



HELMITIN
QUALITY ADHESIVE SOLUTIONS

HELMIBOND 852

TWO-PART 3D LAMINATING WATERBORNE CONTACT ADHESIVE

Product Description

Helmibond 852 is a 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. It is used in conjunction with 5% Helmitin Hardener 560.

Benefits

- Ideal for Kolmag and other high temperature presses
- Excellent for parts with deep draw downs
- High initial green strength allows immediate trimming of parts
- Meets ANSI/KCMA A161.1 – 2000 for:
 - Shrinkage and heat resistance
 - Hot and cold check resistance

Handling & Storage

- Consult the Safety Data Sheet prior to use.
- Keep container tightly closed and store off the floor when not in use.
- Protect from freezing. Product should not be used after being frozen.
- Do Not store or ship at temperatures below 7°C/45°F.
- Store containers where temperatures will not be less than 10°C/50°F and will not exceed 32°C/90°F.
- Pressure will build in tightly closed containers when mixed with hardener.
- Use at room temperature 20°C/68°F.

Physical Properties

Solids Content:	40 ± 2%
Viscosity:	2,200 cP
Specific Gravity:	1.07
Weight/Gal:	8.93 lb
pH:	6 - 8
Coverage/Gal:	500 - 580 ft ² @ 3 wet mils
Shelf Life:	6 months from date of manufacture
Pot Life:	8 hours @ 24°C/75°F
Color:	White, dries clear
Packaging:	Totes, Drums
VOC:	0 lb/gal (0 g/L); less water and exempt solvents
Freeze/Thaw:	Not freeze/thaw stable. Protect from freezing.
Clean-up:	Use warm water when the adhesive is in the wet state

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.

Application Guidelines

1. Use a clean plastic pail/bucket to mix enough adhesive to be used within 4 - 6 hours.
2. Add 5% by weight Helmitin Hardener 560 slowly to the Helmibond 852 and mix thoroughly for 5 minutes utilizing a squirrel mixer on a variable speed drill or air mixer.
3. Filter mixed adhesive through a fine mesh filter into the pressure pot.
4. When Helmibond 852 is mixed with 5% Helmitin Hardener 560, the pot life is 8 hours at 24 °C/75 °F. At higher temperatures the pot life is shorter.
5. The adhesive should be applied utilizing an HVLP spray gun with a minimum fluid tip and needle of 0.055 inches (1.4 mm). Coating weight applied should be approximately 3 wet mils or 6.5 - 7.5 wet grams per ft². 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 to 20 psi. Do Not apply the adhesive if the temperature of the adhesive, environment or substrates drops below 10 °C/50 °F.
6. Allow the adhesive to dry thoroughly. When force drying the adhesive, do not exceed 50 °C/122 °F.
7. Parts may be bonded up to 6 hours after drying.
8. Press times should be 30 seconds to 4 minutes with a glue line temperature of 71 °C/160 °F - 77 °C/170 °F. The minimum adhesive reactivation temperature is 71 °C/160 °F at the glue line.
9. Forming pressures depend on the press system and are approximately 3 bar (44 psi).
10. Final bond strength is achieved after 72 hours.

Recommended Equipment

	Automatic		Manual	
	Binks	DeVilbiss	Binks	DeVilbiss
Spray Gun	21,61,610,95A	AGX 550	18,62, 2001,95	JGA 510
Fluid Tip	63B	FX	63B	FX
Fluid Needle	63B	FX	63B	FX
Air Cap	66SD-3	797	66SD-3	797