

HELMIBOND

847 *PREMIUM SOLID WOOD BONDING PVA*

PRODUCT DESCRIPTION

HELMIBOND 847 is a premium quality, fast setting, unextended, high strength PVA adhesive designed in particular for solid wood bonding. It is particularly suited for edge/face gluing to produce solid wood panels, posts, beams, etc. An excellent choice for joint assembly and dowel insertion in cabinet and furniture assembly applications.

BENEFITS

- ✓ No fillers – Tight, invisible glue lines.
- ✓ High solids – Reduces/eliminates sunken glue lines.
- ✓ Fast setting.
- ✓ High shear strength.
- ✓ Versatile – can be used to bond HPL, veneer, particle board, MDF, plywood, etc. in general assembly and hot/cold press applications.

PHYSICAL PROPERTIES

- **Base:** PVA
- **Solids Content:** 55.0 ± 2.0%
- **Viscosity:** 3,200 - 3,800 cP
- **Specific Gravity :** 1.10
- **Weight/Gal. :** 9.17 lb.
- **Coverage/Gal.:** 229 ft² @ 7 wet mils
- **Open Time:** 5 minutes
- **Clamp Time:** 20 minutes; minimum
- **.pH:** 4 - 5
- **Color:** White
- **Packaging:** Drums, Pails, Plastic Jugs
- **VHAP:** 0.0 lb/lb solids
- **VOC:** 0 lbs/gal (0 g/L) less water and exempt solvents
- **Freeze/Thaw Stable:** Stable, one cycle. Protect from freezing nevertheless
- **Shelf Life:** 6 months from date of manufacture

CLEAN-UP

- Use warm water when the adhesive is in the wet state.
- Dispose of waste in accordance with all applicable local/state/provincial/federal regulations.

**See product SDS for regulatory information*

SUGGESTED USES

- Edge gluing of solid wood furniture and cabinet panel components.
- Face gluing of post and beam components.
- Solid wood furniture assembly.
- Dowel insertion.
- Dovetail joints.
- Hot/cold press applications.

SPECIFICATIONS

Meets or Exceeds:

- **LEED Indoor Environmental Quality Credit 4.4; Low Emitting Materials: Composite Wood and Laminate Adhesives.**
 - No added urea-formaldehyde.
- **LEED Indoor Environmental Quality Credit 4.1; Low Emitting Materials: Adhesives and Sealants.**
 - VOC content less than limits imposed by the State of California's South Coast Air Quality Management District (SCAQMD) Rule #1168. (80g/L, less water and exempt solvents).

CAUTION

- Avoid contact with skin and eyes. Rinse affected areas immediately with water. **Consult the Safety Data Sheet.**
- Be careful to avoid contamination by iron (rust) from any source, such as containers, tools or application equipment, as such contamination will lead to dark glue lines.

HANDLING & STORAGE

- **Consult the Safety Data Sheet prior to use.**
- Rotate stock to use the oldest material first.
- Store between 10°C/50°F and 32°C/90°F.
- Keep container tightly closed and store off the floor when not in use.
- **Protect from freezing.** Product should not be used after being frozen.
- If the container has been sitting for a period of time and has settled, stir before using.
- Use at room temperature, 18°C/65°F, or warmer. For best results use above 21°C/72°F.

HELMIBOND

847 *PREMIUM SOLID WOOD BONDING PVA*

USAGE TIPS

1. Substrates to be bonded should be clean and free from moisture, dirt, oil, and other contaminants.
2. Adhesive and substrates should be at 18°C/65°F or above.
3. Adhesive can be applied by squeeze bottle, manual roller, or roll coater.
4. Moisture content of wood should be 6 - 8%.
5. At least one substrate must be porous.

APPLICATION GUIDELINES

Solid Wood & General Assembly:

1. Apply **HELMIBOND 847** in a continuous coat to the entire area of one or both of the surfaces to be bonded. Adequate adhesive should be applied to achieve a slight squeeze out when clamping.
2. Clamp for 20 minutes minimum or until adhesive film dries.
3. Allow a minimum of 1 hour prior to machining. Machining parts before the wood has returned to equilibrium moisture content often causes sunken glue lines when the parts are finished. Depending on the wood species and shop conditions proper drying often takes 12 - 24 hours.

Cold Press Laminating:

1. Apply **HELMIBOND 847** using a roll coater utilizing 16 grooves/inch and apply 6 - 8 wet mils of adhesive. Plywood applications may require a higher coat weight of adhesive.
2. Open time is 5 minutes with a closed assembly time of 5 - 10 minutes.
3. Cold press time is a minimum of 30 minutes at 50 psi at 21°C/70°F and an RH of 45 - 50%. Press time can be up to 2 hours depending on plant temperature, humidity, stock density, moisture content of substrates, application amount, etc.
4. For cold pressing, typical pressures are 30 - 100 psi for HPL, 100 - 150 psi for solid core stock and 100 - 250 psi for veneered panels.
5. Press times will vary depending on substrates being bonded.

NOTE: This product may not be compatible with fire retardant board. Consult with **HELMITIN** technical support prior to use with this type of substrate.