



# 5490 PTFE Plastic Film Tape

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## Product Data Sheet

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Updated : March 1996  
Supersedes : October 1993

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**Product Description**      A low friction film which is resistant to wear. The extruded film is more suitable for applications on flat surfaces due to its resistance to curl.

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**Physical Properties**  
Not for specification purposes

<b>Adhesive Type</b>	Silicone	
<b>Backing</b>	Extruded film made of DuPont's PTFE (Polytetrafluorethylene) film.	
<b>Film Thickness</b> (ASTM D-3652)	50 µm	
<b>Total Thickness</b>	90 µm	
<b>Tape Colour</b>	Blue-black	
<b>Shelf Life</b>	12 months from date of despatch by 3M when stored in the original carton at 21°C (70°F) & 50 % Relative Humidity	

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**Performance Characteristics**  
Not for specification purposes

<b>Adhesion to Stainless Steel</b> ASTM D-3330	2.9 N/10mm	
<b>Tensile Strength</b> ASTM D-3759	38.5 N/10mm	
<b>Elongation at Break</b> ASTM D-3759	150 %	
<b>Temperature Range</b> Maximum Minimum	204 °C -53 °C	

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5490 PTFE Plastic Film  
Tape

### Additional Product Information

No. 5490 is an extruded, calendered film. This process provides an exceptionally smooth surface when applied. Resists curl on unwind and lays flat.

Chemical resistance of No. 5490 is excellent. The silicone adhesive will be attacked by commercial organic solvents and should not be used for applications requiring organic solvent resistance.

Shelf life of No. 5490 is excellent with no noticeable deterioration after normal storage of one year. Applied tape can be considered permanent in inherent limits of the backing or adhesive are not exceeded.

### **CAUTION**

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

### Application Techniques

To prevent wrinkling or bubbling of the backing on PTFE film tapes when subjected to temperature above 120°C, pre-heat the surface the tape will be

applied to. Pre-heat the surface to at least 65°C, preferably 80°C, to obtain the best results.

While always ensuring surface is dry, clean and with no loose surface. Firm even pressure should always be applied.

### Applications

Easy release surface provided by wrapping rollers, plates, belts etc., where build-up of sticky materials, ink and paints normally occur.

Chemical resistant surface provided by lining hoods, bins, chutes and wrapping pipes, cables, conduit etc.

### FEATURES

Extruded PTFE Film.

Silicone adhesive.

### ADVANTAGES

Exceptionally smooth surface.  
Resists edge curl.  
Lays Flat.

High temperature performance.  
Long ageing.

### BENEFITS

Ease of clean-up.  
Stays in place.  
Higher productivity.

High productivity.

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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.



### Specialty Tapes & Adhesives

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