

SKIVED UHMW-PE FILMS

UHMW-PE

SAINT-GOBAIN offers a broad range of Skived Films. 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 - 0.97 g/cm ²	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 Composite 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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IMPORTANT: The values presented are typical values and should not be used for specification purposes. Contact your representative for more information. It is the user's responsibility to ensure the suitability and safety of Saint-Gobain Composite Solutions 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 misuse of the materials it provides arising out of the design, fabrication or application of the products into which the materials are incorporated by purchaser and/or user.

WARRANTY: We warranty specifications at delivery and honor claims for such breach of warranty for six (6) months after delivery. 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. User assumes all other risks, if any, including the risk of injury, loss or damage, whether direct or consequential arising out of the use, misuse or inability to use this product(s). SAINT-GOBAIN COMPOSITE SOLUTIONS DISCLAIMS ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

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