PTFE Glass Cloth Tapes

5151 • 5153

Technical Data **June, 2011**

Product Description

3M™ PTFE Glass Cloth Tapes 5151 and 5153 are constructed using (PTFE) polytetrafluoroethylene impregnated glass cloth with silicone adhesive. These tapes are used in many applications requiring high temperature performance and high abrasion resistance. 3M tapes 5151 and 5153 also come in a premium grade and a liner version.

Product Construction

Product	Backing	Adhesive	Liner	Color	Standard Roll Length	Standard Roll Widths
3M tape 5151PL	Woven glass cloth impregnated with PTFE, premium grade, liner	Silicone	Embossed UPVC, random dot pattern, yellow	Dark Brown	36 yds. (32.9 m)	12, 24 and 36 in.
3M tapes 5151 and 5153	Woven glass cloth impregnated with PTFE	Silicone	No liner	Light Brown	36 yds. (32.9 m)	12, 24 and 36 in.
3M tape 5153L	Woven glass cloth impregnated with PTFE, liner	Silicone	Embossed UPVC, random dot pattern, yellow	Light Brown	36 yds. (32.9 m)	12, 24 and 36 in.

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
3M tape 5151		
Adhesion to Steel:	33 oz./in. width (36 N/100 mm)	D-3330
Tensile Strength at Break:	110 lbs./in.width (1925 N/100 mm)	D-3759
Backing Thickness:	3.0 mils (0.08 mm)	D-3652
Total Tape Thickness:	5.3 mils (0.13 mm)	D-3652
Temperature Use Range:	-100°F to 500°F (-73°C to 260°C)	
3M tape 5153		
Adhesion to Steel:	43 oz./in. width (47 N/100 mm)	D-3330
Tensile Strength at Break:	290 lbs./in.width (5075 N/100 mm)	D-3759
Backing Thickness:	5.8 mils (0.15 mm)	D-3652
Total Tape Thickness:	8.0 mils (0.20 mm)	D-3652
Temperature Use Range:	-100°F to 500°F (-73°C to 260°C)	

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).

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Application Ideas

- 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.

Storage

Store under normal conditions of 60° to 80°F (15° to 27°C) and 40 to 50% R.H. in the original carton.

Shelf Life

To obtain best performance, use this product within two years from date of manufacture.

Technical Information

The technical information, recommendations and other statements contained in this document are based upon tests or experience that 3M believes are reliable, but the accuracy or completeness of such information is not guaranteed.

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ISO 9001:2008

This Industrial Adhesives and Tapes Division product was manufactured under a 3M quality system registered to ISO 9001:2008 standards.

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