Polyester Label Material 5770

Product Data Sheet

Updated : April 2004
Supersedes : July 2000

Physical Properties
Not for specification purposes

Facestock	58µm (2.3 thou) Matte white polyester
Adhesive	20µm (0.8 thou) #550 High stability adhesive
Liner	81µm (3.2 thou) 90 g/m^2 (55#) Super calendered kraft easy release
Shelf Life	Product retains its performance properties for two years from date of manufacture if properly stored at room temperature conditions of 22ºC and 50% relative humidity.

Features :

- #550 acrylic adhesive provides stable adhesion that neither builds nor degrades over time.
- # 550 acrylic adhesive provides excellent adhesion for attachment to a wide variety of surfaces.
- Labels remove cleanly and in one piece from most metal and high surface energy plastics.
- Facestock is top-coated for thermal transfer printing.
- Liner designed for rotary die-cutting.
- 3M™ Label Material 5770 is UL recognised File MH 16411 ands CSA accepted (File 99316). See the UL and CSA listings for details.

Physical Properties
Not for specification purposes

Adhesion
90° Peel (ASTM D-3330)

Surface	Initial 10 min. dwell N/10mm	Conditioned for 3 days at Room Temperature N/10mm	Conditioned for 3 days at 50°C; 24hr RT dwell prior to exposure; 1hr RT dwell before testing N/10mm
Stainless Steel	3.2	4.0	4.5
Polycarbonate	4.2	5.0	N/A
Polypropylene	0.6	0.9	1.4
Glass	3.7	3.5	3.9
HDPE	0.6	0.7	0.5

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Removability: Visual Inspection All of the samples used to generate the adhesion values above showed no evidence of adhesive transfer to the test surface.			
Liner Release:	180° Liner Removal @ 90 in/min	Grams/25mm Width 8	

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	Evaluation	Edge Penetration
Isopropyl Alcohol	No change in appearance or adhesion	2mm
Detergent	No change in appearance or adhesion	1mm
Engine Oil (121ºC)	No change in appearance or adhesion	2mm

Temperature Resistance

120ºC for 3 days: No Change.

Printing :
Facestock is topcoated for improved ink receptivity and is designed for thermal transfer printing. It is printable by all standard roll processing methods including flexography, hot foil, letterpress and screen printing

Die-Cutting :
Rotary die-cutting is recommended.

Packaging:
Finished labels should be stored in plastic bags

Special Considerations

For maximum bond strength, surface should be thoroughly cleaned and dried. A typical cleaning solvent is heptane or isopropyl alcohol. Consult the manufacturer's **Material Safety Data Sheet** for proper handling and storage of solvents.

For best bonding conditions, application surface should be at room temperature or higher. Low temperature surface, below 10ºC. cause the adhesive to become firm and will now allow it 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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