



Technical Data Sheet

3M™ Flexomount™ Solid Printing Tape 412DL



[Product Details](#)

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		0.5 mm (20 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 412DL 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

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ISO Statement

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