



HELMITIN
QUALITY ADHESIVE SOLUTIONS

HARDENER 561

CROSSLINKING & ADHESION PROMOTING AGENT FOR WATERBORNE ADHESIVES

Product Description

HARDENER 561 is a crosslinking agent used in conjunction with waterborne polyurethane dispersions to increase the heat and water resistance, bond strength and long term performance of the adhesive..

Benefits

- ✓ Provides excellent heat resistance
- ✓ Greatly improves water resistance and long-term adhesion
- ✓ Toughens adhesive, improves bond strength, reduces creep
- ✓ Mixes easily with waterborne polyurethane dispersions

Suggested Uses

- Cabinet doors and other RTF/3DL cabinet components
- Furniture components
- Vacuum/Thermoforming of PVC foils, foam backed vinyls and similar materials for molded automotive, RV, marine, rail and aerospace components

Meets or Exceeds

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

Physical Properties

Base:	Pre-reacted polyisocyanate
Solids Content:	> 99%
Viscosity:	900 - 1,800 cP
Specific Gravity:	1.15
Weight/Gal.:	9.6 lb
Mixture:	Add 5% by weight to the adhesive component
Pot Life:	Approximately 8 hours after mixing
Color:	Clear (561) or Blue (561BU)
Packaging:	Bottles
VHAP Content:	This product contains no VHAPs
VOC Content:	This product contains no VOCs

Handling & Storage

- HARDENER 561 is an organic isocyanate which requires care in handling as it reacts with water and compounds containing active hydrogen groups to produce carbon dioxide gas. Containers that have become contaminated with moisture should not be sealed as a hazardous increase in pressure may result.
- 12 month shelf-life from date of manufacture.
- Rotate stock to use the oldest material first.
- Freeze/Thaw Stable. Warm to 18°C/65°F before using.
- Store between 10°C/50°F and 32°C/90°F.
- Keep container tightly closed and store off the floor when not in use.
- Avoid exposure of containers to direct sunlight.

Packaging

- Cases of 11 x 1 quart bottles

Clean-Up

- SOLVENT 673

GUIDELINES FOR USE

Mixing with Adhesive

1. RTF/3DL adhesives **must** be used with 5% HARDENER 561 added to achieve long term bonds.
2. Cool temperatures will increase the viscosity of HARDENER 561; warming will improve pourability. For best results use above 18°C/68°F.
3. Use a clean plastic pail/bucket to mix enough adhesive and HARDENER 561 to be used within 8 hours.
4. Begin mixing the adhesive component with a squirrel mixer on a variable speed drill or air mixer. Adjust the speed to obtain a small vortex which does not mix air into the adhesive.
5. Slowly add 5% by weight HARDENER 561 to the adhesive component and mix thoroughly for 5 minutes.
6. Filter the mixed adhesive & HARDENER 561 through a fine mesh filter into the pressure pot.
7. When the adhesive component has been mixed with 5% HARDENER 560/561, the pot life is 8 hours at 21°C/75°F. At higher temperatures the pot life will be shorter.

Note

- HARDENER 561 is a pre-reacted polyisocyanate with an extremely low level of volatility at room temperature. It should not be confused with monomeric isocyanates which are far more volatile. When HARDENER 561 is used under normal conditions, no measures beyond those ordinarily taken during work with organic solvents are usually necessary.
- **Do Not** thin HARDENER 561

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.