



# PTFE Glass Cloth Tape

5451 • 5453

## Technical Data

**Product Description** 3M™ PTFE Glass Cloth Tape 5451 and 5453 has a silicone adhesive which provides a high temperature release surface for protection and insulation.

Product Construction	Backing	Adhesive	Color	Standard Roll Length
	Woven glass cloth impregnated with PTFE (polytetrafluoroethylene)	Silicone	Brown	36 yds. (32.9 m)

**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 5451</b>		
Adhesion to Steel:	28 oz./in. width (30.6 N/100 mm)	D-3330
Tensile Strength:	100 lbs./in. width (1760 N/100 mm)	D-3759
Backing Thickness:	3.2 mils (0.08 mm)	D-3652
Total Tape Thickness:	5.6 mils (0.14 mm)	D-3652
Temperature Use Range:	-100° to 400°F (-73° to 204°C)	
<b>3M tape 5453</b>		
Adhesion to Steel:	55 oz./in. width (56 N/100 mm)	D-3330
Tensile Strength:	175 lbs./in. width (3065 N/100 mm)	D-3759
Backing Thickness:	6.0 mils (0.15 mm)	D-3652
Total Tape Thickness:	8.2 mils (0.21 mm)	D-3652
Temperature Use Range:	-100° to 400°F (-73° to 204°C)	

## Features

- Moisture absorption is close to zero, allowing performance in many humid environments.
- The reinforcement provided by the woven glass cloth fabric base adds tensile strength and resistance to tear and puncture in comparison to typical PTFE film backed tapes.

**CAUTION:** When PTFE film tape is exposed to temperatures above 400°F (204°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 tape to temperatures above 400°F (204°C).

# 3M™ PTFE Glass Cloth Tape

5451 • 5453

---

## Application Ideas

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

---

## Storage

Store under normal conditions of 60° to 80°F (16° to 27°C) and 40 to 60% R.H. in the original carton.

---

## Shelf Life

To obtain best performance, use this product within 18 months from date of manufacture.

---

## Product Use

All statements, technical information and recommendations contained in this document are based upon tests or experience that 3M believes are reliable. However, many factors beyond 3M's control can affect the use and performance of a 3M product in a particular application, including the conditions under which the product is used and the time and environmental conditions in which the product is expected to perform. Since these factors are uniquely within the user's knowledge and control, it is essential that the user evaluate the 3M product to determine whether it is fit for a particular purpose and suitable for the user's method of application.

---

## Warranty and Limited Remedy

Unless stated otherwise in 3M's product literature, packaging inserts or product packaging for individual products, 3M warrants that each 3M product meets the applicable specifications at the time 3M ships the product. Individual products may have additional or different warranties as stated on product literature, package inserts or product packages. 3M MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY IMPLIED WARRANTY ARISING OUT OF A COURSE OF DEALING, CUSTOM OR USAGE OF TRADE. User is responsible for determining whether the 3M product is fit for a particular purpose and suitable for user's application. If the 3M product is defective within the warranty period, your exclusive remedy and 3M's and seller's sole obligation will be, at 3M's option, to replace the product or refund the purchase price.

---

## Limitation of Liability

Except where prohibited by law, 3M and seller 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.

**ISO 9001:2000**

This Industrial Adhesives and Tapes Division product was manufactured under a 3M quality system registered to ISO 9001:2000 standards.

# 3M

## Industrial Business Industrial Adhesives and Tapes Division

3M Center, Building 21-1W-10, 900 Bush Avenue  
St. Paul, MN 55144-1000  
800-362-3550 • 877-369-2923 (fax)  
www.3M.com/industrial



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

Printed in U.S.A.  
©3M 70-0709-5112-7 (2001/7/05)