



**Technical Data Sheet** 

English-US Last Revision Date: September, 2024

Supersedes: June, 2024

3M<sup>™</sup> Performance Paper Label Material 7110



Regulatory Info/SDS

Product Details

# **Product Description**

3M<sup>™</sup> Performance Paper Label Material 7110 adheres well to a variety of surfaces including high (HSE) and low surface energy (LSE) plastics and provides resistance to flagging on small diameter vials. This product can be used as a tamper evident seal with the combination of fragile paper facestock and aggressive 3M<sup>™</sup> Adhesive 320.

## **Product Features**

 Facestock is ideal for traditional forms of press printing and write-on variable information. It is tamper evident on a variety of substrates.

 Adhesive adheres will to a variety of surfaces including high surface energy (HSE) and low surface energy (LSE) plastics. It provides resistance to flagging on small diameter vials.

• 43# Densified Kraft liner helps improve application accuracy due to liner release consistency.

• The construction is designed to survive autoclaving while adhered to most surfaces.

## **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	320 High Tenacity Acrylic
Facestock	Uncoated White Tamper Indicating Paper
Adhesive Coat Weight	1.66 — 2.04 g/100 in <sup>2</sup>

Attribute Name	Value
Adhesive Thickness	0.02 mm (0.8 mil)
Facestock Thickness	0.07 mm (2.8 mil)
Liner	White DK liner
Liner Thickness	0.064 mm (2.5 mil)

## **Typical Performance Characteristics**

#### 180° Peel Adhesion

Temperature: 23 °C (73 °F) Dwell Time: 72 h Test Method: ASTM D3330

Substrate	Value
Polypropylene (PP)	7.8 N/cm (71 oz/in) <sup>1</sup>
Stainless Steel	*paper tear N/cm <sup>1</sup>

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

Attribute Name	Value
Note	Calipers are nominal values (*Note: The adhesion to the
	substrate is higher than the internal strength of the paper
	resulting in delamination or paper tear upon removal. )

#### **Typical Environmental Characteristics**

#### **Temperature Resistance**

250°F (121°C) for 24 hours: no significant visual change -40°F (-40°C) for 24 hours: no significant visual change

#### Sterilization Process

Specifically designed for flagging resistance on small diameter glass vials following steam autoclave, gamma or ethylene oxide sterilization.

#### Printing

This coated paper facestock is imprintable using most flexo ink systems. Variable printing can be added with thermal, dot matrix.

#### Converting

Rotary die cutting is recommended. Fanfolding labels is not recommended. Small labels should be evaluated carefully. Winding tensions should be kept at a minimum to prevent the adhesive from oozing. Please refer to the die cutting/converting section of this data page or the "Guide to Converting and Handling Label Products" technical bulletin for additional information.

## Handling/Application Information

## **Application Examples**

- Pharmaceutical labeling.
- Meets many pharmaceutical industry or manufacturer specifications.
  Provides destructibility and is often used as a security or tamper-resistant closure.
- Barcode labels and rating plates.
- Property identification and asset labeling.

#### **Application Techniques**

Labels misaligned on glass containers on-line should be removed with water at room temperature.

Silicone overspray/contamination of the substrate can cause poor adhesion.

To minimize the effects of humidity on the products, package the die-cut and printed stock in polyethylene bags. Low density polyethylene (2-4) mils can help prevent humidity penetration and stabilize the moisture content in the siliconized kraft liner.

## **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.

### Available Sizes

Attribute Name	Value
Packaging	Finished labels should be stored in plastic bags.

#### **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, has 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.

# ISO Statement

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

3M<sup>™</sup> Industrial Adhesives and Tapes Division 3M Center, St. Paul, MN 55144-1000 3M.com/iatd 3M is a trademark of 3M Company. ALCONOX is a registered trademark of Alconox, Inc.  $@3M\ 2024\ (9/24)$