

October, 2016

## 3M™ PTFE Extruded Film Tape 5491

### Product Description

3M™ PTFE Extruded Film Tape 5491 offers an extremely low coefficient of friction which, in combination with a pressure sensitive silicone adhesive, creates a smooth, non-stick surface over a variety of substrates to assist in the movement of web materials in many types of roll-wrap lay flat applications.

### Product Features

- Extruded PTFE film tapes lie flatter than typical skived PTFE film tapes, resists curling during unwind and provide an exceptionally smooth surface when applied.
- Non-stick PTFE film provides an exceptionally slick surface for easy clean-up.
- 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 so are not recommended for application requiring organic resistance.
- Silicone adhesive provides clean removal from a variety of surfaces.



## Technical Information Note

The following technical information and data should be considered representative or typical only and should not be used for specification purposes.

## Typical Physical Properties

Property	Values		Method
Color	Brown		
Total Tape Thickness	0.17 mm	6.7 mil	ASTM D3652
Backing Thickness	0.13 mm	5 mil	ASTM D3652
Backing	Extruded PTFE (polytetrafluoroethylene)		
Adhesive	Silicone		

## Typical Performance Characteristics

Property	Values		Method	Substrate
Peel Adhesion	3.8 N/cm	35 oz/in	ASTM D3330	Stainless Steel
Tensile Strength	72.7 N/cm	672 oz/in	ASTM D3759	
Elongation at Break	260 %		ASTM D3759	
Temperature Use Range	-54 to 260 °C	-65 to 500 °F		

## Available Sizes

Property	Values	
Standard Roll Length	32.9 m	36 yd

## Handling/Application Information

### Application Ideas

- Easy-release surface by wrapping rollers, plates, belts, etc. where build-up of sticky materials and inks can occur, minimizing clean-up.
- Chemical resistant surface for sealing and masking.
- Low coefficient of friction surface on rollers, formers, etc. to facilitate web movement.
- High strength and abrasion resistance reduce friction between surfaces, minimizing rattle and machinery noise.
- Mold release for composite or metal bonding.
- Wide temperature range for performance on or near heated machinery and equipment.

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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## Storage and Shelf Life

Store under normal conditions of 60° to 80°F (16° to 27°C) and 40 to 60% R.H. in the original carton. To obtain best performance, use this product within 24 months from date of manufacture.

## Trademarks

3M is a trademark of 3M Company.

## References

Property	Values
3m.com Product Page	<a href="https://www.3m.com/3M/en_US/company-us/all-3m-products/~/3M-PTFE-Film-Tape-5491?N=5002385+3293242546&amp;rt=rud">https://www.3m.com/3M/en_US/company-us/all-3m-products/~/3M-PTFE-Film-Tape-5491?N=5002385+3293242546&amp;rt=rud</a>
Safety Data Sheet (SDS)	<a href="https://www.3m.com/3M/en_US/company-us/SDS-search/results/?gsaAction=msdsSRA&amp;msdsLocale=en_US&amp;co=ptn&amp;q=5491">https://www.3m.com/3M/en_US/company-us/SDS-search/results/?gsaAction=msdsSRA&amp;msdsLocale=en_US&amp;co=ptn&amp;q=5491</a>

## Family Group

	5490	5491
Color	Brown	Brown
Total Tape Thickness (mm)	0.09	0.17
Backing Thickness (mm)	0.05	0.13
Backing	Extruded PTFE (polytetrafluoroethylene)	Extruded PTFE (polytetrafluoroethylene)
Adhesive	Silicone	Silicone
Tensile Strength (N/cm)	30.4	72.7

## ISO Statement

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

## Information

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