

PTFE SKIVED FILMS PREMIUM



SAINT-GOBAIN® offers a broad range of Skived Films. These films are manufactured by **Saint-Gobain Performance Plastics Corporation**, Tape Solutions business, and come with high quality virgin PTFE resins or PTFE compounds and are designed to meet applications with the highest operational requirements. Full in-house processing includes mixing, molding, sintering, skiving and slitting, as well as ISO 9001 and ISO 14001 certifications, guaranteeing consistent, high product quality.

Skived Premium PTFE Films are used in the toughest and most demanding applications. The outstanding chemical resistance, insulation and low friction properties provide excellent performance that can sustain high heat ranges as noted in this data sheet. The materials mechanical properties combined with their conformity to common food and pharma regulations make them a preferred choice for high-end requirements.

To complement the product offering a bondable version is available (best-in class etching on one or both sides).

**Previously known as*

CHEMFILM® PTFE SKIVED FILMS PREMIUM



FEATURES AND BENEFITS

- High purity due to usage of highest quality resins
- Continuous service temperature up to 260°C
- Superior etching for improved bondability
- Conformity to common food and pharma regulations
- Low friction combined with perfect release properties
- Very high insulation properties for electrical applications
- Extremely tight tolerances
- Outstanding, almost universal chemical resistance

AVAILABILITY

Skived PTFE Films are available in widths up to 1700 mm and thickness down to 25 µm. A variety of standard dimensions is always available and kept in stock. Please contact the factory for further information, slit widths and minimum order quantities. Special thicknesses, widths or other requirements are available upon request.

APPLICATIONS

- Septa, cap and storage tank liners
- Pump and Valve Diaphragms
- Elastomer Laminates
- Gas & Liquid tight barrier in compensators and expansion joints
- Food baking and grilling
- High frequency circuit boards
- Wire & cable especially in high temperature and sensitive equipment
- Low friction & anti-squeak in automotive

*Pictures shown are for illustration purpose only.

TYPICAL PROPERTIES

Property	0100 Premium- PTFE	0100E Premium- PTFE, etched	0105 Premium- PTFE, colored	0105E Premium- PTFE, colored, etched	0167 Antistatic- PTFE compound	0167E Antistatic- PTFE compound, etched	Test Method
Thickness	0.025 - 3.0 mm	0.025 - 1.5 mm	0.05 - 3.0 mm	0.05 - 1.5 mm	0.1 - 3.0 mm	0.1 - 1.5 mm	-
Surface tension, etched surface	N/A	≥ 45 mN/m	N/A	≥ 45 mN/m	N/A	≥ 45 mN/m	DIN ISO 8296
Tensile Strength	≥ 25 N/mm ²	≥ 25 N/mm ²	≥ 25 N/mm ²	≥ 25 N/mm ²	≥ 25 N/mm ²	≥ 25 N/mm ²	DIN EN ISO 527 v = 50 mm/min microtensile specimen (according to ISO 13000)
Elongation at break*	≥ 280 %	≥ 280 %	≥ 250 %	≥ 250 %	≥ 250 %	≥ 250 %	DIN EN ISO 527 v = 50 mm/min microtensile specimen (according to ISO 13000)
Filler content	None	None	≤ 3	≤ 3	≤ 2	≤ 2	Thermal Gravimetric Analysis
Appearance/color	White	Brown*	Color	Brown**	Black	Black/Brown**	-

Property	Value	Test method
Density	2.13 - 2.19 g/cm ³	DIN EN ISO 1183-1
Surface finish	R _t ≤ 10 μm	DIN EN ISO 4288
Dielectric breakdown strength	40 - 100 kV/mm for unfilled materials	ASTM D-149 thickness 0.05- 0,5mm
Ball indentation hardness 132/60**	28 N/mm ² for unfilled materials	DIN EN ISO 2039-1 thickness min 4mm
Coefficient of friction***	0.07	-

The values presented are typical values and should not be used for specification purposes.

Contact your **Saint-Gobain** Tape Solutions representative for more information.

Special requirements (e.g. thickness or color) are available. All values, except surface tension, are measured on non-etched film/laminate with a thickness of > 0.1 perpendicular to molding direction.

*Standard values according to ISO 13000 PTFE semi-finished products grade 1 (for unfilled materials)

**On etched side

***Raw material manufacturer data

****Ball on Disc, Ø=6mm, v=10mm/s, F_N=2N, t=2h

IMPORTANT: It is the user's responsibility to ensure the suitability and safety of Saint-Gobain products for all intended uses and that the materials to be used comply with all applicable regulatory requirements. Saint-Gobain assumes no responsibility for any product failures that occur due to your actions or inactions, including your use, design, fabrication or application of the products into which the materials are incorporated.

WARRANTY: This document should not be considered a warranty or a guarantee. The descriptions of the Product provided hereinabove may vary based on specifications requested and testing protocols. Typically, Saint-Gobain warrants that product(s) will meet mutually agreed specifications at delivery and Saint-Gobain honors any breach of warranty claims for six (6) months from delivery of the products. If a product is determined to be nonconforming with its warranty, Saint-Gobain's sole obligation is, at its option, to either replace the nonconforming products or reimburse the purchase price for the same.

The only obligation under any applicable product warranty will be to replace any portion proving defective, or at our option, to refund the purchase price thereof. SAINT-GOBAIN DISCLAIMS ALL OTHER EXPRESS OR IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR USE.



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