

HELMIPLAST 39-38-1

SPRAYABLE, HEAT ACTIVATABLE POLYURETHANE ADHESIVE FOR SOLE ATTACHING & UPHOLSTERY

Product Description

HELMIPLAST 39-38-1 is a sprayable, flammable solventborne polyurethane adhesive designed to bond vinyl, leather, foam, felt, and various soling materials in footwear manufacturing applications. An excellent choice also for contoured seating and upholstery applications where pre-glued, dried substrates are assembled and then heat fused in a press to form the finished cushion. Can also be cold-bonded as a contact adhesive while still in a semi-dry state.

Benefits

- ✓ Very good sprayability
- ✓ Fast drying
- ✓ Penetrates and strengthens leather
- ✓ No tack when dry
- ✓ High initial bond strength
- ✓ Strong final bonds
- ✓ Excellent aging properties
- ✓ Heat, oil, and moisture resistant
- ✓ Excellent plasticizer migration resistance

Suggested Uses

- Sole Attaching
- Contour Seating
- Rubber Bonding
  - Firehoses
  - Mudflap
  - Anti-fatigue mats
- Vinyl laminating
  - Window coverings & blinds

Physical Properties

Base:	Polyurethane
Solids Content:	11 - 15%
Viscosity:	550 - 650 cP
Specific Gravity:	0.84
Weight/Gal:	7.0 lb
Coverage/Gal:	approx. 170 ft² @ 2.5 dry grams/ft²
Open Time:	60 minutes
Color:	Off White; Translucent & Pink
VHAP:	1.15 lb/lb of solids
VOC:	5.9 lb/gal (710 g/L); less water and exempt solvents

Handling & Storage

- 12 month shelf life from date of manufacture in unopened containers.
- Rotate stock to use the oldest material first.
- Freeze/Thaw Stable - if chilled, warm to 22°C/72°F and mix well.
- 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 containers to direct sunlight.
- **Do Not** apply or make bonds at temperatures below 18°C/65°F.
- Use at room temperature, 18°C/65°F, or warmer. For best results use above 21°C/72°F.

Packaging

- 53 US Gallon Drums, 5 US Gallon Pails

Clean-Up

- HELMITIN SOLVENT 670
- **Never** use lacquer thinner to thin adhesive or clean equipment.

HELMITIN ADHESIVES
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*SEE SDS FOR REGULATORY INFORMATION

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APPLICATION GUIDELINES

Sole Attaching

1. In order to achieve good bonds, leather upper materials must be thoroughly roughed to the corium layer. Some vinyl-coated or polyurethane-coated upper materials may require light roughing or a Solvent 670 wipe prior to adhesive application.
2. Outsole materials such as Kraton, composition rubber, EVA and rigid nylon require special primers to promote adhesion (contact Helmitin Technical Service for more information).
3. Ensure that the spray system oil and water traps are functioning, drained regularly and are at least 25' from the air compressor.
4. Outsoles and uppers must receive a complete and even coating of HELMIPLAST 39-38-1 and be allowed to dry thoroughly.
   - Areas with no adhesive applied to them will not bond.
   - Overnight drying of outsoles is recommended.
   - Freshly cemented uppers require 1 - 2 hours dry time at room temperature.
5. Heat reactivation of the glue line at approximately 75 - 80°C//167 - 176°F is required, after which the outsole is immediately attached to the upper by means of a sole press.
6. Allow the adhesive 2 - 3 days curing before testing for bond strength.
7. Trials are recommended before commencing production to determine the suitability of this adhesive with individual materials and processes.

Upholstery

1. All substrates must be clean dry and free from contaminants.
2. Ensure that the spray system oil and water traps are functioning, drained regularly and are at least 25' from the air compressor.
3. Both the fabric and core must receive a complete and even coating of HELMIPLAST 39-38-1. The suggested coat weight is 2.5 dry grams/ft^2
   - Areas with no adhesive applied to them will not bond.
4. Allow the adhesive to dry thoroughly; 1 hour *minimum*.
   - Properly dried adhesive will have no tack and parts will slide easily without sticking when dry.
5. Assemble the parts and place in the seating press.
6. Heat reactivation of the glue line occurs at between 75 - 80°C//167 - 176°F. The glue line must itself attain this temperature under pressure to form a bond.
7. Parts may be handled and further processed immediately after cooling.
8. Trials are recommended before commencing production to determine the suitability of this adhesive with individual materials and processes

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.
- Thinning the adhesive is not recommended.

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.

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QUALITY ADHESIVE SOLUTIONS

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