



# 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
	<b>3M tape 5151PL</b>	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.
	<b>3M tapes 5151 and 5153</b>	Woven glass cloth impregnated with PTFE	Silicone	No liner	Light Brown	36 yds. (32.9 m)	12, 24 and 36 in.
	<b>3M tape 5153L</b>	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
<b>3M tape 5151</b>		
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)	
<b>3M tape 5153</b>		
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).

# 3M™ PTFE Glass Cloth Tapes

5151 • 5153

---

## 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.

---

## Product Use

Many factors beyond 3M's control and uniquely within user's knowledge and control can affect the use and performance of a 3M product in a particular application. Given the variety of factors that can affect the use and performance of a 3M product, user is solely responsible for evaluating the 3M product and determining whether it is fit for a particular purpose and suitable for user's method of application.

---

## Warranty, Limited Remedy, and Disclaimer

Unless an additional warranty is specifically stated on the applicable 3M product packaging or product literature, 3M warrants that each 3M product meets the applicable 3M product specification at the time 3M ships the product. 3M MAKES NO OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OR CONDITION OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY IMPLIED WARRANTY OR CONDITION ARISING OUT OF A COURSE OF DEALING, CUSTOM OR USAGE OF TRADE. If the 3M product does not conform to this warranty, then the sole and exclusive remedy is, at 3M's option, replacement of the 3M product or refund of the purchase price.

---

## Limitation of Liability

Except where prohibited by law, 3M will not be liable for any loss or damage arising from the 3M product, whether direct, indirect, special, incidental or consequential, regardless of the legal theory asserted, including warranty, contract, negligence or strict liability.



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



### Industrial Adhesives and Tapes Division

3M Center, Building 225-3S-06  
St. Paul, MN 55144-1000  
800-362-3550 • 877-369-2923 (Fax)  
www.3M.com/industrial



Recycled Paper  
40% pre-consumer  
10% post-consumer

3M is a trademark of 3M Company.  
Printed in U.S.A.  
©3M 2011 70070952083 (6/11)