



# **Technical Data Sheet**

3M<sup>™</sup> Extended Liner Tape 465XL



Last Revision Date: May, 2022

English

Product Details

Regulatory Info/SDS

# **Product Description**

3M<sup>™</sup> Extended Liner Tapes have a liner that extends beyond the width of the adhesive to provide easy liner starting and removal. The liners (with the exception of 3M<sup>™</sup> Extended Liner Tapes 450EK and 9934XL) are printed with the message, "Remove to Expose Adhesive".

# **Product Features**

• The extended liner provides a dry edge on both edges of the tape for easy liner removal. The stated product width represents the width of the liner. The adhesive width is narrower than the liner width by the amount of the cumulative dry edges.

 • 3M™ Extended Liner Tape 465XL is ideal for adhesion to paper materials but also work well on many other surfaces. Some application ideas are:

- Pressure-sensitive edges for posters and point of purchase sales advertising.

- Permanent mounting of novelty items, note pads, literature, posters and labels.

 Pressure-sensitive edging on business forms.
3M™Extended Liner Tape 465XL is ideal for pharmaceutical outsert attachment. 3M tape 465XL is .002 in. thick for surface which requires more adhesive mass.

# **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	Test Method	Value
Color		Clear
Adhesive Type		400 Acrylic
Total Tape Thickness	ASTM D3652	0.05 mm (2 mil)
Liner Print		Remove to Expose Adhesive
Liner		60# Densified Kraft Tan Paper Green
		Printing
Liner Thickness		0.09 mm (3.5 mil)

Attribute Name	Value
	3M <sup>™</sup> Adhesive 400 is a medium-firm acrylic
*Note	pressure-sensitive adhesive system. It features high initial
Note	adhesion to a wide variety of materials and good shear
	holding power.

# **Typical Performance Characteristics**

Temperature: 22 °C (72 °F)

Attribute Name	Test Method	Value
180° Peel Adhesion	ASTM D3330	2.7 N/cm (25 oz/in) <sup>1</sup>

<sup>1</sup> 12 in/min (300 mm/min)

Attribute Name	Value
Short Term Temperature Resistance	121 °C (250 °F) <sup>1</sup>
Long Term Temperature Resistance	82 °C (180 °F) <sup>2</sup>

<sup>1</sup> Short Term (minutes, hour)

<sup>2</sup> Long Term (day, weeks)

## **Typical Environmental Performance**

Attribute Name	Value
Solvent Resistance	Medium/High
UV Resistance	Excellent

# **Special Considerations**

The stated product width represents the width of the liner. The adhesive width is narrower than the liner width by the amount of the cumulative dry edges.

## Handling/Application Information

#### **Application Techniques**

• Bond strength is dependent upon the amount of adhesive-to-surface contact developed. Firm application pressure helps develop better adhesive contact and improve bond strength.

• To obtain optimum adhesion, the bonding surfaces must be clean, dry, and well unified. Some typical surface cleaning solvents are isopropyl alcohol and heptane.\*

• Ideal tape application temperature range is 70°F to 100°F (21°C to 38°C). Initial tape application to surfaces at temperatures below 50°F (10°C) is not recommended because the adhesive becomes too firm to adhere readily. However, once properly applied, low temperature holding is generally satisfactory.

\*Note: When using solvents, extinguish all ignition sources, including pilot lights, and follow the manufacturer's precautions and directions for use.

# Industry Specifications

#### **FDA Statement**

This product might be suitable for use in indirect food contact applications. Please see the applicable Regulatory Data Sheet for more information relating to FDA compliance.

# Storage and Shelf Life

24 months from date of manufacture when stored in original cartons at 70°F (21°C) and 50% relative humidity.

# Available Sizes

Attribute Name	Value
Available Width	12.7, 19.1, 25.4 mm (1/2, 3/4, 1 in)
Core Size (ID)	76.2 mm (3 in)
Liner Extension Width (each side)	2.4 mm (3/32 in)
Maximum Length	548 m (600 yd)
Minimum Length	55 m (60 yd)
Normal Slitting Tolerance	± 0.8 mm (± 1/32 in)

# **Automotive Disclaimer**

Select Automotive Applications: This product is an industrial product and has not been designed or tested for use in certain automotive applications, such as automotive electric powertrain battery or high voltage applications, which may require the product to be manufactured in a IATF certified facility, meet a Ppk of 1.33 for all properties, undergo an automotive production part approval process (PPAP), or fully adhere to automotive design or quality system requirements (e.g., IATF 16949 or VDA 6.3). Customer assumes all responsibility and risk if customer chooses to use this product in these applications.

## **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, 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.

## **ISO Statement**

This Industrial Adhesives and Tapes Division product was manufactured under a 3M quality system registered to ISO 9001 standards.

3M Industrial Adhesives and Tapes Division 3M Center, Building 225-3S-06 St. Paul, MN 55144-1000 800-362-3550 3M is a trademark of 3M Company. @ 3M 2022 (5/22)