Assembly 161

PRODUCT DESCRIPTION

Assembly 161 *is specifically designed for use with automatic doweling equipment. Its low viscosity (150 cps.) allows the appropriate flow through the narrow feed lines and injectors of European-made doweling machinery. Assembly 161 sets fast to reduce assembly time, offers excellent strength, and provides a translucent glue line. It is formulated for use on solid woods, particleboard, MDF, plywood and other porous materials.*

PHYSICAL PROPERTIES [1]

Chemical Family Description: *Polyvinyl acetate emulsion adhesive*

Appearance: *White colored liquid*

Weight Solids (%): *42.0 – 46.6*

pH: *4.0 - 4.8*

Typical Viscosity (cps): *160 – 270*

Specific gravity: *1.08*

Freeze/Thaw Stable[2]: *No*

Suggested Minimum Use Temperature[3]: *6.7º C*

APPLICATION GUIDELINES

Moisture Content*: Proper stock moisture content is important to successful dowel gluing. Adhesives generally set more slowly as moisture content of the wood increases. Dowel holes can also become out of round as the moisture content decreases. Recommended moisture content ranges are 6-8%.*

Machining*: Dowel holes should be cut accurately with sharp tools. Dull tools cause burnishing of the dowel hole and prevent glue penetration. The dowel hole should also be free of torn grain which will produce a high percent of surface wood failure but relatively little strength.*

Part Fit*: To obtain maximum strength, the dowel should fit snugly into the dowel hole. Too tight of fit will push the glue into the bottom of the hole. Conversely, too loose of fit will produce a heavy glue line, and ultimately, a weak joint. A small space between the bottom of the dowel and the bottom of the hole (1/16") will allow room for expansion of the dowel without producing stress cracks.*

Minimum Temperature*: Curing temperatures should be higher than the minimum use temperature of the adhesive. This includes the temperature of the stock to be glued as well as the air and adhesive temperatures.*

Machine Settings: *Consult with machine manufacturer's recommendation for details.*

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OTHER ADHESIVES

Assembly 161 *is designed for use in automatic dowel insertion equipment. Most of our customers find that the viscosity is too low for hand doweling. Franklin Adhesives has a complete line of assembly glues to help you complete the dowel joint. Recommended adhesives in order of increasing viscosity are: Assembly 8-5% (950 cps), Assembly 8 (1,500 cps), Assembly 65 (3,500 cps), Assembly 70A (8,000 cps), Assembly T-2A (16,000 cps), and Assembly TX-Brown (40,000 cps). For additional information, contact Franklin Adhesives.*

PERFORMANCE PROPERTIES

Block Shear Strength[4]:

	psi	***wood failure%***
Room Temperature	*2,711*	*32*
150ºF Overnight	*1,089*	

Room Temperature Speed of Set[5]: *1.01 (Moderately Fast)*

[1] All numerical values represent typical properties.
[2] If product has been frozen, contact Technical Service for instructions.
[3] Measured by Franklin's film formation test. Gluing conditions will affect minimum use temperature.
[4] Performed according to ASTM D-905 on hard maple.
[5] Measured by Franklin's torsion speed of set tester on hard maple @ 3 minutes clamp time.

HANDLING AND STORAGE

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.

IMPORTANT NOTICE TO CUSTOMER:
The recommendations and data contained in this Product Data Sheet for use of this product are based on information Franklin believes to be reliable. They are offered in good faith without guarantee, as conditions and methods for use of our product by Customer and are beyond Franklin's control. Customer must determine the suitability of the product for a particular application before adopting it on a commercial scale.

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