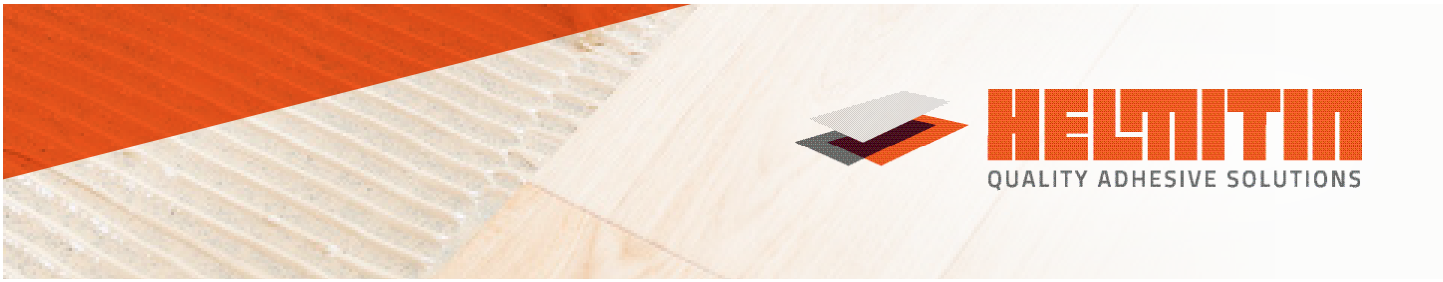

HELMITHERM 470

EDGEBANDING HOT MELT FOR DIFFICULT-TO-BOND SUBSTRATES

Product Description

A very high heat resistance, edgebanding hot melt designed specifically to bond well with difficult edge materials such as unprimed HPL strips and solid wood edging up to ¼" thick. This seamless product yields invisible glue lines with many substrate combinations.

Benefits

- ✓ Aggressive adhesion to all types of edgebanding materials
  - ✓ No need to prime HPL or solid wood edges
- ✓ High heat resistance – reduces the likelihood of edge delamination in:
  - ✓ Finishing ovens
  - ✓ Transportation
  - ✓ Cabinetry and millwork installed near sources of high heat
- ✓ Seamless to yield an invisible glue line
  - ✓ Run white PVC, HPL and solid wood with the same adhesive Non-smearing and cleaner trimming to reduce adhesive buildup on finished parts and machinery

Suggested Uses

- Unprimed HPL edging.
- Solid, pre-coiled, and engineered wood edging up to ¼" thick.
- PVC, ABS, PP and melamine edgetapes.
- Fleece-backed, paper-backed and raw veneer tapes.
- Use with substrates from white to black.

Meet or Exceeds

- **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 (80g/L, less water and exempt solvents)
- **LEED Indoor Environmental Quality Credit 4.4; Low Emitting Materials: Composite Wood and Laminate Adhesives**
  - No added urea-formaldehyde

Physical Properties

Base:	Polyolefin
Form:	Pellets
Application Temperature(s)	
	▪ Application roller: 170°C/356°F - 220°C/428°F
	▪ Glue Pot: 170°C/356°F - 200°C/392°F
	▪ Pre-melter: 155°C/320°F - 170°C/338°F
Softening Point:	160 ± 5°C (311 ± 10°F) (ASTM E28)
Melt Viscosity:	42,000 cP @ 177°C/350°F
Specific Gravity:	1.0
Coverage:	1.2 - 2.7 grams/linear foot (per inch of edge thickness)
Running Speed:	8 - 26 m/min. Open time will vary depending on hot melt, substrate, and ambient temperature, the amount of adhesive applied and compression pressure applied to the edge
Color:	White
VHAP:	Not applicable.
VOC:	0 lb/gal (0 g/L); less water and exempt solvents

Handling & Storage

- 12 month shelf life from date of manufacture
- Rotate stock to use the oldest material first
- Store at room temperature
- Keep unused material covered and free from moisture, dirt, dust and/or other sources of contamination

Packaging

- Available in 20 kg/44 lb bags

Clean-Up

- Finished Parts - SOLVENT 665 or HELMITIN CITRUS CLEANER

HELMITIN ADHESIVES
Toll Free: 877.823.2624
inquiries@helmitin.com
helmitin.com

*SEE SDS FOR REGULATORY INFORMATION

HELMITHERM 470

EDGEBANDING HOT MELT FOR DIFFICULT-TO-BOND SUBSTRATES

APPLICATION GUIDELINES

Conditioning of Materials (Cores, Solid Wood, Wood Veneer and HPL Edging)
Allow the core and edge materials to acclimate together at the same temperature and humidity for at least 48 hours before bonding. Optimum conditions are approximately 22°C/72°F and relative humidity of 45% - 55%. Provisions should be made for the circulation of air around the components.

Adhesive Application

1. Regular maintenance of the edgebander in general and glue pot in particular are essential.
    - Remove any buildup of dust and debris at every break.
    - Follow the edgebander manufacturer's preventative maintenance schedule.
2. The first sign of a malfunction in the adhesive application system is often poorly bonded edges.
    - Check the glue pot and application roller temperatures regularly with a good quality IR thermometer or pyrometer to ensure all thermostats and heating elements are functioning properly.
3. Working temperatures are critical when working with hot melt adhesives.
    - For best results, the factory and substrate temperatures should be 20°C/68°F or warmer.
    - Situate edgebanders away from outside doors; cold drafts will adversely affect the bonding ability of the hot melt and lead to edge failures.
4. Solid wood edges require special care when using EVA based hot melts.
    - Edges should be freshly cut or planed; sanding is to be avoided as dust can clog the wood surface and prevent adhesive penetration.
    - If sanding must be done, use 60 grit or coarser.
    - Edge moisture content should be between 6 and 7%; higher moisture content can lead to edge failure if the wood shrinks excessively.
    - Priming the edge with a PVA ("white glue") or contact cement greatly improves adhesion. Allow at least 2 hours for water-based primers to dry completely.
5. HPL edges also require priming when using EVA based hot melts to obtain optimum results.
    - Consider HELMITHERM 470 hot melt to eliminate edge priming and improve adhesion to difficult substrates.
6. **Application temperature depends on the edge material.**
    - 170 - 190°C (355 - 375°F) for PVC and other synthetic edgetapes.
    - 190 - 200°C (375 - 395°F) for veneer tapes.
    - 210 - 220°C (410 - 430°F) for solid and engineered wood, and HPL.
7. Apply enough adhesive to leave a thin, even coat of adhesive which fills all voids in the core material.
    - Excessive adhesive application will cause cleanliness problems on both the finished parts as well as the edgebanders.
8. Adhesive degradation and the build-up of hardened and charred hot melt in the glue pot can be reduced by avoiding the prolonged heating of the hot melt when not running parts through the edgebander.
    - Turn the adhesive temperature(s) down 10 - 30°C when idle and not running parts.
    - If excessive adhesive degradation occurs, remove degraded hot melt from glue pot and add fresh hot melt.
9. Ensure that the compression rollers are applying enough pressure to properly mate the edge to the core.

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.

HELMITIN ADHESIVES
Toll Free: 877.823.2624
inquiries@helmitin.com
helmitin.com

HELMITIN
QUALITY ADHESIVE SOLUTIONS

*SEE SDS FOR REGULATORY INFORMATION