

- ULTEM 2100 1000 -

PROPERTIES	UNIT	TEST METHOD	VALUES
<u>Physical</u>			
Glass reinforced 10%			
Density	g/cm ³	ISO 1183	1.34
Coefficient of thermal expansion in flow direction CTE (23°C-60°C)	1/°C	ASTM D696	2.6.10 ⁻⁵
Water absorption at saturation at 23°C	%	ISO 62	1
<u>Mechanical</u>			
Tensile stress - at break at 5 mm/min	MPa	ISO 527	115
Tensile strain - at break at 5 mm/min	%	ISO 527	4
Tensile modulus at 1mm/min	MPa	ISO 527	6000
Flexural stress at break at 2 mm/min	MPa	ISO 178	185
Flexural modulus at 2 mm/min	MPa	ISO 178	4500
Hardness H 358/30	MPa	ISO 2039-1	140
Hardness Rockwell R, M or L	-	ISO 2039-2	M109
Abrasion resistance Taber, CS-17, 1 kg	mg/1000cy	GE	15
Impact Izod unnotched at +23°C (- 30°C)	kJ/m ²	ISO 180-1C	30 (30)
<u>Thermal</u>			
Vicat A/50 10N (method A) à 50°C/h	°C	ISO 306	223
Vicat B/50 50N (method B) à 50°C/h	°C	ISO 306	212
HDT / Ae at 1,80 MPa	°C	ISO 75	205
HDT / Be at 0,45 MPa	°C	ISO 75	210
Relative Temperature Index RTI – electrical properties	°C	UL746B	170
Relative Temperature Index RTI – mechanical properties with impact	°C	UL746B	170
UL 94 rating flame class rating / at mm thickness	Class / mm	UL94	V0/0.41
Limited Oxygen Index- LOI	%	ASTM D2863	46
<u>Electrical</u>			
Dielectric strength at 3,2 mm	kV/mm	ASTM D149	34 / 26 / 16
Surface resistivity	Ohm	ASTM D257	>10 ¹⁵
Volume resistivity	Ohm,cm	ASTM D257	>10 ¹⁵
Dielectric constant at 50 Hz	-	ASTM D150	3.1
Dielectric constant at 1 MHz	-	ASTM D150	3
Dissipation factor at 50 Hz	-	ASTM D150	0.0008
Dissipation factor at 1 MHz	-	ASTM D150	0.0025
Comparative Tracking Index - CTI	PLC	UL746A	4
Arc Resistance - D-495 - class	PLC	UL746A	6
High Voltage Arc - Tracking Rate – HVTR - class	PLC	UL746A	2

The values indicated are it with titles codes and do not engage to in no case the responsibility for company PHT



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