



Technical Data Sheet

3M™ Textured Vinyl Durable Label Material
FV02490N



Additional Info



Regulatory
Info/SDS

Product Description

3M™ Textured Vinyl Durable Label Materials are flexible and conformable clear vinyl label stocks that offer durability and moisture resistance. These vinyl labels utilize 3M™ Adhesive P1212 which is a high clarity general purpose acrylic emulsion that exhibits good initial tack, die cutting properties, minimal cold flow, and UV resistance.

Product Features

- Good moisture and abrasion resistance.
- The polymerically plasticized nature of this soft flexible vinyl imparts long term dimensional stability for demanding applications.
- Meets CONEG requirements.
- Cost effective alternative to velvet lexan for labels intended for indoor use.
- Liner for 3M label product FV02490N 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. 18 |
| Facestock | Clear Textured Vinyl NTC |
| Adhesive Coat Weight | 1.58 — 1.93 g/100 in ² |

| Attribute Name | Value |
|---------------------|--------------------|
| Facestock Thickness | 0.13 mm (5 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) | | 2 – 5.9 g/cm (10 – 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 overlaminate for labels on 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

Meets CONEG requirements

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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