

VieTape AT5301

ACRYLIC FOAM TAPE

PRODUCT DESIGN

VieTape AT5301 employ strong acrylic adhesives with exceptional long-term holding capabilities. The peel adhesion and tensile holding power of VieTape AT5301 surpass those of ordinary pressure-sensitive tape products. Furthermore, VieTape AT5301 are resistant to solvents, extreme temperatures, and UV light, making them suitable for a wide range of indoor and outdoor applications.

| Properties | Value | Note |
|---|---|--|
| Adhesive Type | Acrylic | |
| Thickness (ASTM D-3652) | | |
| • Tape | 1.1 mm | |
| • Liner | 0.08 mm | |
| • Total | 1.18 mm | |
| Foam Density | 800 kg/m ³ | |
| Adhesive Carrier | Acrylic Foam cc | |
| Release Liner | Printed Paper | |
| Tape Colour | White | |
| Peel Adhesion to Stainless Steel | 44 N/10mm | 90° peel @ room temp, 72 hr dwell, jaw speed 300mm/min |
| Static Shear Strength | 1500 g @ 20°C 500 g @ 66°C 500 g @ 93°C | weight held for 10,000 mins to stainless steel with ½ sq in (3.23 sq cm) overlap |
| Normal Tensile (T Block) | 970 kPa | to Aluminium at room temp, 6.45 sq cm, jaw speed 50 mm/min |
| Temperature Performance (Minutes/Hours) | 150 °C | |
| (Days/Weeks) | 90 °C | |
| Solvent Resistance | Most solvents, including gasoline, JP-4 jet fuel, mineral spirits, motor oil, ammonia cleaner, acetone, and methyl ethyl ketone, did not seem to cause any deterioration upon exposure to splash testing. The drying time required was only 20 seconds. | |
| UV Light Resistance | Excellent | |



ADDITIONAL PRODUCT INFORMATION

The strength of a bond is directly influenced by the level of contact between the adhesive and surface. Therefore, a firm application pressure is required to enhance adhesive contact and bond strength. To achieve optimal adhesion, the bonding surfaces must be thoroughly cleaned, dried, and unified. Commonly used solvents for surface cleaning include rubbing alcohol (isopropyl alcohol/water mixture) or heptane, which must be handled with proper safety precautions.

In some cases, it may be necessary to prime or seal substrates before bonding. For instance, porous or fibrous materials such as wood require sealing to create a uniform surface, while other materials like copper, brass, and plasticised vinyl require priming or coating to prevent interactions between the adhesive and substrates.

Ideal tape application temperature ranges from 20 to 40°C. It is not recommended to apply tape to surfaces at temperatures below 10°C since the adhesive becomes too firm to adhere properly. However, once the tape is correctly applied, low-temperature holding is typically acceptable. Furthermore, in certain cases, exposing the bond to elevated temperatures, such as 65°C for an hour, can enhance the adhesive wet-out on substrates, resulting in increased bond strength and quicker ultimate bond strength achievement.

APPLICATIONS

This tape is versatile and appropriate for numerous indoor and outdoor industrial applications, often as a substitute for permanent fasteners like rivets, spot welds, and liquid adhesives. However, users must thoroughly test the tape in actual use conditions with intended substrates, particularly in extreme environmental conditions.

This tape is capable of bonding various substrates, including sealed wood, many plastics, composites, and metals. However, some plastics, such as polyethylene, polypropylene, teflon, silicones, and other low surface energy materials, can present bonding challenges. Additionally, galvanized surfaces should be assessed carefully as they can pose potential issues. Evaluations are necessary when bonding to any questionable surface.

SHELF LIFE & STORAGE

24 months from manufacturing date when stored in the original carton at 20°C & 50 % Relative Humidity.

