

3M™ Outdoor UL Recognized White Polyester Durable Label Material OFM03402

Product Description

3M™ Outdoor UL Recognized White Polyester Durable Label Materials are durable, high performance materials that offer excellent thermal stability 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 White Polyester Durable Label Material OFM03402 is designed for high-speed die cutting and matrix stripping. This liner has been remoisturized after silicone coating to restabilize the sheet and reduce side curl, an excellent choice for perforation and fanfold applications. The C2S version of this liner used in 3M™ Outdoor UL Recognized White Polyester Durable Label Material OFM040E has a light coating of silicone on the backside to reduce label pick.

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	White Polyester TC	
Facestock Thickness	0.051 mm	2 mil
Adhesive	P1400 Perm. 18	
Liner	50# SC Remoist semi-bleached super calendered kraft sheet	
Liner Thickness	0.079 mm	3.1 mil
Adhesive Coat Weight	1.75 g/100 in ² ± 10%	

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 150 °C	-20 to 302 °F		
180° Peel Strength	3.85 N/cm	35.2 oz/in	TLMI	12 in/min, 1 in wide sample
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	15 to 50 g/2 in		TLMI	180° removal, 300 in/min

Handling/Application Information

Application Ideas

- Nameplates and product ID labels.
- Durable goods, power tools, equipment and machinery, lawn and garden.

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Printing

Gloss topcoat is designed to be printable with a variety of film inks and thermal transfer ribbons. The following inks and thermal transfer ribbons have been evaluated and found to give excellent adhesion when tested with 3M™ Tape 610 and 3M™ Tape 810. However, press conditions vary and proper evaluation using your specific conditions is critical and highly recommended for successful ink and ribbon adhesion.

Supplier	UV Inks	Ink Series	Printing Process
XSYS Print Solutions		UNV80071	Letterpress
		USC50022	Screen
		USC10031	Screen
Environmental Inks		Ultra Kote 1800 OPV	Flexo
Nazdar		PSST-3952	Screen
Norcote		02-022, 80049, 02304, 021019	Screen
Water Based			
XSYS Print Solutions		HMF80071	Flexo
		HMF90100	Flexo
		MHF30004	Flexo
Water Ink Technologies		WFLO 42976	Flexo
Environmental Inks		Aqua Polyscreen Plus	Flexo
		Aqua Poly Cup	Flexo
Wykoff Inks		SCF 6551	Flexo
Solvent Based			
Siegwerk Ink		FCTB65L2	Flexo
		FCTD65L4	Flexo
		FCTE65L3	Flexo
		FCTH65L5	Gravure
		GV124	Screen
Nazdar			
Thermal Transfer Ribbon Supplier		Ribbon Series Ribbon	Type
Armor		AXR7 +	Resin
DNP		W137-C	Wax
		M-250	Wax/Resin
		R510-W	Resin
		SP330, DC400	Resin
iimak		Prime Mark, PM350	Wax/Resin
Ricoh		B110A	Wax/Resin
		BC110C	Resin
			Resin
Sony		3022, 4085 Plus	Wax
		4070	Resin (UV+)
		4075	Resin

Storage and Shelf Life

Store under normal conditions of 70°F (21°C) and 50% relative humidity. To minimize the effects of humidity on the products, package the die-cut and printed stock in polyethylene bags. Low density polyethylene (2-4 mils) can help prevent humidity penetration. To obtain best performance, use this product within 24 months from the date of manufacture.

Industry Specifications

UL recognized for indoor/outdoor use (Files MH11410 and MH16411)

Trademarks

3M is a trademark of 3M Company.

Family Group

	OFM0302	OFM0402	OFM0403	OFM0405	OFM040E	OFM0502	OFM03402
Facestock	White Polyester TC	White Polyester TC	White Polyester TC	White Polyester TC	White Polyester TC	White Polyester TC	White Polyester TC
Facestock Thickness (mm)	0.025	0.051	0.051	0.051	0.051	0.13	0.051
Adhesive	P1400 Perm. 16	P1400 Perm. 21	P1400 Perm. 21	P1400 Perm. 21	P1400 Perm. 21	P1400 Perm. 21	P1400 Perm. 18
Liner	50# SC Remoist semi-bleached super calendered kraft sheet	50# SC Remoist semi-bleached super calendered kraft sheet	78# White CCK bleached clay coated kraft sheet	90# Polycyd. bleached kraft sheet polyethylene coated on two sides	50# SC C2S semi-bleached super calendered kraft sheet	50# SC Remoist semi-bleached super calendered kraft sheet	50# SC Remoist semi-bleached super calendered kraft sheet
Liner Thickness (mm)	0.079	0.079	0.12	0.18	0.079	0.079	0.079

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=OFM03402

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

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