

Technical Data Sheet

3M™ Polyester Tape 8402

Product Description

3M™ Polyester Tape 8402 is a film tape with a silicone adhesive for holding down bagging materials and parts during composite and metal bonding operations. Ideal for splicing applications on surfaces that are difficult to adhere too, such as silicone coated papers and films.




Product Features

- Works in demanding conditions and retains flexibility in autoclave conditions in temperatures ranging from -60°F (-50°C) to 350°F (176°C)
- Higher heat resistance as compared with acrylics
- Silicone adhesive provides clean removal from a variety of surfaces
- Translucent green backing is easily identifiable for splicing applications
- Chemical resistant adhesive and backing provides durability in difficult environments

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	Polyester	
Adhesive Type	Silicone	
Color	Translucent green	
Backing Thickness (mm)	0.02 mm	View 
Test Method: ASTM D3652		
Total Tape Thickness (mil)	1.9 mil	View 
Test Method: ASTM D3652		
Total Tape Thickness (mm)	0.05 mm	View 
Test Method: ASTM D3652		

Backing Thickness	0.92 mil	View 
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Test Method: ASTM D3652

Typical Performance Characteristics

Property	Values	Additional Information
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Tensile Strength	43.8 N/cm	View 
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Test Method: ASTM D3759

180° Peel Adhesion	2.5 N/cm	View 
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Test Method: ASTM D3330

Notes: 12 in/min (300 mm/min)


180° Peel Adhesion	23 oz/in	View 
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Test Method: ASTM D3330


Notes: 12 in/min (300 mm/min)

Tensile Strength	400 oz/in	View 
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Test Method: ASTM D3759


Elongation at Break (%)	125 %	View 
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Test Method: ASTM D3759

Long Term Temp C	177 °C	View 
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Test Condition: Long Term (day, weeks)

Minimum Long Term Temperature Resistance	-60 °C
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Long Term Temp F	350 °F	View 
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Test Condition: Long Term (day, weeks)

Minimum Long Term Temperature Resistance	-50 °F
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Temperature Use Range note	Removes cleanly and remains flexible after 3 hours, 350°F (177°C), in autoclave.
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Available Sizes

Property	Values	Additional Information
Standard Roll Length	66 m	
Standard Roll Length	72 yd	

Storage and Shelf Life

Store under normal conditions of 60° to 80°F (16° to 27°C) and 40 to 60% R.H. in the original packaging. To obtain best performance, use this product within 12 months from date of manufacture.

Bottom Matter

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Trademarks

3M is a trademark of 3M Company.

Handling/Application Information

Application Examples

- Flash breaker in metal bonding processes where the excess epoxy (flash) flows on the tape.
- Holding of bagging materials and parts during metal or composite bonding operations.
- Masking metal surfaces in acid or caustic chemical milling, etching, or anodization baths.
- Protective tape reduces scratches during handling and shipping.
- Paint mask for areas subject to higher temperature bake cycles.
- Splicing applications on surfaces that are difficult to adhere too, such as silicone coated papers and films.
- Splicing of films subject to high temperatures or chemicals.

References

Property	Values
3m.com Product Page	https://www.3m.com/3M/en_US/p/d/b40070649/
Safety Data Sheet SDS	https://www.3m.com/3M/en_US/company-us/SDS-search/results/?gsaAction=msdsSRA&msdsLocale=en_US&co=ptn&q=8402

Family Group

Link Tags:

- 8402
- 8403

Products	Backing	Color	Backing Thickness (mm)	Total Tape Thickness (mm)	Tensile Strength	Long Term Temp C	Minimum Long Term Temperature Resistance	Long Term Temp F
8403	Polyester	Translucent green	0.04 mm	0.06 mm	71.8 N/cm	177 °C	-60 °C	350 °F
8402	Polyester	Translucent green	0.02 mm	0.05 mm	43.8 N/cm	N/A	-60 °C	350 °F

ISO Statement

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

Information

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