



Technical Data Sheet

3M[™] Cushion-Mount[™] Plus Plate Mounting Tapes with Easy Mount Adhesive E1920S





Last Revision Date: July, 2010

English

Regulatory Info/SDS

Product Description

3M™ Cushion-Mount™ Plus Plate Mounting Tapes with Easy Mount Adhesive are designed for mounting flexographic print plates to cylinders or sleeves. This family of foam mounting tapes provides excellent print quality for process, combination, and solid printing.

Product Features

- Offers a complete range of foam densities providing excellent print quality from process to combination to solid printing.
- · Consistent caliper control allows the printer to use multiple foam densities on a print job to optimize print quality.
- Use the 3M proprietary Easy Mount liner, creating micro-channels in both adhesive surfaces. The crosshatched pattern creates a continuous and permanent network of micro-channels in the adhesive, allowing air to escape from between the tape and cylinder/sleeve and between the tape and plate.
- The adhesive on the linered side (plate side) of the tape is designed for mounting of photopolymer plates, excellent holding power on-press and clean plate removal when demounting.
 The adhesive on the non-linered side (cylinder side) of the tape is designed for mounting to flexographic printing cylinders or sleeves, providing easy application at mounting and clean removability when demounting.

Technical Information Note

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

Typical Physical Properties

Attribute Name	Test Method	Value
Adhesive Type		Differential Acrylate
Density	ASTM D3574	416 kg/m³ (26 lb/ft³) ¹
Shore A Hardness	ASTM D2240	60
Adhesive Carrier		Light Medium Pink Foam
Application Thickness		0.508 mm (20 mil)
Film Thickness		0.114 mm (4.5 mil)
Total Tape Thickness	ASTM D3652	0.559 mm (22 mil)
Lot to Lot Tolerance		± 0.038 mm (± 1.5 mil)
Typical Application Area Caliper		± 0.01 mm (± 0.4 mil)
Variation		
Compression Deflection: 10%		70 kPa (10 lb/in²)
Compression		
Compression Deflection: 25%		138 kPa (20 lb/in²)
Compression		130 KFd (20 ID/III-)
		Combination of solid and line with tone
Type of Printing		reproduction where process printing is
		important

¹ Foam with adhesive

Typical Performance Characteristics

90° Peel Adhesion

Temperature: 22 °C (72 °F)
Test Condition: Non-Linered Side
Test Method: ASTM D3330

Substrate	Value
Composite Sleeve	7.1 N/cm (65 oz/in) ¹
Photopolymer	2.8 N/cm (25 oz/in) ²
Polyester (PET)	5.5 N/cm (50 oz/in) ¹
Stainless Steel	6 N/cm (55 oz/in) ¹
Urethane - A	8.2 N/cm (75 oz/in) ¹
Urethane - B	7.7 N/cm (70 oz/in) ¹

^{1 12} in/min (300 mm/min)

² Linered

Attribute Name	Value
Temperature Resistance	49 °C (120 °F)

Typical Environmental Performance

Attribute Name	Value
	Water - Excellent
	Alkanes - Excellent
Solvent Resistance	Alcohols - Good
	Acetates - Fair

Storage and Shelf Life

Store under normal conditions of 60° to 80°F (16° to 27°C) and 40 to 60% relative humidity in the original carton. To obtain best performance, use within two years from date of manufacture.

Available Sizes

Attribute Name	Value
Maximum Available Width	1371.6 mm (54 in)
Minimum Available Width	50.8 mm (2 in)
Normal Slitting Tolerance	± 0.794 mm (± 1/32 in)
Standard Roll Length	22.9 m (25 yd)

Information

Technical Information: The technical information, guidance, and other statements contained in this document or otherwise provided by 3M are based upon records, tests, or experience that 3M believes to be reliable, but the accuracy, completeness, and representative nature of such information is not guaranteed. Such information is intended for people with knowledge and technical skills sufficient to assess and apply their own informed judgment to the information. No license under any 3M or third party intellectual property rights is granted or implied with this information.

Product Selection and Use: Many factors beyond 3M's control and uniquely within user's knowledge and control can affect the use and performance of a 3M product in a particular application. As a result, customer is solely responsible for evaluating the product and determining whether it is appropriate and suitable for customer's application, including conducting a workplace hazard assessment and reviewing all applicable regulations and standards (e.g., OSHA, ANSI, etc.). Failure to properly evaluate, select, and use a 3M product and appropriate safety products, or to meet all applicable safety regulations, may result in injury, sickness, death, and/or harm to property.

Warranty, Limited Remedy, and Disclaimer: Unless a different warranty is specifically stated on the applicable 3M product packaging or product literature (in which case such warranty governs), 3M warrants that each 3M product meets the applicable 3M product specification at the time 3M ships the product. 3M MAKES NO OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OR CONDITION OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR ARISING OUT OF A COURSE OF DEALING, CUSTOM, OR USAGE OF TRADE. If a 3M product does not conform to this warranty, then the sole and exclusive remedy is, at 3M's option, replacement of the 3M product or refund of the purchase price.

Limitation of Liability: Except for the limited remedy stated above, and except to the extent prohibited by law, 3M will not be liable for any loss or damage arising from or related to the 3M product, whether direct, indirect, special, incidental, or consequential (including, but not limited to, lost profits or business opportunity), regardless of the legal or equitable theory asserted, including, but not limited to, warranty, contract, negligence, or strict liability.

Disclaimer: 3M industrial and occupational products are intended, labeled, and packaged for sale to trained industrial and occupational customers for workplace use. Unless specifically stated otherwise on the applicable product packaging or literature, these products are not intended, labeled, or packaged for sale to or use by consumers (e.g., for home, personal, primary or secondary school, recreational/sporting, or other uses not described in the applicable product packaging or literature), and must be selected and used in compliance with applicable health and safety regulations and standards (e.g., U.S. OSHA, ANSI), as well as all product literature, user instructions, warnings, and limitations, and the user must take any action required under any recall, field action or other product use notice. Misuse of 3M industrial and occupational products may result in injury, sickness, or death. For help with product selection and use, consult your on-site safety professional, industrial hygienist, or other subject matter expert. For additional product information, visit www.3M.com.

ISO Statement

This Industrial Adhesives and Tapes Division product was manufactured under a 3M quality system registered to ISO 9001 standards.

3M Industrial Adhesives and Tapes Division 3M Center, Building 225-3S-06 St. Paul, MN 55144-1000 800-362-3550 3M and Cushion-Mount are trademarks of 3M Company. @ 3M 2010 (7/10)