



UHMW Polyethylene Tape

5425

Technical Data

Product Description 3M™ UHMW Polyethylene Tape 5425 is a film coated with a special acrylic adhesive that is resistant to many solvents.

Product Construction	Backing	Adhesive	Liner	Color	Standard Roll Length
	Ultra-high molecular weight polyethylene	Acrylic	55# densified kraft	Translucent	36 yds. (32.9 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
Adhesion to Steel:	30 oz./in. width (33 N/100 mm)	D-3330
Tensile Strength:	45 lbs./in. width (788 N/100 mm)	D-3759
Elongation at Break:	100%	D-3759
Backing Thickness:	3.0 mils (0.08 mm)	D-3652
Total Tape Thickness: (without liner)	4.5 mils (0.11 mm)	D-3652
Liner Thickness:	3.2 mils (0.08 mm)	D-3652
Temperature Use Range:	-30° to 225°F (-34° to 107°C)	

Features

- Acrylic adhesive is a firm high solvent and oil resistant adhesive which bonds best to high surface energy materials.
- UHMW polyethylene is a thermoplastic that has a unique combination of properties which make it ideal for many tough impact wear or sliding applications. Within its operational temperature range, UHMW polyethylene tape can provide the following advantages:
 - A. Outstanding abrasion resistance:** Will outwear many types of PTFE and other materials in sliding applications.
 - B. Low coefficient of friction:** Exceeded only by the PTFE's.
 - C. Self-lubricating:** Can often be used where lubrication is not possible because of contamination.
 - D. Sound damping:** High energy absorption capacity helps reduce noise levels in machinery and equipment.

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Application Ideas

- Abrasion protection for rubber fuel cells.
- Gaskets exposed to many corrosive chemicals.
- Spiral wrap wire harness to resist hydraulic fluids.
- Dissimilar metal separation to help prevent wear and chemical corrosion.
- Excellent for wear surfaces where transparency is needed.
- Guide rails and chutes requiring a more durable, solvent resistant slide surface.

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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ISO 9001:2000

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



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