



Technical Data Sheet

3M™ Clear Polypropylene Durable Label Material FP102



[Product Details](#)

Product Description

3M™ Clear Polypropylene Durable Label Materials offer durability and moisture resistance. These label products utilize 3M™ Adhesive P1410, which is a general purpose permanent tackified acrylic that offers adhesion to a wide variety of substrates, including polyolefins.

Product Features

- Liner for 3M™ Clear Polypropylene Durable Label Material FP102 is designed for high-speed die cutting and matrix stripping. Not recommended for sheet on press applications.

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	Value
Adhesive Type	P1410 Perm. 18
Facestock	Clear Polypropylene TC
Adhesive Coat Weight	1.75 g/100 in ² ± 10%

Attribute Name	Value
Facestock Thickness	0.051 mm (2 mil)
Liner	50# SC semi-bleached super calendered kraft sheet
Liner Thickness	0.079 mm (3.1 mil)

Construction Tested

Adhesion properties determined per TLMI Method using 1.0 mil polyester with 1.1 mil of adhesive on a polished stainless steel panel.

Typical Performance Characteristics

Test Method: TLMI

Attribute Name	Temperature	Substrate	Value
180° Peel Adhesion	23 °C (73 °F)	Stainless Steel	5.28 N/cm (48 oz/in) ¹
Liner Release	23 °C (73 °F)		15 — 50 g/2 in ²
Shear Adhesion			1 h ³
Loop Tack			3.16 N/cm (28.8 oz/in) ¹

¹ 304 mm/min (12 in/min)

² 180° removal, 300 in/min

³ 1.0 in² x 1000g

Attribute Name	Value
Application Temperature	5 — 49 °C (40 — 120 °F)
Long Term Temperature Resistance	60 °C (140 °F) ¹

Attribute Name	Value
Minimum Long Term Temperature Resistance	-29 °C (-20 °F) ¹

¹ Long Term (day, weeks)

Attribute Name	Value
Note	Calipers are nominal values

Printing

Topcoated to accepted most film ink systems and some thermal transfer printing.

Water-based Flexo inks:
Water Ink Technologies, Inc. Versifilm
Akzo Nobel, Hydrofilm 4000

Handling/Application Information

Application Examples

Plastic containers, durable goods.

Storage and Shelf Life

Store under normal conditions of 16° to 27°C (60° to 80°F) and 40 to 60% relative humidity in a sealed plastic bag, out of direct sunlight. For best performance, use this product within 24 months from date of manufacture.

Information

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ISO Statement

This product was manufactured under a 3M quality system registered to ISO 9001 standards.

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