

3M™ Outdoor UL Recognized Polyester Overlamine Durable Label Material OFM010N

Product Description

3M™ Outdoor UL Recognized Polyester Overlamine Durable Label Materials are durable high performance clear materials that offer excellent thermal stability, abrasion and moisture resistance. These polyester labels utilize 3M™ Adhesive P1400 which is a high performance tackified acrylic designed for use in demanding environments.



Product Features

- UL recognized for indoor/outdoor use UL files MH11410 and MH16411.
- Adhesive offers good UV resistance and excellent adhesion to a wide variety of substrates, including polyolefins.
- Liner for 3M™ Outdoor UL Recognized Polyester Overlamine Durable Label Material OFM010N offers exceptional adhesive smoothness and clarity for superior adhesive "wet out".
- Meets EU RoHS Directive (e.g.) means that the product or part does not contain any of the following substances in excess of the following maximum concentration values in any homogeneous material, unless the substance is in an application that is exempt under RoHS: (a) 0.1% (by weight) for lead, mercury, hexavalent chromium polybrominated biphenyls or polybrominated diphenyl ethers; or (b) 0.01% (by weight) for cadmium. Unless otherwise stated by 3M in writing, this information represents 3M's knowledge and belief based on information provided by third party suppliers to 3M.

3M™ Outdoor UL Recognized Polyester Overlaminates Durable Label Material OFM010N

Technical Information Note

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

Construction Tested

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

Typical Physical Properties

Property	Values	
Facestock	Clear Polyester NTC	
Facestock Thickness	0.025 mm	1 mil
Adhesive	P1400 Perm. 16	
Liner	Clear Polyester	
Liner Thickness	0.038 mm	1.5 mil
Adhesive Coat Weight	1.40 to 1.71 g/100 in ²	

Convertability

3M™ Outdoor Acrylic Adhesive P1400 is specifically designed to be compatible with a variety of print methods and end use applications. Adhesive processing issues are not anticipated when proper roll tensions, handling and storage conditions are used. Please refer to the die cutting/converting section of this data page or the "Guide to Converting and Handling Label Products" technical bulletin for additional information.

*Note

For all clear film face and clear film liner material combinations, a slight appearance variation may be observed along the roll edge. This effect is due to the facestock's haze tolerance and is further magnified by the clear film liner and multiple wraps of clear films. This variation is not associated with a color shift of the facestock and does NOT negatively affect the labelstock's clarity in the final overlamination application.

Note

Calipers are nominal values

Typical Performance Characteristics

Property	Values		Method	Notes
Application Temperature	5 to 49 °C	40 to 120 °F		
Service Temperature Range	-29 to 125 °C	-20 to 257 °F		
180° Peel Strength	3.85 N/cm	35.2 oz/in	TLMI	12 in/min, 1 in wide sample

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Typical Performance Characteristics (continued)

Property	Values		Method	Notes
Loop Tack	3.16 N/cm	28.8 oz/in	TLMI	12 in/min, 1 in wide sample
Shear	4 hr		TLMI	0.25 in ² x 500g
Release Range	10 to 30 g/2 in		TLMI	180° removal, 300 in/min

Handling/Application Information

Application Ideas

Overlaminates for durable goods, power tools, equipment and machinery, lawn and garden.

Application Techniques

For maximum bond strength, surface should be clean and dry. A typical cleaning solvent is heptane or isopropyl alcohol. Note: Consult the manufacturer's MSDS for proper handling and storage of solvents. For best conditions, application surface should be at room temperature or higher. Low temperature surfaces (below 10°F [-12°C]) can cause the adhesive to become so firm that it will not develop contact with the substrate. Higher initial bonds are achieved through increased rub down pressure.

Printing

This film is not treated for printability.

Storage and Shelf Life

Store at room temperature conditions of 72°F (22°C) and 50% relative humidity. All unconverted and converted label materials should be stored in polyethylene protections to minimize the effects of humidity penetration.

If stored under proper conditions, product retains its performance and properties for 24 months from date of manufacture.

Industry Specifications

UL recognized for indoor/outdoor use (File MH16411)

Meets EU RoHS Directive

Trademarks

3M is a trademark of 3M Company.

Family Group

	OFM0101	OFM010N	OFM0102	OFM0103	OFM0109	OFM0202	OFM0202N-60
Facestock	Clear Polyester NTC	Clear Polyester NTC	Clear Polyester NTC	Clear Polyester NTC	Clear Polyester NTC	Clear Polyester NTC	Clear Polyester NTC
Facestock Thickness (mm)	0.025	0.025	0.025	0.025	0.025	0.051	0.051
Adhesive	P1400 Perm. 16	P1400 Perm. 16	P1400 Perm. 16	P1400 Perm. 16	P1400 Perm. 16	P1400 Perm. 18	P1400 Perm. 18

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Family Group (continued)

	OFM0101	OFM010N	OFM0102	OFM0103	OFM0109	OFM0202	OFM0202N-60
Liner	40# SC semi-bleached super calendered kraft sheet	Clear Polyester	50# SC Remoist semi-bleached super calendered kraft sheet	78# White CCK bleached clay coated kraft sheet	Clear Polyester	50# SC Remoist semi-bleached super calendered kraft sheet	Clear Polyester
Liner Thickness (mm)	0.061	0.038	0.079	0.12	0.038	0.079	0.025

References

- 1. Safety Data Sheet
 Url: https://www.3m.com/3M/en_US/company-us/SDS-search/results/?gsaAction=msdsSRA&msdsLocale=en_US&co=ptn&q=OFM010N

ISO Statement

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

Product Selection and Use

All statements, technical information and recommendations contained in this document are based upon tests or experience that 3M believes are reliable. However, many factors beyond 3M’s control can affect the use and performance of a 3M product in a particular application, including the conditions under which the product is used and the time and environmental conditions in which the product is expected to perform. Since these factors 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.

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