3M

VHB™
Acrylic Foam Tape 5925F

Product Data Sheet

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Supersedes : New

Product Description

3M™ VHB™ Acrylic Foam Tape 5925 is a double coated pressure sensitive adhesive tape for bonding a wide variety of substrates including lower surface energy materials such as powder coated paints and plastics.

In many cases abrasion of surface is not required.

Physical Properties
Not for specification purposes

Adhesive Type	Acrylic Foam.
Thickness (ASTM D-3652)	0.64 mm
Foam Density	590 kg/m³
Release Liner	Red polyethylene film
Tape Colour	Black
Shelf Life	24 months from date of manufacture by 3M (when stored in original cartons at 20°C & 50 % Relative Humidity)

Performance Characteristics
Not for specification purposes

Peel Adhesion to Stainless Steel 90° peel @ room temp, 72 hr dwell, jaw speed 300mm/min	30 N/10mm
Static Shear Strength weight held for 10,000 mins to stainless steel with ½ sq in (3.23 sq cm) overlap	1500 g @ 22°C 500 g @ 68°C 500 g @ 93°C 250 g @ 121°C
Normal Tensile (T-Block) to Aluminium at room temp, 6.45 sq cm, jaw speed 50 mm/min	620 kPa
Temperature Performance (Minutes/Hours) (Days/Weeks)	150 °C 120 °C
Solvent Resistance Splash testing cycle - 20 seconds submersion - 3 cycles.	High
UV Light Resistance	Excellent.

Additional Product Information

Bond strength is dependent upon the amount of adhesive-to-surface contact developed. Firm application pressure develops better adhesive contact and thus improves bond strength.

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.

It may be necessary to seal or prime some substrates prior to bonding.

a. Most porous or fibred materials (e.g. wood) will require sealing to provide a unified surface.
b. Some materials (e.g. copper, brass, plasticised vinyl) will require priming or   coating to prevent interaction between adhesive and substrates.

VHB Joining Systems are suited for use in many interior and exterior industrial applications. In many situations, they can replace rivets, spot welds, liquid adhesives and other permanent fasteners.

Each product in the VHB family has specific strengths. These can include high tensile, shear and peel adhesion and resistance to solvents, moisture and plasticiser migration.

All VHB tapes should be thoroughly evaluated by the user under actual use conditions with intended substrates, especially if expected use involves extreme environmental conditions.

VHB Joining Systems are suitable for bonding a variety of substrates, including sealed wood, many plastics, composites and metals. Plastics which can be a problem are polyethylene, polypropylene, teflon, silicones and other low surface energy materials.

Plasticised vinyl bonding is dependent on the types and concentrations of plasticisers which can migrate into the adhesives causing a reduction in bond strength; 4941 and 4945 are most resistant to plasticiser migration.

To prevent corrosion on copper and brass, only lacquer coated material should be used within VHB Joining Systems.

Thorough evaluations are recommended when bonding is required to any questionable surface.

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