

Technical Data Sheet

3M™ PTFE Glass Cloth Tape 5151

Product Description

3M™ PTFE Glass Cloth Tape 5151 is constructed using (PTFE) polytetrafluoroethylene impregnated glass cloth with silicone adhesive. This tape is used in many applications requiring high temperature performance and high abrasion resistance. 3M tape 5151 also comes in a premium grade, lined version 5151PL.

Product Features



- Very low moisture absorption allows the tape to perform in many humid environments.
- Provides greater tensile strength and resistance to tear and puncture than typical PTFE film backed tapes.
- Thick glass cloth backing for a long wear life and high impact and puncture resistance.
- Thick PTFE coating for an exceptionally smooth surface and provides non-stick, low friction surface.
- Easy release liner on versions with liner.
- Silicone adhesive offers high temperature performance and long aging.

CAUTION: When PTFE film tapes are exposed to temperatures about 600°F (316°C), small quantities of hazardous vapors may be released. INHALATION OF THESE VAPORS MAY BE HARMFUL OR MAY CAUSE RESPIRATORY TRACT IRRITATION. Do not heat or expose PTFE film tapes to temperatures above 600°F (316°C).

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	Woven glass cloth impregnated with PTFE	
Adhesive Type	Silicone	
Liner	No Liner	
Color	Light Brown	
Backing Thickness (mm)	0.08 mm	View 
Test Method: ASTM D3652		
Total Tape Thickness (mil)	5.3 mil	View 

Test Method: ASTM D3652

Total Tape Thickness (mm)	0.13 mm	View
Test Method: ASTM D3652		
Backing Thickness	3 mil	View
Test Method: ASTM D3652		

Typical Performance Characteristics

Property	Values	Additional Information
Tensile Strength	192.6 N/cm	View
Test Method: ASTM D3759		
180° Peel Adhesion	3.6 N/cm	View
Test Method: ASTM D3330		
Notes: 12 in/min (300 mm/min)		
180° Peel Adhesion	33 oz/in	View
Test Method: ASTM D3330		
Notes: 12 in/min (300 mm/min)		
Tensile Strength	1760 oz/in	View
Test Method: ASTM D3759		
Long Term Temp C	260 °C	View
Test Condition: Long Term (day, weeks)		
Minimum Long Term Temperature Resistance	-73 °C	
Long Term Temp F	500 °F	View
Test Condition: Long Term (day, weeks)		
Minimum Long Term Temperature Resistance	-100 °F	

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 (15° to 27°C) and 40 to 50% R.H. in the original carton. To obtain best performance, use this product within two years from date of manufacture.

Bottom Matter

3M
Industrial Adhesives and Tapes Division
3M Center, Building 225-3S-06
St. Paul, MN 55144-1000
800-362-3550

Trademarks

3M is a trademark of 3M Company.

Handling/Application Information

Application Examples

- Easy release surface on packaging and heat sealing machines, ironing and pressing equipment.
- Release surface on metal bonding tools.
- Lining conveying chutes, troughs and ducts.
- Covering rollers, drums, turnbars and formers on stitches, binders and other process machinery.

References

Property	Values
3m.com Product Page	https://www.3m.com/3M/en_US/p/d/b40068311/
Safety Data Sheet SDS	https://www.3m.com/3M/en_US/company-us/SDS-search/results/?gsaAction=msdsSRA&msdsLocale=en_US&co=ptn&q=5151

Family Group

Link Tags:

- 5151
- 5153
- 5151PL
- 5153L

Products	Backing	Liner	Color	Total Tape Thickness (mm)	Tensile Strength	Long Term Temp C	Minimum		Adhesive Type	Backing Thickness (mm)
							Long Term Temperature Resistance	Long Term Temp F		

5151PL	Woven glass cloth impregnated with PTFE, premium grade	Embossed UPVC	Dark Brown	0.13 mm	192.6 N/cm	260 °C	-73 °C	500 °F	N/A	N/A
5153	Woven glass cloth impregnated with PTFE	No Liner	Light Brown	0.2 mm	507.9 N/cm	260 °C	-73 °C	500 °F	Silicone	N/A
5153L	Woven glass cloth impregnated with PTFE	Embossed UPVC	Light Brown	0.2 mm	507.9 N/cm	260 °C	-73 °C	500 °F	N/A	N/A
5151	Woven glass cloth impregnated with PTFE	N/A	Light Brown	0.13 mm	192.6 N/cm	260 °C	-73 °C	N/A	Silicone	0.08 mm

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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