



PTFE Extruded Film Tape

5490 • 5491

Technical Data

November, 2007

Product Description 3M™ PTFE Extruded Film Tapes have a film backing with a silicone adhesive.

Product Construction	Backing	Adhesive	Color	Standard Roll Length
	Extruded PTFE (polytetrafluoroethylene)	Silicone	Gray	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

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Adhesion to Steel:	27 oz./in. width (29 N/100 mm)	D-3330
Tensile Strength:	22 lbs./in. width (385 N/100 mm)	D-3759
Elongation at Break:	150%	D-3759
Backing Thickness:	2.0 mils (0.05 mm)	D-3652
Total Tape Thickness:	3.7 mils (0.09 mm)	D-3652
Temperature Use Range:	-65° to 400°F (-54° to 204°C)	

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Adhesion to Steel:	35 oz./in. width (38 N/100 mm)	D-3330
Tensile Strength:	40 lbs./in. width (700 N/100 mm)	D-3759
Elongation at Break:	200%	D-3759
Backing Thickness:	5.0 mils (0.13 mm)	D-3652
Total Tape Thickness:	6.7 mils (0.17 mm)	D-3652
Temperature Use Range:	-65° to 400°F (-54° to 204°C)	

Features

- Extruded, calendered film tapes that resist curling during unwind and provide an exceptionally smooth surface when applied.
- Extruded PTFE film tapes lie flatter than typical skived PTFE film tapes.
- Thicker backing helps extend the service life, compared to thinner versions, when subjected to abrasion or wear.
- Provides excellent chemical resistance except to organic solvents. **Note:** The silicone adhesive will be attacked by commercial organic solvents and is not recommended for applications requiring organic resistance.

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).

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Features *(continued)*

- To help prevent wrinkling or bubbling of the backing on PTFE film tapes when they are subjected to temperatures above 250°F (121°C), pre-heat the surface to at least 150°F (66°C) (preferred 180°F, 82°C) to obtain best results.

Application Ideas

- Easy-release surface on rollers, plates, belts, etc. where build-up of sticky materials and inks can occur.
- Low coefficient of friction surface on rollers, formers, etc. to facilitate web movement.
- Chemical resistant surface for sealing and masking.
- Wrapping rubber nip rollers on hot polyethylene extrusion machines.

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.

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



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