



**HELMITIN**  
QUALITY ADHESIVE SOLUTIONS

# HELMIBOND 883WH

## WHITE ONE-PART 3D LAMINATING ADHESIVE

### Product Description

Helmibond 883WH is a one-part waterborne polyurethane adhesive used for membrane pressing or vacuum forming thermoplastic foils in the manufacture of kitchen cabinet doors, furniture components and other 3D applications.

### Benefits

- ✓ One-part – no mixing of hardener and long pot life
- ✓ Reactivation can take place long after parts have been sprayed
- ✓ High initial Green Strength
- ✓ White color offers easy visibility during application and after drying

### Suggested Uses

- 3D Laminating of vinyl and similar thermoplastic foils
- Pre-applied heat activatable adhesive coating for flexible materials

### Meets or Exceeds

- **SCAQMD Rule 1168**
- **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)
- **LEED Indoor Environmental Quality Credit 4.4; Low Emitting Materials: Composite Wood and Laminate Adhesives**
  - No added urea-formaldehyde

### Physical Properties

<b>Activation Temperature:</b>	74 - 82 °C (165 - 180 °F)
<b>Solids Content:</b>	42 +/- 2%
<b>Viscosity:</b>	2,200 - 2,600 cP
<b>Specific Gravity:</b>	1.05
<b>Weight/Gal:</b>	8.75 lb
<b>Coverage/Gal:</b>	535 ft <sup>2</sup> @ 3 wet mils
<b>pH:</b>	6 - 8
<b>Color:</b>	White
<b>VHAP:</b>	0 lb/lb of solids
<b>VOC:</b>	0.0 lb/gal (0 g/L); less water and exempt solvents

### Handling & Storage

- 6 month shelf-life from date of manufacture.
- Rotate stock to use the oldest material first.
- **Not Freeze/Thaw Stable. Protect from Freezing.** Product cannot be used after being frozen.
- Store between 10 °C/50 °F and 32 °C/90 °F.
- Do Not store or ship at temperatures below 7 °C/45 °F.
- Use at room temperature, 18 °C/65 °F, or warmer. For best results use above 22 °C/72 °F
- **Do Not** apply or make bonds at temperatures below 18 °C/65 °F.
- Keep container tightly closed and store off the floor when not in use.
- Avoid exposure of containers to direct sunlight.
- If the container has been sitting for an extended period of time and has settled, stir thoroughly before using.

### Packaging

- 275 gallon totes, 55 gallon drums, 5 gallon pails

### Clean-Up

- Use warm soapy water when the adhesive is in the wet state
- Cured adhesive will require scraping/sanding

## APPLICATION GUIDELINES

### Conditioning of Materials

Substrates should be acclimatized at 18°C/65°F, or above, for at least 48 hours prior to bonding. Make provisions to allow the free flow of air around substrates.

### Adhesive Application

1. Substrates to be bonded must be clean and free from burn or score marks, moisture, dirt, oil, and other contaminants.
2. Adhesive and substrates should be 18°C/65°F or warmer. For best results use above 22°C/72°F.
3. At least one substrate must be porous.

### General Assembly

1. Filter the adhesive through a fine mesh filter.
2. The adhesive should be applied utilizing an HVLP spray gun with a minimum fluid tip and needle of .055" (1.4 mm). Coating weight applied should be approximately 3 wet mils or 3.5 dry grams per ft<sup>2</sup>. When applying to porous substrates, it may be necessary to increase coating amounts or apply two coats of adhesive. The atomization pressure at the gun should be 45 - 65 psi triggered and the fluid pressure/pot pressure should be 10 - 20 psi. **DO NOT** apply the adhesive if the temperature of the adhesive, environment or substrates drops below 10°C/50°F.
3. Allow the adhesive to dry thoroughly. When force drying the adhesive, do not exceed 50°C/122°F.
4. Press times should be 30 seconds to 4 minutes with a glue line temperature of 74 - 82°C (165 - 180°F). The minimum adhesive reactivation temperature is 74°C/165°F at the glue line.
5. Forming pressures depend on the press system and are approximately 3 bar (44 psi).
6. Final bond strength is achieved after 7 days.

### 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.*