

SKIVED UHMW-PE FILMS

UHMW-PE

A broad range of **SKIVED FILMS** are manufactured by **Saint-Gobain**[®] Performance Plastics Corporation, Tape Solutions business. The process chain includes skiving and slitting which is certified according to IATF 1649 and ISO 9001, guaranteeing a consistent high product quality.

Skived UHMW-PE Films are commonly used in applications with general requirements, such as release, non-stick or improved robustness.

Skived UHMW-PE Films come with higher abrasion resistance, offering higher durability for mechanical stresses, whilst also providing self-lubricating properties similar to Skived PTFE Films. Their anti-stick surface and sound deadening properties make them a preferred choice for demanding applications.

Skived UHMW-PE Films are bondable without etching, e.g. through thermal activation or with the use of a bonding agent.

**Previously known as*

CHEMFILM[®] SKIVED UHMW-PE FILMS



FEATURES AND BENEFITS

- High abrasion resistance/durability
- Continuous service temperature up to 90°C
- Self-lubricating properties similar to PTFE
- Anti-stick surface
- Sound deadening
- Bondable without etching



AVAILABILITY

- Widths up to 1500 mm
- Thickness down to 25 µm
- Special thicknesses, widths or other requirements are available upon request

APPLICATIONS

- Tank Liners
- Elastomer Laminates
- Gas & Liquid tight barrier in storage tanks including those working at very low temperatures
- Release materials in industrial applications with high wear and abrasion
- Low friction & anti-squeak in automotive and industrial machinery

TYPICAL PROPERTIES

Property	UHMW-PE, natural	UHMW-PE, black	Unit	Test Method
Thickness	0.025 - 1.5	0.025 - 1.5	mm	-
Tensile Strength	≥ 30	≥ 30	N/mm ²	DIN EN ISO 527 v = 50 mm/min microtensile specimen (according to ISO 13000)
Elongation at break	≥ 180	≥ 180	%	DIN EN ISO 527 v = 50 mm/min microtensile specimen (according to ISO 13000)
Filler content	None	< 5	% by weight	Thermal Gravimetric Analysis
Appearance / Color	White	Black	-	-

Property	Value	Test Method
Density	0.91 – 1.00 g/cm ³	DIN EN ISO 1183-1
Surface finish	R _t ≤ 10 μm	DIN EN ISO 4288
Dielectric breakdown strength*	45 kV/mm for unfilled materials	ASTM D-149 thickness 0.05 - 0,5mm
Ball indentation hardness 132/60*	≥ 34 N/mm ² for unfilled materials	DIN EN ISO 2039-1 thickness min 4mm
Coefficient of friction**	0.10	-

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.

*Raw material manufacturer data

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

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