

3M VHB™ Tape 5909

Product Data Sheet

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Product Description

3M™ VHB™ Tape 5909 is a thin foam tape with pressure sensitive adhesive on both sides and is used for bonding a wide range of materials, including many paints and lower surface energy plastics in addition to metals and other plastics.

The tape is conformable to increase contact with the surfaces, especially for rigid or slightly mismatched surfaces.

The double coated foam tape family 5906, 5907, 5908, 5909 is similar to other products in the 3M™ VHB™ Tape 5952 family except thickness.

Construction

Adhesive Type	Modified Acrylic
Thickness	
Tape	0,30 mm
Liner	0,08 mm
Total (Tape + Liner)	0,38 mm
Thickness Tolerance	+/- 15%
Release Liner	0,08 mm, Clear Polyester
Tape Colour	Black
Density	750 kg/m ³

Performance Characteristics

Adhesion to Stainless Steel (acc to ASTM D3330, test angle 90°)	210 N / 100 mm
Static Shear Strength (ASTM D3654) 10.000min	22°C 1000g 70°C 500g 90°C 250g
Temperature Resistance Short Term (Minutes, Hours) Long Term (Days, Weeks)	121°C 93°C

Shelf Life

24 Months from date of shipment when stored at 4°C to 38°C and 0-95% relative humidity. The optimum storage conditions are 22°C and 50% relative humidity.

Performance of tapes is not projected to change even after shelf life expires; however, 3M does suggest that 3M™ VHB™ Tapes are used prior to the shelf life date whenever possible.

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.

Most porous or fibred materials (e.g. wood) will require sealing to provide a unified surface.

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 due to their surface properties are polyethylene, polypropylene, teflon, silicones and other low surface energy materials.

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.

Precautionary Information

Refer to product label and Material Safety Data Sheet for health and safety information before using the product.

For information please see below for contact details.

Important Notice

All statements, technical information and recommendations contained in this document are based upon tests or experience that 3M believes are reliable. However, many factors beyond 3M's control can affect the use and performance of a 3M product in a particular application, including the conditions under which the product is used and the time and environmental conditions in which the product is expected to perform. Since these factors are uniquely within the user's knowledge and control, it is essential that the user evaluate the 3M product to determine whether it is fit for a particular purpose and suitable for the user's method or application. All questions of liability relating to this product are governed by the terms of the sale subject, where applicable, to the prevailing law.

Values presented have been determined by standard test methods and are average values not to be used for specification purposes. Our recommendations on the use of our products are based on tests believed to be reliable but we would ask that you conduct your own tests to determine their suitability for your applications. This is because 3M cannot accept any responsibility or liability direct or consequential for loss or damage caused as a result of our recommendations

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