



Removable Vinyl Label Products

FV0164R2 • FV016401 • FV016402 • FV016405 • FV016408

Technical Data

February, 2007

Product Description

3M™ Removable Vinyl Label Products are flexible, conformable white vinyl label stocks that offer durability and moisture resistance. These vinyl labels 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.

Construction

Product Number	Facestock	Adhesive	Liner
3M™ Removable Vinyl Label Product FV0164R2	.004 in. Soft Clear Vinyl TC6	R3500 Rem. 16	50# SC Remoist 3.1 mil semi-bleached super calendered kraft sheet
3M™ Removable Vinyl Label Product FV016401	.004 in. Soft Clear Vinyl TC6	R3500 Rem. 16	40# SC 2.4 mil semi-bleached super calendered kraft sheet
3M™ Removable Vinyl Label Product FV016402	.004 in. Soft Clear Vinyl TC6	R3500 Rem. 16	50# SC 3.1 mil semi-bleached super calendered kraft sheet
3M™ Removable Vinyl Label Product FV016405	.004 in. Soft Clear Vinyl TC6	R3500 Rem. 16	90# Polycd. 7.0 mil bleached kraft sheet polyethylene coated on two sides
3M™ Removable Vinyl Label Product FV016408	.004 in. Soft Clear Vinyl TC6	R3500 Rem. 16	44# Poly/Kraft 3.1 mil liner where polypropylene has been laminated to a 44# brown kraft sheet

(Calipers are nominal values)

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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 1.0 mil of adhesive on a polished stainless steel panel.

Peel Adhesion	Approx.	0.3 lbs./in. (53 N/m)	TLMI Method, 180° Peel, 12"/min., 1" wide sample
Loop Tack	Approx.	0.5 lbs./in. (88 N/m)	TLMI Method, 12"/min., 1" wide sample
Shear		N/A	TLMI Method, 0.25 in ² x 500g
Adhesive Coat Weight		1.55 g/100 in ² ± 10%	3M Method E10MFP01
Release Range	3M™ Label Products FV0164R2, FV016401, FV016402, FV016408	15 to 50 g/2 in.	TLMI Method, 180° removal, 300 in./min.
	3M™ Label Product FV016405	20 to 80 g/2 in.	TLMI Method, 180° removal, 300 in./min.
Service Temperature	-20°F to 140°F (-29°C to 60°C)		
Application Temperature	40°F to 110°F (5°C to 43°C)		

Features

- The polymerically plasticized nature of this soft, flexible vinyl imparts long term dimensional stability for demanding applications.
- Static cling alternative.
- Good initial tack.
- Long term adhesion with clean removability (no residue).
- Liner for 3M™ Removable Vinyl Label Product FV0164R2 is designed for high-speed die cutting and matrix stripping. This liner has been remoisturized after silicone coating to restabilize the sheet and reduce side curl, an excellent choice for perforation and fanfold applications.
- Liner for 3M™ Removable Vinyl Label Products FM016401 and FM016402 is designed for high-speed die cutting and matrix stripping. Not recommended for sheet on press applications.
- Liner for 3M™ Removable Vinyl Label Product FV016405 is designed for the ultimate in layflat. The backside of this liner is not printable.
- Liner for 3M™ Removable Vinyl Label Product FV016408 has excellent caliper control and strength making it ideal for high speed labeling applications.

Printing

- A non-topcoated print surface designed for use with solvent screen ink systems.

Solvent Screen Inks:

Nazdar's 7700 and System 2
 Sericol's Polyplast PY, GVYL, VYL, TMI and Techmark
 3M™ Screen Printing UV Inks Series 9800

Please be aware that our current production specifications for these materials are primarily qualified for printers who use flexographic, screen printing, and thermal transfer printing processes. 3M has neither done profile work with these products for printing by digital inkjet processes, nor engaged in any lot variation studies, nor taken any special measures in manufacturing or handling of these products with the intent of recommending these products for printing by digital inkjet methods.

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Application Ideas

- Oil change decals, window decals, removable instructional labels, pre-mask, POP promotional labels, resealable tabs.

Storage Conditions

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.

Shelf Life

To obtain best performance, use this product within two years from the 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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ISO 9001:2000

This Industrial Adhesives and Tapes Division product was manufactured under a 3M quality system registered to ISO 9001:2000 standards.



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