



## Technical Data Sheet

### 3M™ Computer-Imprintable Polyester Label Material 7881



[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 7881 is UL recognized (Files MH11410) 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 clear polyester             |
| Adhesive Coat Weight | 1.21 — 1.49 g/100 in <sup>2</sup> |

| 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) <sup>1</sup> |
| Polypropylene (PP) | 6.1 N/cm (56 oz/in) <sup>1</sup> |
| Stainless Steel    | 7.3 N/cm (67 oz/in) <sup>1</sup> |

<sup>1</sup> 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  
-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.

## **Industry Specifications**

UL Recognized (File MH11410)  
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**

**Technical Information:** The technical information, guidance, and other statements contained in this document or otherwise provided by 3M are based upon records, tests, or experience that 3M believes to be reliable, but the accuracy, completeness, and representative nature of such information is not guaranteed. Such information is intended for people with knowledge and technical skills sufficient to assess and apply their own informed judgment to the information. No license under any 3M or third party intellectual property rights is granted or implied with this information.

**Product Selection and Use:** Many factors beyond 3M's control and uniquely within user's knowledge and control can affect the use and performance of a 3M product in a particular application. As a result, customer is solely responsible for evaluating the product and determining whether it is appropriate

and suitable for customer's application, including conducting a workplace hazard assessment and reviewing all applicable regulations and standards (e.g., OSHA, ANSI, etc.). Failure to properly evaluate, select, and use a 3M product and appropriate safety products, or to meet all applicable safety regulations, may result in injury, sickness, death, and/or harm to property.

**Warranty, Limited Remedy, and Disclaimer:** Unless a different warranty is specifically stated on the applicable 3M product packaging or product literature (in which case such warranty governs), 3M warrants that each 3M product meets the applicable 3M product specification at the time 3M ships the product. 3M MAKES NO OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OR CONDITION OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR ARISING OUT OF A COURSE OF DEALING, CUSTOM, OR USAGE OF TRADE. If a 3M product does not conform to this warranty, then the sole and exclusive remedy is, at 3M's option, replacement of the 3M product or refund of the purchase price.

**Limitation of Liability:** Except for the limited remedy stated above, and except to the extent prohibited by law, 3M will not be liable for any loss or damage arising from or related to the 3M product, whether direct, indirect, special, incidental, or consequential (including, but not limited to, lost profits or business opportunity), regardless of the legal or equitable theory asserted, including, but not limited to, warranty, contract, negligence, or strict liability.

**Disclaimer:** 3M industrial and occupational products are intended, labeled, and packaged for sale to trained industrial and occupational customers for workplace use. Unless specifically stated otherwise on the applicable product packaging or literature, these products are not intended, labeled, or packaged for sale to or use by consumers (e.g., for home, personal, primary or secondary school, recreational/sporting, or other uses not described in the applicable product packaging or literature), and must be selected and used in compliance with applicable health and safety regulations and standards (e.g., U.S. OSHA, ANSI), as well as all product literature, user instructions, warnings, and limitations, and the user must take any action required under any recall, field action or other product use notice. Misuse of 3M industrial and occupational products may result in injury, sickness, or death. For help with product selection and use, consult your on-site safety professional, industrial hygienist, or other subject matter expert. For additional product information, visit [www.3M.com](http://www.3M.com).

## **ISO Statement**

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

3M™ Industrial Adhesives and Tapes Division  
3M Center, St. Paul, MN 55144-1000  
[3M.com/iatd](http://3M.com/iatd)

©3M 2024 (6/24)