PTFE Glass Cloth Tape

5451 • 5453

Technical Data **October, 2016**

Product Description

Premium performance 3M™ PTFE Glass Cloth Tape 5451 and 5453 has a brown woven glass cloth backing impregnated with PTFE (polytetrafluoroethylene). These tapes provide a slick surface on process machinery and offers an extremely low coefficient of friction which, in combination with a pressure sensitive silicone adhesive, creates a non-stick surface that performs at elevated temperatures.

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:	38 oz./in. width (41 N/100 mm)	D-3330
Tensile Strength:	100 lbs./in. width (1760 N/100 mm)	D-3759
Backing Thickness:	5.6 mils (0.14 mm)	D-3652
Total Tape Thickness:	3.2 mils (0.08 mm)	D-3652
Temperature Use Range:	-100° to 500°F (-73° to 260°C)	
3M tape 5453		
Adhesion to Steel:	55 oz./in. width (60 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

- Very low moisture absorption allows the tape to perform in many humid environments.
- Premium glass cloth reinforced backing provides greater tensile strength and resistance to tears and punctures than typical PTFE film backed tapes.
- Excellent chemical resistance enables tape to withstand challenging applications.

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).

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Application Ideas

- Easy-release, low friction surface on heat sealing and packaging equipment.
- Mold release surface in composite bonding.
- Lining conveying chutes, troughs and ducts.
- Covering rollers, drums, turnbars and formers on stitchers, binders and other process machinery.
- High temperature bundling.
- Barrier for the separation of dissimilar parts.

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 24 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.

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ISO 9001

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

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