VHB™ Tape
GPL-110GF

Technical Datasheet

August 2020

Product Description

3M™ VHB™ GPL-110GF is a gray double coated acrylic foam tape with a high initial tack skin adhesive. Its design enables bonding to a wide range of materials including metals, glass, high and medium surface energy plastics and many painted surfaces.

Note: All 3M™ VHB™ Tapes should be thoroughly evaluated by the end user under actual use conditions with intended substrates to determine whether a specific tape is fit for a particular purpose and suitable for user's method of application, especially if expected use involves extreme environmental conditions or high dead load stress.

Key Features

- Double-coated acrylic foam tape
- 100% closed cell acrylic foam
- Low temperature tack
- High initial tack
- Multi material bonding for high and medium surface energy substrates

Applications & Benefits

- Capability to bond to many substrates makes it a good fit for applications in many industries such as plastics processing, transportation, home appliance and signage.
- GPL-110GF can be applied at temperatures as low as 0-5° C for certain applications.

Physical Properties

Adhesive Type	Modified Acrylic
Thickness	1.10 mm
Density	700 kg/m³
Release Liner	3M VHB branded red polyethylene film
Tape Colour	Gray

Performance Characteristics

90° Peel adhesion to Stainless Steel ASTM D3330, 90° peel angle @ RT, after 72h @ RT dwell	300 N/100mm
90° Peel adhesion to ABS ASTM D3330, 90° peel angle @ RT, after 72h @ RT dwell	300 N/100mm
T-block Tensile strength ASTM D-897 - To aluminum, jaw speed 2 in/min (50 mm/min.) Peak force to separate is measured. 72 hours dwell @ RT	450kPa
Static Shear Strength on Stainless Steel ASTM D3654, after 72h @ RT dwell (Weight held for 10.000 minutes, 3.32cm² (0.5in²)	23° C - 750 g 70° C - 500 g
Temperature Performance Short term (minutes, hours): Long term (days, weeks):	110° C 85° C

Application Techniques

Ideal application temperature range is 21° C to 38° C.

Based on our evaluation GPL-110GF can be applied at temperatures as low as 0-5° C for certain applications. (Note: Low temperature operation varies on different substrates.)

Pressure sensitive adhesives use viscous flow to achieve substrate contact area. Firm application pressure develops better adhesive contact and thus improves bond strength. This is especially important for low temperature operation.

To obtain optimum adhesion, the bonding surfaces must be clean, dry and well unified. Typical surface cleaning solvents are isopropyl alcohol/water mixture (rubbing alcohol) or heptane. Use proper safety precautions for handling solvents.

Shelf Life & Storage

24 months from date of manufacturing when stored at 16° C – 25° C and 40-65 % relative humidity.

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