



Last Revision Date: September, 2024

Supersedes: June, 2024

**English-US** 

# **Technical Data Sheet**

3M™ Polypropylene Label Material 76716NA



Product Details

# **Product Description**

3M™ Polypropylene Label Material 76716NA with 3M™ Adhesive 350 can permanently bond to high surface energy (HSE) and low surface energy (LSE) plastics, textured and contoured surfaces, powder coatings, and slightly oily metals.

## **Product Features**

- Corona-treated facestock for improved ink receptivity.
- Good film stiffness allows easy die cutting and dispensing for automatic applications.
- Bright white and high opacity facestock.
  Excellent chemical resistance and holding strength even at high temperatures.
- 55# densified kraft liner assures consistent die cutting.
  Indoor UL and CSA approved. See UL (File MH16411) and CSA (File 99316) 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	#350 Acrylic
Facestock	White Polypropylene T2S

Attribute Name	Value
Adhesive Thickness	0.028 mm (1.1 mil)
Facestock Thickness	0.066 mm (2.6 mil)
Liner	55# Densified Kraft
Liner Thickness	0.081 mm (3.2 mil)

# **Typical Performance Characteristics**

#### 180° Peel Adhesion

Temperature: 23 °C (73 °F)

Dwell Time: 72 h

Test Method: ASTM D3330

Substrate	Value
Polycarbonate (PC)	7.6 N/cm (69 oz/in) <sup>1</sup>
Polypropylene (PP)	4.5 N/cm (41 oz/in) <sup>1</sup>
Stainless Steel	6 N/cm (55 oz/in) <sup>1</sup>

<sup>1 304</sup> mm/min (12 in/min)

Attribute Name	Value
Note	Calipers are nominal values

## **Typical Environmental Characteristics**

# **Humidity Resistance**

24 hours at 90°F (32°C) and 90% relative humidity: No significant change in appearance or adhesion

# **Temperature Resistance**

300°F (149°C) for 24 hours: Slight discoloration; 4% shrinkage MD, 10% shrinkage CD 250°F (121°C) for 24 hours: No significant visual change 220°F (104°C) for 24 hours: No significant visual change -40°F (-40°C) for 10 days: No significant visual change

### **Processing**

#### **Printing:**

Facestock is corona treated for ink receptivity. While not specifically designed for thermal transfer printing, acceptable performance is found for a number of applications. As always, the customer should test to confirm acceptability for their application.

Facestock 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.

The following thermal transfer ink ribbons are suggested for possible use.

**Armor:**AXR-7+; AXR-600 **Dai Nippon:**R-300; R-316; M-230

ICS:4099-1 limak:SP-330; PrimeMark Intermec:Premium

Mid City Columbia:GGL-80; GGL-80HE Ricoh:B110A, B110C

Sony:TR4070, TR5070 Zebra:4065; 5094

#### 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.

Finished labels should be stored in plastic bags.

# **Handling/Application Information**

#### **Application Examples**

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

#### **Application Techniques**

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

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.

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

## **Industry Specifications**

UL Recognized (File 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.

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### **ISO Statement**

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

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