



## Technical Data Sheet

### 3M™ UHMW Polyethylene Tape 5421



[Product Details](#)

#### Product Description

3M™ UHMW Polyethylene Tapes are film coated with a rubber adhesive which provides an excellent abrasion resistant surface. These tapes feature a unique combination of properties that make it ideal for many tough impact wear or sliding applications. 3M™ UHMW-PE Film Tape 5421 is a thinner version of 3M™ UHMW-PE Film Tape 5423.

#### 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
- Thick caliper UHMW polyethylene tape for extended service life as a protective surface against 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.
- Rubber Adhesive provides good initial tack for immediate bonding to material surface.
- 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

Attribute Name	Test Method	Value
Color		Translucent
Adhesive Type		Rubber
Backing		UHMW-PE Film (ultra-high molecular weight polyethylene)
Backing Thickness	ASTM D3652	0.13 mm (5 mil)
Total Tape Thickness	ASTM D3652	0.17 mm (6.7 mil)
Liner Thickness		0.09 mm (3.5 mil)

#### Typical Performance Characteristics

Attribute Name	Test Method	Temperature	Value
180° Peel Adhesion	ASTM D3330	23 °C (73 °F)	3.7 N/cm (34 oz/in) <sup>1</sup>
Elongation at Break	ASTM D3759		440 %
Tensile Strength	ASTM D3759		79.6 N/cm (46 lb/in)
Long Term Temperature Resistance			107 °C (225 °F) <sup>2</sup>
Minimum Long Term Temperature Resistance			-34 °C (-30 °F) <sup>2</sup>

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

<sup>2</sup> Long Term (day, weeks)

## **Handling/Application Information**

### **Application Examples**

- Noise reduction between dissimilar parts.
- Reduce squeaks, rattles and other noises that occur with movement
- Lining of conveyer flat guide rails, tank and bin liners, and discharge chutes.
- Protection for aluminum sheets on stretch forming presses.
- Liners for Spray booths.
- Slick surface for easy glide for drawers and cabinets.

### **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 18 months from date of manufacture.

### **Available Sizes**

Attribute Name	Value
Standard Roll Length	32.9 m (36 yd)

### **Information**

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### **ISO Statement**

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

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