



Overlamine Label Materials

FL01N • FL02N • FL025

Technical Data

March 2017

Product Description 3M™ Overlamine Label Material Products are durable, matte clear polycarbonate overlaminates that offer excellent moisture and abrasion resistance. These labels utilize 3M™ Adhesive P1212, which is a high clarity general purpose acrylic emulsion that exhibits good initial tack, excellent die cutting properties, minimal cold flow, and good UV resistance.

Construction	Product Number	Facestock	Adhesive	Liner
	3M™ Overlamine Label Material FL01N	.005 in. Made with Lexan™ Resin	P1212 Perm. 22	.0015 in. Clear Polyester Liner
	3M™ Overlamine Label Material FL02N	.003 in. Made with Lexan™ Resin	P1212 Perm. 22	.0015 in. Clear Polyester Liner
	3M™ Overlamine Label Material FL025	.003 in. Made with Lexan™ Resin	P1212 Perm. 22	.007 in. 90# PCK Liner

(Calipers are nominal values)

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Features

- Adhesive dry ingredients are listed by FDA as indirect food contact additives when used in food packaging with minimum opportunity for exposure. See 21 CFR 175.105.
- Meets CONEG requirements.
- Liner for 3M™ Overlamine Label Materials FL01N and FL02N is used when high strength and caliper control are important. Recommended for high speed labeling applications or where clarity of the adhesive is critical.
- Liner for 3M™ Overlamine Label Material FL025 is used when lay flat performance is important.
- 3M™ Overlamine Label Materials FL02N and FL025 are UL recognized for indoor use, UL files MH11410 and MH16411

Application Ideas

- Decorative nameplates.
- Specialty overlamine for durable goods.

3M™ Overlaminates Label Materials

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Typical Physical Properties

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

Adhesion properties determined per TLMI Method using 1.0 mil polyester with 0.9 mil of adhesive on a polished stainless steel panel.

Peel Adhesion	3.0 lbs./in. (616)	TLMI Method, 180° Peel, 12"/min., 1" wide sample
Loop Tack	1.8 lbs./in. (316)	TLMI Method, 12"/min., 1" wide sample
Shear	3 hours	TLMI Method, 0.25 in. ² x 500g
Adhesive Coat Weight	3M™ Label Products FL01N, FL02N, FL025 1.89 to 2.31 g/100 in. ²	TM-2279
Release Range	3M label products FL02N, FL025 5 to 30 g/2 in.	TLMI Method, 180° removal, 300 in./min.
	3M label products FL01N 10 to 30 g/2 in.	TLMI Method, 180° removal, 300 in./min.
FL01N Service Temperature	-20°F to 257°F (-29°C to 125°C)	
FL02N, FL025 Serv. Temp	-20°F to 140°F (-29°C to 60°C)	
Application Temperature	40°F to 120°F (5°C to 49°C)	
Convertability	3M™ General Purpose Acrylic Adhesive P1212 is designed to be compatible with a variety of print methods and indoor 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.	

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.

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Storage 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.

Shelf Life If stored under proper conditions, product retains its performance and properties for two years from date of manufacture.

Product 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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This Industrial Adhesives and Tapes Division product was manufactured under a 3M quality system registered to ISO 9001:2008 standards.

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