



Technical Data Sheet

3M™ Computer-Imprintable Polyester Label Material 7880



[Product Details](#)



[Regulatory Info/SDS](#)

Product Features

- Topcoated polyester is compatible with dot matrix printing and is hand writeable. The matte coating resists degradation from scuffing, chemicals, moisture, and wide temperature fluctuations. The topcoat also provides improved ink anchorage for traditional forms of press printing.
- #300 adhesive bonds well to a wide variety of substrates including metals, high surface energy (HSE) plastics and low surface energy (LSE) plastics. It is ideal for applications requiring high initial adhesion especially to LSE plastic surfaces.
- 55# densified kraft liner assures consistent die cutting.
- 3M™ Label Material 7880 is UL recognized (Files MH11410 and MH16411) and CSA accepted (File 99316). See the UL and CSA listings for details.

Technical Information Note

The following technical information and data should be considered representative or typical only and should not be used for specification purposes.

Typical Physical Properties

Attribute Name	Value
Adhesive Type	#300 Acrylic
Facestock	Matte radiant white polyester
Adhesive Coat Weight	1.21 — 1.49 g/100 in ²

Attribute Name	Value
Adhesive Thickness	0.02 mm (0.8 mil)
Facestock Thickness	0.058 mm (2.3 mil)
Liner	55# Densified kraft
Liner Thickness	0.081 mm (3.2 mil)

Typical Performance Characteristics

180° Peel Adhesion

Temperature: 22 °C (72 °F)

Dwell Time: 72 h

Test Method: ASTM D3330

Substrate	Value
Polycarbonate (PC)	6.7 N/cm (61 oz/in) ¹
Polypropylene (PP)	6.1 N/cm (56 oz/in) ¹
Stainless Steel	7.3 N/cm (67 oz/in) ¹

¹ 12 in/min (300 mm/min)

Attribute Name	Value
Note	Calipers are nominal values

Typical Environmental Characteristics

Humidity Resistance

24 hours at 100°F (38°C) and 100% relative humidity: no significant changes in appearance or adhesion

Temperature Resistance

300°F (149°C) for 24 hours: no significant visual change

0.75% MD shrinkage

0.9% CD shrinkage

-40°F (-40°C) for 10 days: no significant visual change

Processing

Printing:

Facestock is topcoated for improved ink receptivity and is designed for dot matrix printing. It is printable by all standard roll processing methods including flexography, hot stamp, letterpress, and screen printing. Refer to the Graphic Ink Selection Guide or call 3M Customer Service at 1-800-223-7427 for additional information.

Die Cutting:

Rotary die cutting is recommended. Fanfolding of labels is not recommended. Small labels should be evaluated carefully. Winding tensions should be kept at a minimum to help prevent the adhesive from oozing.

Packaging:

Finished labels should be stored in plastic bags.

Special Considerations

For maximum bond strength, the surface should be clean and dry. Typical cleaning solvents are heptane and isopropyl alcohol.**

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

For best bonding conditions, application surface should be at room temperature or higher. Low temperature surfaces, below 50°F (10°C), can cause the adhesive to become so firm that it will not develop maximum contact with the substrate. Higher initial bonds can be achieved through increased rubdown pressure.

Handling/Application Information

Application Examples

- Barcode labels and rating plates.
- Property identification and asset labeling.
- Warning, instruction, and service labels for durable goods.
- Nameplates for durable goods.

Agency Listing Information

Dot Matrix Printing:

*UL recognized and CSA accepted component for indoor and outdoor use. The following ribbons are UL recognized when used with this material.

• CGL-79™ from Mid-City Columbia, 800-462-2336 or 800-996-4656

• Ranger 288 from Herbert Dehinton & Co., 847-998-8150

3M does not recommend the Ranger 288 ribbon for bar code printing.

Laser Toner Printing:

UL recognized with the following printers and toners.

*Toner and Printer/UL Recognized Components

Hitachi HMT 446 toner kit for producing finished printed labels with UL listed Synergystex CF-1000 laser printer

Industry Specifications

UL Recognized (Files MH11410 and MH16411)

CSA Accepted (File 99316)

Storage and Shelf Life

Store under normal conditions of 16° to 27°C (60° to 80°F) and 40 to 60% relative humidity in the original packaging, out of direct sunlight. For best performance, use this product within 24 months from date of manufacture.

Information

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ISO Statement

This product was manufactured under a 3M quality system registered to ISO 9001 standards.

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