' 10"	3' 00"	2' 49"	2' 39"	2' 30"	2' 13"

Temperatures above 90° C are not recommended for High Pressure Laminates by their manufacturers.

PERFORMANCE PROPERTIES

Meets or exceeds the following industry standards:

- ANSI/HPMA 1994 Type II water resistance
- NWWDA Type I and Type II water resistance
- European Standard DIN EN 204 D3 (formerly DIN 68602 B3)
- European E-1 formaldehyde emission standard

Block Shear Strength:	lb/in²	wood failure%
25°C	4,144	57
65°C Overnight	1,660	00

Room Temperature Speed of Set: 0.73 (Very Slow)

RELATED PRODUCTS

Multibond EZ-1 is designed for edge-gluing and laminating in cold press, hot press, and radio frequency.

Multibond EZ-2 is similar to Multibond EZ-1. However, it may be used under colder plant conditions.

Multibond 2015 is formulated for longer assembly times than Multibond EZ-1 and improved bleed through protection on thin veneers.

STORAGE AND HANDLING

Store in tightly closed original container. Protect from freezing. Storing at temperatures above 25°C will reduce the maximum storage time. If thickening, separation or settling occurs, the adhesive should be thoroughly mixed and will then be ready to use again.

Note:

Discoloration of wood veneer products occurs occasionally. This phenomenon is very infrequent and ranges in appearance, color and may vary with the species of the veneer. Discoloration may appear during or after the manufacturing process. Among other things, environmental conditions in some manufacturing plants can contribute to discoloration. If veneer discoloration occurs, our representatives are prepared to visit and assist you in attempting to identify the causes of the staining and possible solutions. Because such discoloration is attributable to conditions beyond our control, Franklin International can assume no responsibility of liability for any discolorations that might occur.

Important Notice to Purchaser: Our recommendations, if any, for use of this product are based on tests believed to be reliable. The greatest care is exercised in the selection of our materials and in our manufacturing operations. However, we make no recommendation to use this product in any manner which conflicts with existing laws and/or patents and WE MAKE NO WARRANTIES, EXPRESS OR IMPLIED, REGARDING THIS PRODUCT OR ITS USE, INCLUDING MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE, THE MANUFACTURER IS NOT LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL OR SPECIAL DAMAGES OF ANY KIND. Revised 09/29/05