



HELMITIN
QUALITY ADHESIVE SOLUTIONS

HELMISTIK 1617

FAST GRAB VACUUM INFUSION ADHESIVE

Product Description

A fast drying spray adhesive with a high degree of initial tack designed to hold reinforcing materials and composite matrices firmly in place in advance of and during resin infusion processes.

Benefits

- ✓ Fast drying
- ✓ High tack
- ✓ Strong, no sag 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.

Physical Properties

Base:	Synthetic rubber
Open Time:	60 minutes
Color:	Natural
VHAP:	1.2 lb/lb of solids
VOC:	419 g/L (3.5 lb/gal); less water and exempt solvents

Handling & Storage

- 12 month 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 cans, 27 lb, 132 lb, 263 lb canisters

Clean-Up

- Removing adhesive overspray from parts: SOLVENT 665 or CITRUS CLEANER
- Flushing adhesive supply hoses and spray guns: SOLVENT 1667

APPLICATION GUIDELINES**Canister Equipment Set-up**

1. Attach and securely tighten each end of the adhesive supply hose to the matching fitting on the spray gun and canister. Turn the trigger pull adjusting nut to the fully closed position to prevent accidental adhesive discharge from the spray gun.
2. Check the fittings for tightness. Position and tighten the spray tip on the spray gun. Plumbers tape is recommended to ensure a tight seal. Slowly open the valve on the canister to start the flow of adhesive and check for leaks. Partial opening is recommended initially. If there are no leaks, fully open the canister valve.
3. Turn the trigger pull adjusting nut on the spray gun 3 - 6 times counterclockwise to allow the adhesive to flow when the trigger is pulled. Discharge the spray gun and adjust the spray pattern to achieve a consistent spray of the desired width.

Adhesive Application

1. Substrates to be bonded with HELMISTIK 1617 must be clean, dry and free from dust, dirt, grease, oils, solvents or any other contaminants.
2. Hold spray gun at a consistent distance of 6 inches to 10 inches from the substrates producing a web pattern across the substrates with minimal overlap. (6"-8" for aerosol spray cans.)
3. The adhesive should be applied at a coating weight of 1.5 - 3 dry g/ft² (15 - 35 g/m²) at the same time achieving 80 - 100% coverage. Allow the adhesive to tack before bonding.
 - a. To check for dryness, use the back of your fingers and press 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. Heavy areas on the adhesive may form a skin on the surface of the adhesive. Press the back of your fingers into the adhesive and twist to tear the skin open. 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.
4. Heavier reinforcements may require the adhesive to be applied to both sides.
5. 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.
6. Extremely porous materials may require two coats of HELMISTIK 1617. Allow the first coat to dry (this will 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.

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 laminating pressure was applied during assembly.
- **Do Not Exceed the Recommended Open Time! Apply Sufficient Laminating Pressure!**

Frequent Use of Canister

1. Leave the hose and gun assembly attached to the canister and leave the canister valve open. This will keep the hose and gun charged with adhesive. Completely close the trigger pull adjusting nut when not in use. Adjust the trigger pull adjusting nut as desired to continue spraying again.
2. Regular gun and hose maintenance and cleaning is recommended for best performance. Clean the spray tip with SOLVENT 665 or HELMITIN CITRUS CLEANER on a daily basis to avoid excessive adhesive build-up. The use of metallic objects to clean the tip is not recommended as they will cause damage to the tip and create an irregular spray pattern.

Canister Storage/Change Over

1. If the canister is not to be used for two weeks or longer, turn the canister valve completely off and dispense all material in the hose and gun assembly. Once empty and no pressure is present when the spray gun trigger is pulled, slowly disconnect the hose from the canister. Protect adjacent surfaces from any material that may drip from the hose.
2. The hose and gun may be then be flushed with the SOLVENT 1667 Supply Hose & Spray Gun Cleaner canister. See the SOLVENT 1667 PDS for full instructions on doing so.
3. The hose may also be cleaned by removing the spray gun and manually flushing it with SOLVENT 665 or SOLVENT NF 699.
4. Flush the closed canister valve with SOLVENT 665 or HELMITIN CITRUS CLEANER to prevent any residual adhesive that is remaining in the valve from plugging it prior to the next use.

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.