

# ULTEM™ 1000B NATURAL FILM

## (25 µm – 50 µm)

### PRODUCT DATASHEET

#### DESCRIPTION

ULTEM™ 1000B Natural 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
<b>Mechanical</b>			
Tensile Modulus	ISO R527	MPa	2,800
Tensile Strength @ Yield	ISO R527	MPa	100
Tensile Elongation at @ Yield	ISO R527	%	6.0
Tensile Strength @ Break	ISO R527	Mpa	95
Tear Strength Elongation @ Break	ISO R527	M%	50
Tear Strength Initiation	ASTM D1004	N/mm	260
<b>Thermal</b>			
Coefficient of Thermal Expansion	IPC-TM-650	ppm/°C	52
Shrinkage @ 170°C EXT. DIR.	IPC-TM-650	%	0.49
Shrinkage @ 170°C CROSS. DIR.	IPC-TM-650	%	0.30
Glass Transition Temperature	DMA	°C	217
<b>Physical</b>			
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
<b>Electrical</b>			
Dielectric Strength @ 125 µm Natural	ASTM D149	Volts/mil	6.400
<b>Flammability</b>			
UL Performance	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.

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## PRODUCT AVAILABILITY

Gauge	: 25 µm (0,001") +/-10% - 50 µm (0,002") +/-10%
Standard roll width	: 1270 mm (50")
Texture	: matte / matte
Color code	: 1000
Color	: Natural amber

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