

Technical Data Sheet

3M™ Clear Polyester Durable Label Material FM01860N

Product Description

3M™ Clear Polyester Durable Label Materials are durable, high performance materials that offer excellent thermal stability and moisture resistance. These label products utilize 3M™ Adhesive R3500, which is designed for use on smooth surfaces such as glass, metal and plastic (including polystyrene) and offers excellent UV resistance, good initial tack, and long term adhesion with clean removability and is an excellent alternative to static cling.

Note: As a removable adhesive, performance may vary depending upon the substrate to which it is applied. Therefore, extensive testing should be conducted prior to use and textured surfaces should be avoided. Not appropriate for children’s toy or sticker applications.

Product Features

- Good initial tack.
- Long term adhesion with clean removability.
- Repositionable.
- Excellent UV resistance.
- Liner for 3M™ Clear Polyester Durable Label Material FM01860N 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.

Construction Tested

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

Typical Physical Properties

Property	Values	Additional Information
Adhesive Type	R3500 Rem. 16	
Liner	Clear Polyester	
Liner Thickness	0.038 mm	
Facestock	Clear Polyester NTC	
Facestock Thickness	0.051 mm	

Facestock Thickness	2 mil
Liner Thickness	1.5 mil
Conformability	Semi-rigid – Label is suitable for flat or slightly curved surfaces.
Adhesive Coat Weight	1.55 g/100 in² ± 10%

Typical Performance Characteristics

Property	Values	Additional Information
180° Peel Adhesion	0.53 N/cm	View 
Test Method: TLMI		
Substrate: Stainless Steel		
Notes: 12 in/min (300 mm/min)		
180° Peel Adhesion	4.8 oz/in	View 
Test Method: TLMI		
Substrate: Stainless Steel		
Notes: 12 in/min (300 mm/min)		
Long Term Temp C	68 °C	View 
Test Condition: Long Term (day, weeks)		
Minimum Long Term Temperature Resistance	-29 °C	View 
Test Condition: Long Term (day, weeks)		
Long Term Temp F	155 °F	View 
Test Condition: Long Term (day, weeks)		
Minimum Long Term Temperature Resistance	-20 °F	View 
Test Condition: Long Term (day, weeks)		
Application Temperature	5 to 43 °C	
Application Temperature	40 to 110 °F	

Note	Calipers are nominal values
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Loop Tack	0.88 N/cm	View 
Test Method: TLMI		
Notes: 12 in/min (300 mm/min)		
Loop Tack	8 oz/in	View 
Test Method: TLMI		
Notes: 12 in/min (300 mm/min)		
Liner Release	15 to 50 g/2 in	View 
Test Method: TLMI		
Notes: 180° removal, 300 in/min		

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.

Bottom Matter

3M
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Trademarks

3M is a trademark of 3M Company.

Handling/Application Information

Application Examples

Pre-mask/paint masking applications.

References

Property	Values
3m.com Product Page	https://www.3m.com/3M/en_US/p/d/b5005329218/
Safety Data Sheet SDS	https://www.3m.com/3M/en_US/company-us/SDS-search/results/?gsaAction=msdsSRA&msdsLocale=en_US&co=ptn&q=FM01860N

ISO Statement

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

Information

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