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## 3M™ UHMW Polyethylene Tape 5425

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### Product Description

3M™ UHMW Polyethylene Tape 5425 is a film coated with a special acrylic adhesive that is resistant to many solvents and oil. Providing high adhesion and chemical resistance in the most demanding applications.

### Product Features

- Tape demonstrated no evidence of wear through after Taber Abrasion at 1000 cycles, using CS-10 wheel and 1000g load when applied to S-37 mounting sheet.
- Low water vapor transmission rate <0.50 g/100in<sup>2</sup>/24hr
- 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.
- Outstanding abrasion resistance so will outwear PTFE and other materials in sliding applications.
- Low coefficient of friction characteristics is exceeded only by PTFE.
- UHMW-PE tape can 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.
- Liner makes it ideal for fabricating or die-cutting into various lengths and shapes.



### 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	Additional Information
Backing	UHMW-PE Film (ultra-high molecular weight polyethylene)	
Adhesive Type	Acrylic	
Liner Thickness	0.08 mm	
Color	Translucent	
Backing Thickness (mm)	0.08 mm	View
Test Method: ASTM D3652		
Total Tape Thickness (mil)	5.1 mil	View

Test Method: ASTM D3652

Total Tape Thickness (mm)	0.13 mm	<a href="#">View</a> 
Test Method: ASTM D3652		
Backing Thickness	3 mil	<a href="#">View</a> 
Test Method: ASTM D3652		
Liner Thickness	3.2 mil	

### Typical Performance Characteristics

Property	Values	Additional Information
Tensile Strength	44.4 N/cm	<a href="#">View</a> 
Test Method: ASTM D3759		
180° Peel Adhesion	5.3 N/cm	<a href="#">View</a> 
Test Method: ASTM D3330		
Notes: 12 in/min (300 mm/min)		
180° Peel Adhesion	48 oz/in	<a href="#">View</a> 
Test Method: ASTM D3330		
Notes: 12 in/min (300 mm/min)		
Tensile Strength	400 oz/in	<a href="#">View</a> 
Test Method: ASTM D3759		
Elongation at Break (%)	345 %	<a href="#">View</a> 
Test Method: ASTM D3759		
Long Term Temperature Resistance	107 °C	
Minimum Long Term Temperature Resistance	-34 °C	
Long Term Temperature Resistance	225 °F	

Minimum Long Term Temperature Resistance	-30 °F
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## Available Sizes

Property	Values	Additional Information
Standard Roll Length	32.9 m	
Standard Roll Length	36 yd	

## Storage and Shelf Life

Store under normal conditions of 60° to 80°F (16° to 27°C) and 40 to 60% relative humidity in the original packaging material. To obtain best performance, use this product within 18 months from date of manufacture.

## Bottom Matter

3M  
 Industrial Adhesives and Tapes Division  
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 St. Paul, MN 55144-1000  
 800-362-3550

## Trademarks

3M is a trademark of 3M Company.

## Handling/Application Information

### Application Examples

- 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.

## References

Property	Values
3m.com Product Page	<a href="https://www.3m.com/3M/en_US/p/d/b40070581/">https://www.3m.com/3M/en_US/p/d/b40070581/</a>
Safety Data Sheet SDS	<a href="https://www.3m.com/3M/en_US/company-us/SDS-search/results/?gsaAction=msdsSRA&amp;msdsLocale=en_US&amp;co=ptn&amp;q=5425">https://www.3m.com/3M/en_US/company-us/SDS-search/results/?gsaAction=msdsSRA&amp;msdsLocale=en_US&amp;co=ptn&amp;q=5425</a>

## ISO Statement

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

## Information

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