



HELMITIN
QUALITY ADHESIVE SOLUTIONS

HELMIBOND 833

TYPE I WATER RESISTANT WOOD ASSEMBLY PVA

Product Description

HELMIBOND 833 is a premium, one part Type I water resistant PVA adhesive. It is very fast setting with a long assembly time and good wet tack. It can also be hot pressed and used in applications that are radio frequency cured.

Benefits

- ✓ Type I water resistance
- ✓ 10 minute closed assembly time
- ✓ Extremely rigid bonds
- ✓ Fast drying, short press times
- ✓ Good stability on mechanical glue spreaders

Suggested Uses

- Solid wood bonding where Type I water resistance is required
- Butcher block & cutting boards
- Skateboards, skim boards, snowboards, etc.
- RF gluing
- Hot and cold press laminating of multi-layer wood veneer panels
- **Do Not** use with HPL, etc. as cured HELMIBOND 833 cannot be removed without causing damage.

Certifications & Compliance

- Complies with SCAQMD Rule 1168 VOC limits
- California compliant
- OTC compliant
- HPVA & NWWDA Type I & II
- ASTM D 4317 Type I
- ANSI/HPVA HP-1-2000 Type I & II
- TSCA Title VI
- FDA 175.105 compliant

Physical Properties

Base:	Crosslinking PVA
Solids Content:	50 +/- 2%
Viscosity:	2,500 - 6,000 cP
Specific Gravity:	1.11
Weight/Gal:	9.26 lb
Coverage/Gal:	229 ft ² @ 7 wet mils
Open Time:	10 minutes
Clamp Time:	30 minutes
pH:	2.5 -3.5
Color:	Light Brown
VHAP:	0lb/lb of solids
VOC:	0.047 lb/gal (5.6 g/L); less water and exempt solvents

Handling & Storage

- 12 month shelf life from date of manufacture in unopened containers.
- Rotate stock to use the oldest material first.
- Freeze/Thaw Stable - if chilled, warm to 22°C/72°F and mix well.
- Store between 10°C/50°F and 32°C/90°F.
- Keep containers tightly closed and store off the floor when not in use.
- If the container has been sitting for a period of time and has settled, stir thoroughly before using.
- Avoid exposure of containers to direct sunlight.
- **Do Not** apply or make bonds at temperatures below 18°C/65°F.
- Use at room temperature, 18°C/65°F, or warmer. For best results use above 21°C/72°F

Packaging

- 267 US gallon totes, 53 US gallon drums, 5 US gallon pails, 1 US gallon jugs

Clean-Up

- Use warm water when the adhesive is in the wet state.
- Cured HELMIBOND 833 bonds irreversibly to HPL, and similar decorative surfacing products. It will require scraping/sanding for removal.

APPLICATION GUIDELINES**Conditioning of Materials**

Allow the core and overlay materials to acclimate together at the same temperature and humidity for at least 48 hours before bonding. Optimum conditions are approximately 22°C/72°F and relative humidity of 45% - 55%. Provisions should be made for the circulation of air around the components.

Adhesive Application

HELMIBOND 833 is normally applied by mechanical glue spreader. It may also be applied by hand brush, roller or squeeze bottle. Coverage of 3 - 4 lbs/100 ft² is suitable.

- For best results:
 - Shop, wood and adhesive temperature should be between 18°C/65°F - 23°C/73°F.
 - Surfaces to be bonded must be dry and free of dust, dirt, or other extraneous materials.
 - The moisture content of the wood should be between 6 & 8%.
 - Hot, cold, excessively low or high moisture content materials must be conditioned before bonding.
 - Joints must be square and tight - PVA-based wood adhesives are NOT intended to fill gaps.
 - Both bonding surfaces should be wetted with adhesive prior to assembly.
 - Apply sufficient adhesive to achieve even squeeze out from glued joints. Do Not Over Clamp.

Assembly Time

Assembly time will vary greatly, depending on the amount of spread, temperature of the room and materials to be bonded, porosity of the substrates, humidity and moisture content of the materials; generally 5 - 10 minutes for cold pressing.

Pressure

Pressure should be adequate to bring the two surfaces into intimate contact. Pressures from 30 - 100 psi are considered adequate. The type of wood and the joint design may determine the amount of pressure feasible. Care should be taken not to apply too much pressure as excessive squeeze-out may occur, thus "starving" the glue joint. Regularly spaced small adhesive beads along the glue joint indicates adequate pressure and glue spread.

Typical cold press times range from 30 - 60 minutes and should be verified under actual plant conditions.

Note

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

Warranty

Because Seller has no control over methods of product application or conditions of use, its product is warranted only to be made of standard commercial grade materials and in conformance with Seller's published specifications, if any. Any recommendations for the use of the product are based on tests or experience believed to be reliable and are furnished without compensation, and Seller does not guarantee the applicability or the accuracy of this information or the suitability of its product in any given situation. Buyer must make its own tests to determine the suitability of Seller's product for Buyer's particular use and Buyer assumes all risk and liability of use of Seller's product.

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