



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
3M™ PTFE Extruded Tape 5490		
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)	
3M™ PTFE Extruded Tape 5491		
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

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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.



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