

3M High Performance Non-woven tape

#9183

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Preliminary Technical Data*

Mar. 2008

Product Description

3M™ #9183(non-woven DCT) is a high tensile strength non woven tape coated on both side with a high adhesion acrylic pressure sensitive adhesive. This tape is protected by a polycoated white paper release liner. Due to the high tensile non woven, this tape can be removed without adhesive residue after long term aging.

It features dimensional stability and improved handling with ease of die cutting and laminating because of non-woven with high tensile strength. 3M™ High Performance Acrylic Adhesive provides high bond strength to most surfaces.

Feature

- This tape can be removed without residue after long term aging because of the high tensile non woven.
- This tape is suitable for recycle parts use, because of its high removable property.
- This tape has a non-woven carrier with high tensile strength which can add dimensional stability and also makes it easier to handle the tape during punching use and die-cutting.

Application Idea

- General purpose joining and mounting application at indoor and outdoor use
- Holding and bonding of electronic devices
- Electronic Components Bonding / Attachments
- Appliance attachments

Construction

Product	#9183
Adhesive Type	High Performance Acrylic adhesive
Tape Thickness	0.160mm
Tape Color	Off-White
Carrier	High tensile non-woven
Release Liner	Silicone treated Poly Coated Kraft (3M logo printed yellow green)
Liner Thickness	0.155mm (+/- 10%)
Roll Size	1200mm wide x 50M, 100M

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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		#9183	
180 ° Peel Strength		<u>Kg/in</u>	
ASTM D-3330			
Initial		<u>Face side</u>	<u>Back side</u>
SUS		1.7	1.6
PET		1.7	1.6
PC		2.0	2.5
RT 72hr			
SUS		1.9	1.8
PET		2.0	2.1
PC		2.4	2.7
Tensile &Elongation			
ASTM D-3822			
D-5035		<u>MD</u>	<u>CD</u>
Tensile (Kg/in)		4	1.5
Elongation(%)		50	70
Shear Strength			
ASTM D-3654 modified – (1 inch ²) on SUS			
1000gram at 72°F(22 °C)		>10,000min	
Relative High Temperature Operating Ranges :			
Long Term(days, weeks)		195°F(90 °C)	
Short Term(minutes, hours)		250°F(120 °C)	
Release Level		40 g/in	
ASTM D-3330			
Shelf Life	12months from date of manufacture when stored in original cartons at room temperature & 50% RH		

Preliminary Technical Data*

Based on the limited production. 3MTM #9183 Non-woven tape is a 3M developmental product. It is currently available on limited basis.
As sufficient production data is gathered, the permanent data will be issued.

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

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

Important Notice

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ISO 9002

This Tape & Adhesives Organization product was manufactured under a 3M quality system registered to ISO 9002 standards.



Industrial Adhesives & Tapes Division

3M Korea LTD, Daehan Invest Trust
BLDG 22nd, Yoido-Dong,
Yongdeungpo-Gu, Seoul
Korea
82-2-3771-4036
www.3M.com

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