



Technical Data Sheet

3M™ Indoor UL Recognized Lexan Durable Label Material FL02N



Additional Info

Product Description

3M™ Indoor UL Recognized Lexan Durable Label Materials are durable, matte clear polycarbonate overlaminates that offer moisture and abrasion resistance. These lexan labels utilize 3M™ Adhesive P1212, which is a high clarity general purpose acrylic emulsion that exhibits initial tack, die cutting properties, minimal cold flow, and UV resistance.

Product Features

- UL Recognized file MH11410 • Liner for 3M label product 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.

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	P1212 Perm. 22
Facestock	Velvet Lexan
Adhesive Coat Weight	1.89 — 2.31 g/100 in ²

Attribute Name	Value
Facestock Thickness	0.076 mm (3 mil)
Liner	Clear Polyester
Liner Thickness	0.038 mm (1.5 mil)

Attribute Name	Value
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.

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 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)		1 — 5.9 g/cm (5 — 30 g/2 in) ²
Shear Adhesion			3 h ³
Loop Tack			3.16 N/cm (28.8 oz/in) ¹

¹ 300 mm/min (12 in/min)

² 180° removal, 300 in/min

³ 0.25 in² x 500g

Attribute Name	Value
Application Temperature	5 — 49 °C (40 — 120 °F)
Long Term Temperature Resistance	60 °C (140 °F) ¹
Minimum Long Term Temperature Resistance	-29 °C (-20 °F) ¹

¹ Long Term (day, weeks)

Attribute Name	Value
Note	Calipers are nominal values

Printing

This film is not treated for printability.

Handling/Application Information

Application Examples

- Decorative nameplates.
- Speciality overlamine for durable goods, power tools, equipment and machinery.

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.

Industry Specifications

UL Recognized, File PGGU2.MH11410, Marking & Labeling System Materials - Component, ANSI/UL 969

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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