



Automotive Matte Silver Polyester Label Product

FM043702

Technical Data

October, 2005

Product Description 3M™ Automotive Matte Silver Polyester Label Product FM043702 is a durable, high performance material that offers excellent thermal stability and moisture resistance. This label product utilizes 3M™ Adhesive P1650, which is designed for use in demanding environments including automotive applications.

Construction	Facestock	Adhesive	Liner
	.002 in. Matte Silver Polyester TC	P1650 Perm. 25	50# SC 3.1 mil semi-bleached super calendered kraft sheet

(Calipers are nominal values)

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 0.9 mil of adhesive on a polished stainless steel panel.

Peel Adhesion	4.0 lbs./in. (704 N/m)	TLMI Method, 180° Peel, 12"/min., 1" wide sample
Loop Tack	2.5 lbs./in. (435 N/m)	TLMI Method, 12"/min., 1" wide sample
Shear	2 hours	TLMI Method, 0.25 in ² x 500g
Adhesive Coat Weight	2.3 g/100 in ² ± 10%	3M Method E10MFP01
Release Range	15 to 50 g/2 in.	TLMI Method, 180° removal, 300 in./min.
Service Temperature	-40°F to 302°F (-40°C to 150°C)	
Application Temperature	40°F to 120°F (5°C to 49°C)	
Conformability	Semi-rigid – Label is suitable for flat or slightly curved surfaces.	

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.
- Designed to meet difficult automotive underhood specifications.
- Good moisture and humidity resistance.
- Liner is designed for high-speed die cutting and matrix stripping. Not recommended for sheet on press applications.
- Excellent thermal stability.
- Resistance to many automotive and industrial fluids.

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Printing

- General purpose topcoating is designed for use with a variety of film inks, including flexo, screen, ion deposition, off set, letter press, hot stamp, and thermal transfer printing (the end user should fully evaluate specific ribbons for suitability).

Water-based Flexo inks:

Akzo Nobel Hydro Film 4000 Series

Arcar Ultra Film Series 5 Inks

Ribbons:

Sony 4070

Sony 4075

Sony 5070

Iimak SP330

Application Ideas

- Durable goods, harsh environments, automotive underhood.

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.



**Industrial Business
Converter Markets
Industrial Adhesives and Tapes Division**

1030 Lake Road
Medina, OH 44256-0428
800-422-8116 • 877-722-5072 (fax)
www.3M.com/converter



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Printed in U.S.A.
©3M 2005 70-0713-4423-1 (10/05)