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## 3M™ Clear Polystyrene Label Product FS042

### Product Description

3M™ Clear Polystyrene Label Products are hard, rigid film materials that offer economic alternatives for indoor applications. These polystyrene 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.



### Product Features

- Meets CONEG requirements.
- 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.
- Liner for 3M™ Clear Polystyrene Label Product FS042 is designed for high-speed die cutting and matrix stripping. Not recommended for sheet on press applications.

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	
Facestock	Clear Polystyrene	
Facestock Thickness	0.051 mm	2 mil
Adhesive	P1212 Perm. 18	
Liner	50# SC semi-bleached super calendered kraft sheet	
Liner Thickness	0.079 mm	3.1 mil
Adhesive Coat Weight	1.75 g/100 in² ± 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 60 °C	-20 to 140 °F		
180° Peel Strength	5.28 N/cm	48 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	3 hr		TLMI	0.25 in² x 500g
Release Range	15 to 50 g/2 in		TLMI	180° removal, 300 in/min

Handling/Application Information

Application Ideas

Product ID, shelf marking, general purpose indoor labels.

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Printing

The film is treated to accept most film inks.

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 two years from the date of manufacture.

Industry Specifications

Meets CONEG requirements  
FDA 21 CFR 175.105

Family Group

	FS022	FS023	FS025	FS028	FS042	FS043	FS0592
Facestock	Clear Polystyrene	Clear Polystyrene	Clear Polystyrene	Clear Polystyrene	Clear Polystyrene	Clear Polystyrene	Clear Polystyrene
Facestock Thickness (mm)	0.076	0.076	0.076	0.076	0.051	0.051	0.13
Adhesive	P1212 Perm. 18	P1212 Perm. 18	P1212 Perm. 18	P1212 Perm. 18	P1212 Perm. 18	P1212 Perm. 18	P1212 Perm. 18
Liner	50# SC semi-bleached super calendered kraft sheet	78# CCK stabilized clay coated two side kraft sheet	90# Polycd. bleached kraft sheet polyethylene coated on two sides	44# Poly/Kraft liner where polypropylene has been laminated to a 44# brown kraft sheet	50# SC semi-bleached super calendered kraft sheet	78# CCK stabilized clay coated two side kraft sheet	50# SC Remoist semi-bleached super calendered kraft sheet
Liner Thickness (mm)	0.079	0.12	0.18	0.079	0.079	0.12	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=FS042](https://www.3m.com/3M/en_US/company-us/SDS-search/results/?gsaAction=msdsSRA&msdsLocale=en_US&co=ptn&q=FS042)

ISO Statement

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

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