



**HELMITIN**  
QUALITY ADHESIVE SOLUTIONS

# HELMISTIK 1650

## HIGH PERFORMANCE MIST SPRAY ADHESIVE

### Product Description

A very fast drying mist spray adhesive with immediate aggressive tack designed to hold reinforcing materials and composite matrices firmly in place prior to and during resin infusion processes. Ideal for bonding lightweight substrates such as fiberglass or rockwool insulation and for foam, upholstery and lightweight trim bonding applications. **Not for use with decorative high pressure laminate (HPL) or EPS bonding applications.**

### Benefits

- ✓ Mist spray to optimize coverage
- ✓ Smooth, extremely even application
- ✓ Fast drying
- ✓ High tack
- ✓ Strong, non-sagging bonds
- ✓ Compatible with most resin systems

### Suggested Uses

- Fixing fiberglass/reinforcement fabrics and lightweight core materials in place in advance of and during resin infusion processes for the production of composite components.
- Bonding foam to foam, fabric to foam, foam and fabric to wood, metal and many rigid plastics in the manufacture of mattresses and upholstered furniture products.
- General purpose lamination of light-weight, non-rigid materials such as fiberglass insulation, cork, leather, canvas, felt, etc. to metal, wood, a wide variety of plastics, and many other surfaces
- **Do Not** use with unbacked, plasticized vinyls.
- **Do Not** use to laminate HPL, wood veneers or rigid metal overlays..

### Meets or Exceeds

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

### Physical Properties

<b>Base:</b>	Synthetic rubber
<b>Coverage:</b>	15 oz aerosol can - 30 - 40 ft <sup>2</sup>
<b>Open Time:</b>	60 minutes
<b>Color:</b>	Natural
<b>VHAP:</b>	0 lb/lb of solids
<b>VOC:</b>	53% aerosol

### Handling & Storage

- 2 year shelf life from date of manufacture.
- Rotate stock to use the oldest material first.
- Freeze/Thaw Stable; if chilled below 5°C/41°F – agitate well after first warming to 22°C/72°F
- Store between 10°C/50°F and 32°C/90°F.
- Keep container tightly closed and store off of the floor when not in use.
- Avoid exposure of canisters to direct sunlight.
- Use at room temperature, 18°C/65°F, or warmer. For best results use above 21°C/72°F.
- **Do not** apply or make bonds at temperatures below 15°C/59°F.

### Packaging

15 oz aerosol can

### Clean-Up

- Removing adhesive overspray from parts: SOLVENT 665 or CITRUS CLEANER

### APPLICATION GUIDELINES

#### Adhesive Application

1. Substrates to be bonded with HELMISTIK 1650 must be clean, dry and free from dust, dirt, grease, oils, solvents or any other contaminants.
2. Hold spray can at a consistent distance of 6 to 8 inches from surface of materials being bonded.
3. Apply an even pattern across their surface(s) to be bonded with slight overlap of the spray pattern between passes.
4. The adhesive should be applied at a coating weight of 1.5 - 3 dry g/ft<sup>2</sup> (15 - 35 g/m<sup>2</sup>) at the same time achieving 80 - 100% coverage. Allow the adhesive to dry before bonding.
  - a. To check for dryness, press a small piece of clean cardboard, or similar, into the adhesive and lift up - any adhesive transfer or legginess indicates that more dry time is required.
  - b. **Do Not** use the palm of your hand to check for dryness, it is often dirty and may leave oily residues which will interfere with bonding.
  - c. Adhesive applied in excess may form a skin on the surface. Break the skin to allow trapped solvents to evaporate. Allow more dry time.
  - d. The adhesive is ready for bonding when it feels tacky but there is no transfer or legginess.
  - e. Drying time will vary depending on ambient temperature, humidity and coat weight. Drying time can be reduced by air movement.
5. Heavier reinforcements may require the adhesive to be applied on both sides.
6. Bonds can be made as soon as the adhesive is dry. Bonds made any time during the 60 minute open time will be as strong as those made immediately after drying.
7. Extremely porous materials may require two coats of HELMISTIK 1650. Allow the first coat of adhesive to dry completely so that it may act as a sealer before applying the second coat. Allow the second coat to dry completely before bonding. A dull appearance to the dry adhesive surface indicates that an insufficient amount of adhesive is present to bond well and that more adhesive should be applied.

#### Note:

- A drying issue called "**Blushing**" often occurs under extremely humid conditions. "**Blushing**" occurs when rapidly evaporating solvents cause the temperature of the adhesive surface to drop below dew point. Condensation then forms on the surface of the adhesive and acts as a barrier to further drying; it also interferes with the fusion of the two glued surfaces and prevents them from bonding. All moisture **MUST** be completely evaporated before bonding. Moderate air movement (shop fan) is the preferred method to speed drying while reducing or eliminating "Blushing" issues. Bonds can be made once all moisture and solvents have completely evaporated.
- A failed contact adhesive bond with a shiny appearance to the surface of the adhesive is an indication that the recommended open time was exceeded and/or that inadequate pressure was applied during assembly.
- **Do Not Exceed the Recommended Open Time! Apply Sufficient Pressure To Ensure 100% Contact of All Bonding Surfaces!**

#### 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.*