



Polyethylene Tape

5421 • 5423

Technical Data

July, 2005

Product Description 3M™ Polyethylene Tape 5421 and 5423 has a rubber adhesive which provides an excellent abrasion resistant surface.

Product Construction	Backing	Adhesive	Liner	Color	Standard Roll Length
	Ultra-high molecular weight polyethylene	Rubber	60# densified kraft	Translucent	18 yds. (16.4 m)

Typical Physical Properties

Note: The following technical information and data should be considered representative or typical only and should not be used for specification purposes.

		ASTM Test Method
3M tape 5421		
Adhesion to Steel:	26 oz./in width (28 N/100 mm)	D-3330
Tensile Strength:	30 lbs./in. width (526 N/100 mm)	D-3759
Elongation at Break:	275%	D-3759
Backing Thickness:	5.0 mils (0.13 mm)	D-3652
Total Tape Thickness: (without liner)	6.7 mils (0.17 mm)	D-3652
Liner Thickness:	3.5 mils (0.09 mm)	D-3652
Temperature Use Range:	-30° to 225°F (-34° to 107°C)	
3M tape 5423		
Adhesion to Steel:	26 oz./in width (28 N/100 mm)	D-3330
Tensile Strength:	55 lbs./in. width (963 N/100 mm)	D-3759
Elongation at Break:	300%	D-3759
Backing Thickness:	10 mils (0.25 mm)	D-3652
Total Tape Thickness: (without liner)	11.7 mils (0.30 mm)	D-3652
Liner Thickness:	3.5 mils (0.09 mm)	D-3652
Temperature Use Range:	-30° to 225°F (-34° to 107°C)	

Features

- Thick caliper UHMW polyethylene tape for extended service life as a protective surface against extreme wear.
- UHMW polyethylene is a thermoplastic that has a unique combination of properties which make it ideal for many tough impact wear or sliding applications.
- Liner makes it ideal for fabricating or die-cutting into various lengths and shapes.
- Outstanding abrasion resistance so will outwear many types of PTFE and other materials in sliding applications.
- Low coefficient of friction exceeded only by the PTFE's.
- Self-lubricating so can often be used where lubrication is not possible because of contamination.
- Sound damping for high energy absorption capacity helps reduce noise levels in machinery and equipment.

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Application Ideas

- Conveyor flat guide rails
- Discharge chutes
- Doctor blades
- Former noses
- Protecting aluminum sheets on stretch forming presses
- Spray booth liners
- Tank and bin liners
- Drawer and cabinet slides
- Feed and grain chutes

Storage

Store under normal conditions of 60° to 80°F (16° to 27°C) and 40 to 60% R.H. in the original carton.

Shelf Life

To obtain best performance, use this product within 18 months from date of manufacture.

Product Use

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This Industrial Adhesives and Tapes Division product was manufactured under a 3M quality system registered to ISO 9001:2000 standards.



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Printed in U.S.A.
©3M 2005 70-0709-5118-4 (7/05)