

ULTEM™ 1000B Film

PRODUCT DATASHEET

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.

TYPICAL PROPERTY VALUES ◆

PROPERTY	TEST METHOD	UNITS	VALUE
Mechanical			
Tensile Modulus	ISO R527	MPa	3000
Tensile Strength @ Yield	ISO R527	MPa	100
Tensile Elongation at @ Yield	ISO R527	%	6.5
Tensile Strength @ 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
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
Electrical			
Dielectric Strength @ 125 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 x10 ¹⁶
Flammability			
UL Performance (75 - 175 µm)	UL94		VTM-0

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

™ Trademark of SABIC.

PRODUCT AVAILABILITY

Standard gauges	: 75 µm (0,003") +/-5% - 175 µm (0,020") +/-5%
Standard roll width	: 1270 mm (50")
Texture	: Smooth / fine matte
Color code	: 1000
Color	: Natural amber

CONTACT US:

SABIC CORPORATE HQ

PO Box 5101
Riyadh 11422
Saudi Arabia
T +966 (0) 1 225 8000
F +966 (0) 1 225 9000
E info@sabic.com

AMERICAS

SABIC
Functional Forms
2500 CityWest Boulevard
Suite 100
Houston, TX 77042
USA
Toll-free (800) 323 3783
F (888) 443 2033
E spinside.sales@sabic.com

EUROPE

SABIC
Functional Forms
Plasticslaan 1
4612 PX
Bergen op Zoom
The Netherlands
T +31 (0)164 293684
F +31 (0)164 293272
E ff.info@sabic.com

PACIFIC

SABIC
Functional Forms
2550 Xiupu Road
Pudong
201319 Shanghai
China
T +86 21 3222 4500
F +86 21 6289 8998
E ff.info@sabic.com

DISCLAIMER: THE MATERIALS, PRODUCTS AND SERVICES OF SAUDI BASIC INDUSTRIES CORPORATION (SABIC) OR ITS SUBSIDIARIES OR AFFILIATES ("SELLER") ARE SOLD SUBJECT TO SELLER'S STANDARD CONDITIONS OF SALE, WHICH ARE AVAILABLE UPON REQUEST. INFORMATION AND RECOMMENDATIONS CONTAINED IN THIS DOCUMENT ARE GIVEN IN GOOD FAITH. HOWEVER, SELLER MAKES NO EXPRESS OR IMPLIED REPRESENTATION, WARRANTY OR GUARANTEE (i) THAT ANY RESULTS DESCRIBED IN THIS DOCUMENT WILL BE OBTAINED UNDER END-USE CONDITIONS, OR (ii) AS TO THE EFFECTIVENESS OR SAFETY OF ANY DESIGN OR APPLICATION INCORPORATING SELLER'S MATERIALS, PRODUCTS, SERVICES OR RECOMMENDATIONS. UNLESS OTHERWISE PROVIDED IN SELLER'S STANDARD CONDITIONS OF SALE, SELLER SHALL NOT BE RESPONSIBLE FOR ANY LOSS RESULTING FROM ANY USE OF ITS MATERIALS, PRODUCTS, SERVICES OR RECOMMENDATIONS DESCRIBED IN THIS DOCUMENT. Each user is responsible for making its own determination as to the suitability of Seller's materials, products, services or recommendations for the user's particular use through appropriate end-use and other 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. Statements by Seller concerning a possible use of any material, product, service or design do not, are not intended to, and should not be construed to grant any license under any patent or other intellectual property right of Seller or as a recommendation for the use of any material, product, service or design in a manner that infringes any patent or other intellectual property right.

SABIC and brands marked with TM are trademarks of SABIC or affiliates.
© Copyright 2020. All rights reserved.

¹ Any brands, products or services of other companies referenced in this document are the trademarks, service marks and/or trade names of their respective holders.



LEXAN is a trademark of SABIC