3M

Velvet Textured Polycarbonate Overlaminating Film 7737FL • 7738FL

Technical Data	August 2013
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Product Description

3MTM Velvet Textured Polycarbonate Overlaminating Films 7737FL and 7738FL utilize velvet textured polycarbonate film to achieve a decorative velvet appearance. 3MTM Adhesive 400 offers excellent low temperature performance and long term aging for resistance to yellowing in outdoor applications.

Construction

Product Number	Adhesive	Liner
3M overlaminating film 7737FL	#400 Acrylic 0.8 mil (20 micron)	.0015 in. Clear Polyester Liner (38 micron)
3M overlaminating film 7738FL	#400 Acrylic 0.8 mil (20 micron)	.0015 in. Clear Polyester Liner (38 micron)

(Calipers are nominal values.)

Features

- Velvet textured polycarbonate overlaminate offers the opportunity to achieve the attractive appearance of a subsurface screen printed nameplate with an economical overlaminate construction which can create looks that are unique.
- Film liner offers superior graphic appearance when overlaminating metallized or darker surfaces.
- UL recognized (File MH11410) for overlamination of polyester labelstocks.
- CSA Accepted (File 99316) for overlamination of both polyester and vinyl labelstocks.

Application Ideas

- Decorative, protective overlaminate on pressure sensitive labels and tags.
- Overlaminate on appliques and decorative trim strips.
- Economical method of achieving the look of a velvet textured nameplate recommend 3MTM Printable Polyesters as a basestock.

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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.

Adhesive Coat Weight	1.05 to 1.65 g/100 in ²	TM-2279	
Release Range	5 to 55 g/2 in.	TLMI Method, 180° removal, 300 in./min.	
Service Temperature	-40°F to 250°F (-40°C to 121°C)		
Minimum Application Temperature	10°F (-12°C)		
Convertability	Low temperature, high clarity 3M™ Acrylic Adhesive 400 is specifically designed to be compatible with a variety of print methods and overlaminate applications. When converting labels for thermal transfer applications, care should be taken with regard to proper roll tensions, handling and storage conditions. 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.		

Typical Peel Adhesion Properties

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Peel test procedure is ASTM D-3330

	Initial (10 Minute Dwell/RT)	
	180° Peel	
Surface	oz/in	N/100 mm
Stainless Steel	38	42

Environmental Performance

Samples were applied to stainless steel panels and allowed to dwell for 24 hours prior to exposures.

Liquid	Dwell Time/Exposure Condition	Results
Isopropyl Alcohol @ Room Temperature	4 hours	Good appearance – 1/16" edge penetration
5% Sulfuric Acid @ Room Temperature	4 hours	Good appearance – no edge penetration
Engine Oil @ 250°F (121°C)	4 hours	Good appearance – no edge penetration
Water @ Room Temperature	24 hours	Good appearance – no edge penetration

Temperature Resistance:

-40°F (-40°C) to 250°F (121°C) for 1 day:

no change

Humidity Resistance:

1 day at 95°F (35°C) and 95% relative humidity:

no change

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Application Techniques

For maximum bond strength, the surface should be clean and dry. A typical cleaning solvent is heptane or isopropyl alcohol.*

For best bonding conditions, application surfaces should be at room temperature or slightly higher. Low temperature surfaces, below 50°F (10°C), cause the adhesive to become firm and will not allow the adhesive to flow and develop intimate contact with the substrate.

*Note: When using solvents, read and follow the manufacturer's precautions and directions for use.

Printing

This film is not treated for printability.

Storage

Store at room temperature conditions of 72°F (22°C) and 50% relative humidity.

Shelf Life

If stored under proper conditions, product retains its performance and properties for two years from date of manufacture.

Technical Information

The technical information, recommendations and other statements contained in this document are based upon tests or experience that 3M believes are reliable, but the accuracy or completeness of such information is not guaranteed.

Product Use

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This Industrial Adhesives and Tapes Division product was manufactured under a 3M quality system registered to ISO 9001:2008 standards.

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Industrial Adhesives and Tapes Division Converter Markets

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