High Performance Double Coated Tape

S9906

Technical Data sheet **Dec. 2013**

Product Description

3M™ S9906 features a polyester film for dimensional stability and improved handling with ease of die cutting and laminating. 3M™ High Performance Acrylic Adhesive provides high bonding strength to most surface such as polycarbonate, acryl and glass etc. Also, S9906 has very good cleavage strength as well as shear strength even under extreme condition. Moreover, 3M™ High Performance Acrylic Adhesive can provides exceptional temperature and chemical resistance.

Feature

• This tape has excellent resistance to cleavage test and drop test.

• This tape has silicone-coated PET liners at both side of adhesive which can withstand high humidity conditions with minimal cockling or wrinkling.

• This tape has a film carrier which can enhance dimensional stability to foams and other substrates and also makes it easier to handle the tape during slitting and die-cutting.

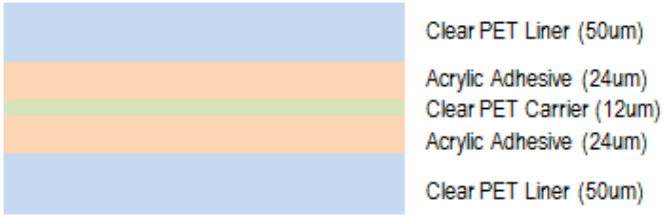
• The bond strength of 3M™ High Performance Acrylic Adhesive increases as a function of time and temperature.

Application Idea

• FPCB module bonding solution
• HSE (PC, PMMA) & Metal bonding solution in narrow width or bonding area

Construction

Product	**S9906**
Adhesive Type	High Performance Acrylic adhesive
Tape Thickness	0.060mm
Tape Color	Clear
Carrier	0.012mm Clear PET Carrier
Liner (Easy side / Tight side)	Clear PET (50um) / Clear PET (50um)
Roll Size	1200mm wide width x 100MT length



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Typical Physical Properties and Performance Characteristics

Note : The following technical information and data should be considered representative or typical only and should not be used for specification purposes.

Product	**S9906**
Peel Strength	N/cm
ASTM D-3330	
Initial	
SUS	> 5.0
RT 72hr	
SUS	> 6.0
Shear Strength ASTM D-3654 modified – (1 inch^2) on SUS 1000gram at RT (23℃)	>10,000 min.
Relative High Temperature Operating Ranges :	
Long Term(days, weeks)	200°F(93℃)
Short Term(minutes, hours)	300°F(149℃)
Shelf Life	12months from date of manufacture when stored in original cartons at room temperature & 50% RH

Application Technique

- Bond strength is dependent upon the amount of adhesive to surface contact developed. Firm application pressure helps develop better adhesive contact and improve bond strength.
- To obtain optimum adhesion, the bonding surfaces must be clean, dry and well unified. Typical surface cleaning solvents are isopropyl alcohol and water (rubbing alcohol) or heptane.

Note : Be sure to follow manufacturer's safety precautions and directions for use when using solvents.

- Ideal tape application temperature range is 70^{o}F To 100^{o}F (21^{o}C to 38^{o}C). Initial tape application to surfaces at temperatures below 50^{o}F (10^{o}C) is not recommended because the adhesive becomes too firm to adhere readily. However, once properly applied, low temperature holding is generally satisfactory.

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Environmental Performance	**Humidity Resistance:** High humidity has minimal effect on adhesive performance. No significant reduction in bond strength is observed after exposure for 7 days at 90°F (32°C) and 90% relative humidity. **UV Resistance:** When properly applied, nameplates and decorative trim parts are not adversely affected by exposure. **Water Resistance:** Immersion in water has no appreciable effect on the bond strength. After 100 hours at room temperature, the high bond strength is maintained. **Temperature Cycling Resistance:** High bond strength is maintained after cycling four times through: 4 hours at 158°F (70°C) 4 hours at -20°F (-29°C) 4 hours at 73°F (22°C) **Chemical Resistance:** When properly applied, nameplate and decorative trim parts will hold securely after exposure to numerous chemicals including oil, mild acids and alkalis.
For Additional Information	To request additional product information or to arrange for sales assistance, call toll free 82-2-3771-4036. Address correspondence to : 3M Tape & Adhesive Organization, 3M Korea LTD, Daehan Invest Trust BLDG 22nd Floor, Yoido Dong, Yongdeungpogu, Seoul, Korea. Our fax number is 82-2-786-7429
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