



Technical Data Sheet

3M™ Flexomount™ Solid Printing Tape 411DL



[Product Details](#)



[Regulatory Info/SDS](#)

Product Description

3M™ Flexomount™ Solid Printing Tapes are double coated tapes designed for mounting photopolymer and rubber printing plates to flexographic printing cylinders or sleeve systems. The adhesive systems are specially formulated for clean removability from both the plate and the print cylinder.

Flexomount tapes have a solid vinyl carrier which is designed for printing solids and line work.

Product Features

- Gray double coated tape with a soft rubber adhesive on each side of a vinyl carrier.
- Available in double or single liner.
- This product complies with RoHS (Restriction of Hazardous Substances): EU Directive 2002/95/EC. RoHS compliant means that the product does not contain any of the substances in excess of the maximum concentration values as amended by Commission Decision 2005/618/EC.

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		Soft Rubber
Density	ASTM D3574	1060 kg/m ³ (70 lb/ft ³) ¹
Adhesive Carrier		Solid Vinyl (Gray)
Thickness		0.38 mm (15 mil) ²
Liner Thickness		0.102 mm (4 mil)
Lot to Lot Tolerance		± 0.038 mm (± 1.5 mil)
Typical Application Area Caliper Variation		± 0.015 mm (± 0.6 mil) ³
Type of Plate		Rubber & Photopolymer
Type of Printing		Solids and Line printing where maximum ink density is critical

¹ Foam with adhesive

² All thicknesses are nominal performance thicknesses for which the products are targeted to perform during the flexographic printing operation.

³ Typical Application Area: 18 in x 6 ft = 1.0 yd², 457.2 mm x 1828.8 mm = 0.8361 m².

Typical Performance Characteristics

90° Peel Adhesion

Temperature: 23 °C (73 °F)

Test Method: ASTM D3330

Substrate	Value
Composite Sleeve	3.3 N/cm (30 oz/in) ¹
Photopolymer	4.4 N/cm (40 oz/in) ¹
Rubber	5.5 N/cm (50 oz/in) ¹

¹ 304 mm/min (12 in/min)

Attribute Name	Test Method	Temperature	Test Condition	Value
Static Shear	ASTM D3654	70 °C (158 °F)	1000 g	10,000 min
180° Peel Adhesion	ASTM D3330	23 °C (73 °F)		5.5 N/cm (50 oz/in) ¹
Temperature Resistance				49 °C (120 °F)
Plate Side Adhesion				Rubber: High Photopolymer: High

¹ 304 mm/min (12 in/min)

Typical Environmental Performance

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

Design Considerations

There are four general considerations for selecting the right mounting tape: the thickness of the tape, the type of printing plate, the adhesion properties and the type of printing.

- **Tape Thickness:**

3M™ Flexomount™ Solid Printing Tape products range in thickness in order to meet undercut or pitch diameters that are common on flexographic printing presses. Tapes are available for 10, 15 and 20 mil (0.25, 0.38 and 0.50 mm) applications.

- **Type of Printing Plate:**

The adhesive systems on each tape have been developed for bonding to photopolymer or rubber printing plates.

- **Adhesion Properties:**

Flexomount solid printing tapes come in two different adhesion levels: standard (gray) and repositionable (black).

3M™ Flexomount™ Tape 411DL comes with the standard adhesive. This product has excellent adhesion to both rubber and photopolymer plates. The high adhesion makes it a good choice for long runs and helps reduce the tendency for plate edge lifting.

Industry Specifications

Complies with RoHS (Restriction of Hazardous Substances): EU Directive 2002/95/EC. RoHS compliant means that the product does not contain any of the substances in excess of the maximum concentration values as amended by Commission Decision 2005/618/EC.

Storage and Shelf Life

Store under normal conditions of 16° to 27°C (60° to 80°F) and 40 to 60% relative humidity in the original packaging, out of direct sunlight. For best performance, use this product within 12 months from date of manufacture.

Available Sizes

Attribute Name	Value
Master Width	1371.6 mm (54 in)
Normal Slitting Tolerance	± 0.795 mm (± 1/32 in)
Standard Roll Length	32.9 m (36 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 product was manufactured under a 3M quality system registered to ISO 9001 standards.

3M™ Industrial Specialties Division
3M Center, St. Paul, MN 55144-1000
www.3M.com

3M and Flexomount are trademarks of 3M Company.
©3M 2024 (9/24)