

September, 2008

3M™ Extended Liner Tape 465XL

Product Description

3M™ 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™ 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 each side of the tape for easy liner removal. Stated product widths include the dry edge of the liner.
- 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

Property	Values	
Color	Clear	
Total Tape Thickness without liner	0.05 mm	2 mil
Adhesive	400 Acrylic	
Liner	60# Densified Kraft Tan Paper Green Printing	
Liner Thickness	0.09 mm	3.5 mil
*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

Property	Values		Method	Substrate
Peel Adhesion	2.7 N/cm	25 oz/in	ASTM D3330	Stainless Steel
Solvent Resistance	Medium/High			
UV Resistance	Excellent			

Relative High Temperature Operating Ranges		Test Condition
121 °C	250 °F	Short Term (minutes, hours)
82 °C	180 °F	Long Term (days, weeks)

Property: Relative High Temperature Operating Ranges

Available Sizes

Property	Values	
Note	Subject to Minimum Order Requirements	
Minimum Length	55 m	60 yd
Maximum Length	548 m	600 yd
Available Width	12.7, 19.1, 25.4 mm	1/2, 3/4, 1 in

Table continued on next page

Available Sizes (continued)

Property	Values	
Normal Slitting Tolerance	± 0.8 mm	± 1/32 in
Liner Extension Width (each side)	2.4 mm	3/32 in
Core Size (ID)	76.2 mm	3.0 in

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.

Storage and Shelf Life

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

Trademarks

3M is a trademark of 3M Company.

References**Safety Data Sheet (SDS)**

https://www.3m.com/3M/en_US/company-us/SDS-search/results/?gsaAction=msdsSRA&msdsLocale=en_US&co=ptn&q=465XL

Family Group

	450EK	450XL	465XL	466XL	476XL	920XL	9925XL	9926XL	9934XL
Relative High Temperature Operating Ranges (°C) Test Condition: Short Term (minutes, hours)	121	121	121	121	65	121	65		66
Relative High Temperature Operating Ranges (°C) Test Condition: Long Term (days, weeks)	82	82	82	82	50	82	41		49
Color	Clear	Clear	Clear	Clear	Clear	Clear	Off-White Translucent	Clear	Clear - slight amber hue
Total Tape Thickness without liner (mm)	0.025	0.025	0.05	0.05	0.16	0.025	0.065	0.025	0.1

Table continued on next page

Family Group (continued)

	450EK	450XL	465XL	466XL	476XL	920XL	9925XL	9926XL	9934XL
Adhesive	400 Acrylic	400 Acrylic	400 Acrylic	340 Acrylic	760 Rubber	400 Acrylic	770 Rubber	*400 Acrylic	*600
Liner	70# White Extensible Kraft	60# Kraft Glassine, Tan Green Printing	60# Densified Kraft Tan Paper Green Printing	62# Densified Kraft Off-White Paper Black Printing	43# Densified Kraft White Paper Red Printing	43# Densified Kraft White Paper Red Printing	43# Densified Kraft White Paper Black Printing	43# Densified Kraft White Paper Red Printing	60# Semi-bleached Kraft
Liner Thickness (mm)	0.146	0.09	0.09	0.11	0.08	0.065	0.05	0.065	0.09

ISO Statement

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

Product Selection and Use

All statements, technical information and recommendations contained in this document are based upon tests or experience that 3M believes are reliable. However, many factors beyond 3M's control can affect the use and performance of a 3M product in a particular application, including the conditions under which the product is used and the time and environmental conditions in which the product is expected to perform. Since these factors are uniquely within the user's knowledge and control, it is essential that the user evaluate the 3M product to determine whether it is fit for a particular purpose and suitable for the user's method of application.

Warranty, Limited Remedy, and Disclaimer

Unless stated otherwise in 3M's product literature, packaging inserts or product packaging for individual products, 3M warrants that each 3M product meets the applicable specifications at the time 3M ships the product. Individual products may have additional or different warranties as stated on product literature, package inserts or product packages. 3M MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY IMPLIED WARRANTY ARISING OUT OF A COURSE OF DEALING, CUSTOM OR USAGE OF TRADE. User is responsible for determining whether the 3M product is fit for a particular purpose and suitable for user's application. If the 3M product is defective within the warranty period, your exclusive remedy and 3M's and seller's sole obligation will be, at 3M's option, to replace the product or refund the purchase price.

Limitation of Liability

Except where prohibited by law, 3M and seller will not be liable for any loss or damage arising from the 3M product, whether direct, indirect, special, incidental or consequential, regardless of the legal theory asserted, including warranty, contract, negligence or strict liability.

