



PTFE Glass Cloth Tape

5451 • 5453

Technical Data

August, 2010

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

3M tape 5451

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 500°F (-73° to 260°C)	

3M tape 5453

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 500°F (-73° to 260°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 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 tape to temperatures above 600°F (316°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.

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.

ISO 9001:2000

This Industrial Adhesives and Tapes Division product was manufactured under a 3M quality system registered to ISO 9001:2000 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 2010 70-0709-5112-7 (8/10)

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

3M:

[5451-1"x36yd](#) [5451-1/2"x36yd](#) [5453-1"x36yd](#)