# **3M**5480 "PTFE" Plastic Film Tape

# **Product Data Sheet**

Updated : April 2008 Supersedes : March 1996

#### **Product Description**

A low friction film which is resistant to wear. The skived (or shaved) film is more suitable for the more conformable applications such as spirally wrapping rollers.

5480 is thinner than 5481 and is more suited to applications requiring more conformability or lighter duty applications.

# Physical Properties

Not for specification purposes

Adhesive Type	Silicone (pressure-sensitive)	
Backing	Skived film made of DuPont's PTFE (Polytetrafluoreothylene) film.	
Film Thickness (ASTM D-3652)	50 μm	
Total Thickness	96 μm	
Tape Colour	Brown	
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	2.2 N/10mm	
Tensile Strength ASTM D-3759	47.3 N/10mm	
Elongation at Break ASTM D-3759	140 %	
Temperature Range Maximum Minimum	204 °C -54 °C	

# Additional Product Information

No. 5480 is a skived "PTFE" Film Tape developed to extend the service life as a release surface on rubber laminating rolls on hot polyethylene extruders.

Age life of 5480 is excellent with no noticeable deterioration after normal storage of one year. Applied tape can be considered permanent if 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 "PTFE" Tapes above 204°C adequate ventilation must be provided.

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Tape

#### **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 (preferred 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	ADVANTAGES	BENEFITS
Skived "PTFE" Film.	Elastic memory. Cross directional strength.	Higher productivity.
	Anti-stick, low friction.	Reduces maintenance and equipment replacement costs.
	Resistant to chemicals, solvents, salts.	
Silicone adhesive.	Performs at high temperatures.	High productivity.

Removes cleanly.

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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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