

Description

Ultem*1000B film is a high performance thermoplastic Polyetherimide material. The combination of high temperature resistance, flame resistance, low moisture absorption and excellent dielectric properties makes Ultem film a good candidate for a broad range of electrical and electronic applications. Ultem film products are thermo-formable and can be heat-sealed to a wide variety of materials.

Gauges:	75 µm (0,003") +/-5% - 500 µm (0,020") +/-5%
Standard roll width:	1270 mm (50")
Texture:	Smooth / fine matte
Color code :	1000
Color :	Natural amber

Typical Property Values◆

Property	Test Method	Units	Value
Physical			
Specific Gravity	ISO 1183	g/cc	1.27
Water Absorption, immersion, 23°C, 24 hr.	ASTM D570	%	1.25
Water Absorption, 50%RH, 23°C, 24 hr.	ASTM D570	%	0.48
Mechanical			
Tensile Modulus	ISO R527	MPa	3000
Tensile Strength @ Yield	ISO R527	Mpa	100
Tensile Elongation @ Yield	ISO R527	%	6.5
Tensile Strength @ Break	ISO R527	Mpa	95
Tensile Elongation @ Break	ISO R527	%	60
Tear Strength Initiation @ 75 µm	ASTM D1004	N/mm	360
Tear Strength Propagation @ 75 µm	ASTM D1938	N/mm	3,5
Thermal			
Coefficient of Thermal Expansion	IPC-TM-650	ppm/°C	52
Shrinkage @ 170°C EXT. DIR.	IPC-TM-650	%	0.33
Shrinkage @ 170°C CROSS. DIR.	IPC-TM-650	%	0.24
Glass Transition Temperature	DMA	°C	217
Thermal Conductivity	ASTM C177	W/m°C	0.22
Electrical			
Dielectric Strength @ 75 µm oil	ASTM D149	Volts/mil	3,650
Dielectric Constant	IPC-TM-650		3.2
Dissipation Factor	IPC-TM-650		0.005
Volume Resistivity	ASTM D257	M `Ω-cm	2.5 x 10 ¹⁵
Surface Resistivity	ASTM D257	M `Ω	1.9 x 10 ¹⁶
Flammability			
UL Performance (75 - 500 µm)	UL 94		VTM-0

- ◆ These are typical properties and are not intended for specification purposes. If minimum certifiable properties are required, please contact your local SABIC Innovative Plastics' representative or the Quality Services Department.

* Trademarks of SABIC Innovative Plastics IP BV



Americas:
SABIC Innovative Plastics
Specialty Film & Sheet
One Plastics Avenue
Pittsfield, MA 01201
USA
Tel. (1) (413) 448 5400
Fax. (1) (413) 448 7506
Toll free: 1-800 451 3147

Europe:
SABIC Innovative Plastics
Specialty Film & Sheet
Plasticslaan 1
NL - 4612 PX Bergen op Zoom
The Netherlands
Tel. (31) (164) 292911
Fax. (31) (164) 293272

Pacific:
SABIC Innovative Plastics
Specialty Film & Sheet
1266 Nanjin Road (W)
Plaza 66, 17th Floor
200040 Shanghai, China
Tel. (86) 21 62881088
Fax. (86) 21 62880818

THE MATERIALS, PRODUCTS AND SERVICES OF SABIC INNOVATIVE PLASTICS HOLDING BV, ITS SUBSIDIARIES AND AFFILIATES ("SELLER"), ARE SOLD SUBJECT TO SELLER'S STANDARD CONDITIONS OF SALE, WHICH CAN BE FOUND AT <http://www.sobic-ip.com> AND ARE AVAILABLE UPON REQUEST. ALTHOUGH ANY INFORMATION OR RECOMMENDATION CONTAINED HEREIN IS GIVEN IN GOOD FAITH, SELLER MAKES NO WARRANTY OR GUARANTEE, EXPRESS OR IMPLIED, (i) THAT THE RESULTS DESCRIBED HEREIN WILL BE OBTAINED UNDER END-USE CONDITIONS, OR (ii) AS TO THE EFFECTIVENESS OR SAFETY OF ANY DESIGN INCORPORATING SELLER'S PRODUCTS, SERVICES OR RECOMMENDATIONS. EXCEPT AS PROVIDED IN SELLER'S STANDARD CONDITIONS OF SALE, SELLER SHALL NOT BE RESPONSIBLE FOR ANY LOSS RESULTING FROM ANY USE OF ITS PRODUCTS OR SERVICES DESCRIBED HEREIN. Each user is responsible for making its own determination as to the suitability of Seller's products, services or recommendations for the user's particular use through appropriate end-use testing and analysis. Nothing in any document or oral statement shall be deemed to alter or waive any provision of Seller's Standard Conditions of Sale or this Disclaimer, unless it is specifically agreed to in a writing signed by Seller. No statement by Seller concerning a possible use of any product, service or design is intended, or should be construed, to grant any license under any patent or other intellectual property right of Seller or as a recommendation for the use of such product, service or design in a manner that infringes any patent or other intellectual property right.

SABIC Innovative Plastics is a trademark of Sabic Holding Europe BV

* Trademark of SABIC Innovative Plastics IP BV