Polyester Overlaminating Film 7742

Product Data Sheet

Updated : July 2000
Supersedes : March 1995

Description :

Premium overlaminate performance for extreme environmental conditions.

Superior abrasion, humidity and solvent resistance.

U.V. exposure resistant for extended periods of time.

Premium clarity films will not impart haze on underlying graphics.

#400 "Hi-Tack" Acrylic Adhesive offers premium adhesive performance to a wide variety of surfaces.

Specifically designed for high-speed, continuous-web rotary press lamination.

High-bond strength resists edge lifting.

Film liner offers superior graphic appearance for metalised or darker colours.

ScotchCap brand Overlaminating Films are Underwriters' Laboratories Recognised (File MH11410).

Physical Properties
Not for specification purposes
(Calipers are nominal values)

Facestock	25 microns (1.0 thou) Matt Clear Polyester
Adhesive	20 microns (0.8 thou) #400 Hi-Tack Acrylic
Liner	63 microns (2.5 thou) #43 Densified Kraft Paper
Shelf Life	24 months from date of manufacture when properly stored at 22°C & 50 % Relative Humidity

Physical Properties
Not for specification purposes

Adhesion
180° Peel (ASTM D3330)

Surface	Initial 10 min. dwell		Conditioned for 3 days at Room Temperature	
	N/10mm	Oz./In.	N/10mm	Oz./In.
Stainless Steel	2.6	24	4.4	40
Polyester	2.6	24	3.7	34

180° Liner Release	Rate of Removal	Gram / 25mm Width
	2.3 m / min	14
	7.6 m / min	16

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Environmental Performance

The properties defined are based on four-hour immersions at room temperature, unless otherwise noted. Samples were applied to stainless steel 24 hours prior to immersions and were evaluated one hour after removal.

Chemical Resistance

Chemical	Appearance
Isopropyl Alcohol	No Change
Detergent	No Change
Engine Oil at 121°C (250°F)	No Change
Water for 48 hours	No Change

Temperature Resistance	
149°C (300°F) for 24 hours	Slightly yellowing
-40°C (40°F) for 24 hours	No Change noted

Humidity Resistance	
24 hours at 38°C (100°F) at 100% relative humidity	No Change

Applications

Protective overlaminate for label and nameplate graphics can be used on appliances, industrial equipment, tools etc.

Graphics requiring a high-gloss or matt appearance.

Processing

Printing:
Facestock are not print treated. Liner backside has anti-block coating which makes it difficult to achieve good ink anchorage when printing on back of liner.
Call Customer Service for recommendations.

Die Cutting:
Rotary or flat-bed after lamination.

Special Considerations

For maximum bond strength, surface should be thoroughly cleaned and dried. A typical cleaning solvent is heptane or isopropyl alcohol.
CAUTION: Follow manufacturer's instructions when using solvents.

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

Higher initial bonds are achieved through increased rub down pressure. Use maximum laminating pressure for best results.

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Values presented have been determined by standard test methods and are average values not to be used for specification purposes.
Our recommendations on the use of our products are based on tests believed to be reliable but we would ask that you conduct your own tests to determine their suitability for your applications.
This is because 3M cannot accept any responsibility or liability direct or consequential for loss or damage caused as a result of our recommendations.

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