



# Technical Data Sheet

## 3M™ Extended Liner Tape 450EK



[Product Details](#)

### Product Description

3M™ Extended Liner Tapes have a liner that extends beyond the width of the adhesive to provide easy liner starting and removal.

### 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.
- (• Alternative statement: The stated width represents the width of the liner. The adhesive is narrower than the liner by the amount of the cumulative dry edges.)
- 3M™ Extended Liner Tape 450EK is ideal for pharmaceutical outsert attachment. 3M tape 450EK has the most tear resistant liner of these products. This release liner has stretch built into the paper making it tough and tear resistant.

### 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	0.025 mm (1 mil)
Liner		70# White Extensible Kraft
Liner Thickness		0.146 mm (5.6 mil)

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

### Typical Performance Characteristics

Temperature: 23 °C (73 °F)

Attribute Name	Test Method	Value
180° Peel Adhesion	ASTM D3330	2.2 N/cm (20 oz/in) <sup>1</sup>

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

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
Available Width	25.4 mm (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)
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.

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## **ISO Statement**

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

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