



5453 "Teflon" Glass Cloth Tape

Product Data Sheet

Updated : March 1996
Supersedes : October 1993

Product Description

A woven glass cloth impregnated with "Teflon" gives this tape extra strength and dimensional stability in addition to the wear and low friction characteristics.

The extra thickness of 5423 gives added strength required for those more critical applications.

Physical Properties

Not for specification purposes

Adhesive Type	Silicone.	
Backing	Woven glass cloth impregnated with Polytetrafluorethylene (PTFE) "Teflon".	
Backing Thickness (ASTM D-3652)	150 µm	
Total Thickness	220 µm	
Tape Colour	Natural	
Shelf Life	12 months from date of despatch by 3M when stored in the original carton at 21°C (70°F) & 50 % Relative Humidity	

Performance Characteristics

Not for specification purposes

Adhesion to Stainless Steel ASTM D-3330	3.8 N/10mm	
Tensile Strength ASTM D-3759	157.5 N/10mm	
Temperature Range Maximum Minimum	204 °C -73 °C	

Additional Product Information

No. 5453 is chemically acceptable for use in processing, transporting, or storage areas for meat and poultry food products prepared under federal inspection. This information obtained from the U.S. Dept of Agriculture (U. S. D. A.)

Moisture absorption is close to zero, allowing No. 5453 to perform in humid environments.

Operational from -75°C to 260°C. No. 5453 resists

wrinkling and blistering when exposed to temperatures above 175°C. It has been employed in applications involving intermittent heat as high as 260°C, however, it is most effective from -75°C to 204°C.

Tear resistant. The reinforcement provided by the woven glass cloth fabric base aids tensile strength and resistance to tear and puncturing in comparison to "Teflon" film backed tapes.

CAUTION

The characteristics of "Teflon" film are such that at temperatures above 204°C, the film gives off small quantities of toxic fumes. Therefore, when using 3M "Teflon" Tapes above 204°C, adequate ventilation must be provided.

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Tape

Application Techniques	Best results are attained when applied to a clean, dry and non dusty surface above 0°C.	To improve adhesion ensure firm and even application pressure is applied.
Applications	<p>Easy release surface on packaging and heat sealing machines, ironing and pressing equipment.</p> <p>Easy release surface coating on metal bonding tools.</p>	<p>Lining conveying chutes, troughs, ducts and baking equipment.</p> <p>Printing: hot-lead mat assembly, printing delivery boards, cover guides and idler rolls.</p>

FEATURES	ADVANTAGES	BENEFITS
Thick glass cloth backing.	<p>Prolonged wear life. High impact and puncture resistance.</p> <p>Excellent tensile and tear strength.</p>	High productivity. Prolongs life of parts, tools and equipment.
Thick Teflon coating.	<p>Exceptionally smooth surface. Provides non-stick, low friction surface.</p> <p>Resists most chemicals and corrosive action of solvents, salts and acids.</p>	<p>Saves clean-up time. Long lasting.</p> <p>Protects surfaces. Prolongs parts and equipment life.</p>
Silicone adhesive.	<p>High temperature performance. Long ageing.</p>	Higher productivity.

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"Teflon" is a trademark of DuPont.

Values presented have been determined by standard test methods and are average values not to be used for specification purposes. Our recommendations on the use of our products are based on tests believed to be reliable but we would ask that you conduct your own tests to determine their suitability for your applications. This is because 3M cannot accept any responsibility or liability direct or consequential for loss or damage caused as a result of our recommendations.



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