

3M

Double Coated Tape

9119-50/85/140 (Temporary)

Technical Data

May 2008

Product description

3M™ Double Coated Tapes 9119-50/85/140 have a firm, silicone pressure sensitive adhesive coated on one side of a polyester film carrier and a high performance acrylic adhesive coated on the other side of the carrier. The silicone adhesive features strong holding power to various silicone surfaces, good temperature performance and good solvent resistance. This tape also features high adhesion of the acrylic adhesive to a variety of surfaces along with good high temperature performance and good solvent resistance.

Construction

9119-50/85/140

	Faceside Adhesive Type/ Thickness	Carrier Type/ Thicknes	Backside Adhesive Type/ Thickness	Liner Color, Type, Print	Liner Caliper	Total Tape Thickness (w/o liner)
9119-50	Acrylic/ 0.0006" (0.015mm)	Clear PET/ 0.0006" (0.013mm)	Silicone/ 0.0007" (0.021mm)	Faceside liner- White, Polycoated Kraft, grey 3M Logo Backside liner- Clear PET	0.0055" (0.14mm)/ 0.003" (0.075mm)	0.002" (0.05mm)/
9119-85	Acrylic/ 0.0011" (0.029mm)	Clear PET/ 0.0006" (0.016mm)	Silicone/ 0.0016" (0.040mm)	Faceside liner- White, Polycoated Kraft, grey 3M Logo Backside liner- Clear PET	0.0055" (0.14mm)/ 0.003" (0.075mm)	0.0034" (0.085mm)/
9119-140	Acrylic/ 0.0016" (0.041mm)	Clear PET/ 0.001" (0.025mm)	Silicone/ 0.0029" (0.074mm)	Faceside liner- White, Polycoated Kraft, grey 3M Logo Backside liner- Clear PET	0.0055" (0.14mm)/ 0.003" (0.075mm)	0.0055" (0.14mm)/

Note 1: Faceside adhesive is on the interior of the roll, exposed when unwound.

Note 2: Backside adhesive is on the exterior of the roll, exposed when liner is removed.

Note 3: PET (Polyester)

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Properties

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.

Peel strength (N/mm)

Product number	Stainless steel	Silicone rubber	
	Acrylic PSA side	Silicone PSA side	
	20minute RT	20minute RT	72hr RT
9119-50	0.47	0.30	0.39
9119-85	0.73	0.50	0.69
9119-140	0.90	0.55	0.77

ASTM D3330-180 degree, Backside substrate: 2mil thick polyester film, Dwell temp: room temperature (23 degree C) for 20~ 40 min..

Shelf Life of Tape in Roll Form 12 months from date of manufacture when stored in original cartons at 70° F (21 °C) and 50% relative humidity.

Application Techniques

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

To obtain optimum adhesion, the bonding surfaces must be clean, dry and well unified. Some typical surface cleaning solvents are isopropyl alcohol or heptane.

Note: Carefully read and follow the manufacturer's precautions and directions for use when working with solvents. These cleaning recommendations may not be in compliance with the rules of certain air quality management districts in California; consult applicable rules before use.

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.

General Information

Silicone adhesive provides good bond to silicone rubber. 3M™ Adhesive provides very high adhesion to a wide variety of materials, excellent shear holding power, high temperature resistance and excellent UV resistant.

Features

A thin polyester carrier in the products provides dimensional stability and improved handling with ease of die cutting and lamination compared to adhesive transfer tapes.

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Application Ideas Applications where bonding silicone rubber to high surface energy materials is necessary.

Application Equipment To apply adhesives in a wide web format, lamination equipment is required to ensure acceptable quality. To learn more about working with pressure-sensitive adhesives please refer to technical bulletin, Lamination Techniques for Converters of Laminating Adhesives.

For additional dispenser information, contact your local 3M sales representative.

Certification/Recognition **MSDS:** For the products 3M has prepared a MSDS which requirements of the Occupational Safety and Health Administration's Hazard Communication Standard, 29 C.F.R.
TSCA: The product are defined as articles under the Toxic Substances Control Act and therefore, are exempt from inventory listing requirements.

Important Notice 3M MAKES NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. User is responsible for determining whether the 3M product is fit for a particular purpose and suitable for user's method of application. Please remember that many factors can affect the use and performance of a 3M product in a particular application. The materials to be bonded with the product, the surface preparation of those materials, the product selected for use, the conditions in which the product is used, and the time and environmental conditions in which the product is expected to perform are among the many factors that can affect the use and performance of a 3M product. Given the variety of factors that can affect the use and performance of a 3M product, some of which 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 of application.

Limitation of Remedies and Liability If the 3M product is proved to be defective, The exclusive remedy, at 3M'S option, shall be to refund the purchase price of or to repair or rplace the defective 3M product. 3M shall not otherwise be liable for loss or damages, whether direct, indirect, special, incidental, or consequential, regardless of the legal theory asserted, including, but not limited to, contract, negligence, warranty, or strict liability.

ISO 9002

This Engineered Adhesives Division product was manufactured under a 3M quality system registered to ISO 9002 standards.

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