

# - NORYL GFN1 701 -

PROPERTIES	UNIT	TEST METHOD	VALUES
<b><u>Physical</u></b>			
Glass reinforced 10%			
Density	g/cm <sup>3</sup>	ISO 1183	1.17
Coefficient of thermal expansion in flow direction CTE (23°C-60°C)	1/°C	ASTM D696	5-10 <sup>-5</sup>
Water absorption at saturation at 23°C	%	ISO 62	0.20
<b><u>Mechanical</u></b>			
Tensile stress - at break at 5 mm/min	MPa	ISO 527	45
Tensile strain - at break at 5 mm/min	%	ISO 527	4
Tensile modulus at 1mm/min	MPa	ISO 527	4000
Flexural stress at break at 2 mm/min	MPa	ISO 178	95
Flexural modulus at 2 mm/min	MPa	ISO 178	3500
Hardness H 358/30	MPa	ISO 2039-1	100
Hardness Rockwell R, M or L	-	ISO 2039-2	M70
Abrasion resistance Taber, CS-17, 1 kg	mg/1000cy	GE	50
Impact Izod unnotched at +23°C (- 30°C)	kJ/m <sup>2</sup>	ISO 180-1A	20 (20)
<b><u>Thermal</u></b>			
Vicat A/50 10N (method A) à 50°C/h	°C	ISO 306	135
Vicat B/50 50N (method B) à 50°C/h	°C	ISO 306	125
HDT / Ae at 1,80 MPa	°C	ISO 75/Ae	115
HDT / Be at 0,45 MPa	°C	ISO 75/Be	130
Relative Temperature Index RTI – electrical properties	°C	UL746B	-
Relative Temperature Index RTI – mechanical properties with impact	°C	UL746B	-
UL 94 rating flame class rating / at mm thickness	Class / mm	UL94	HB/1.47
Limited Oxygen Index- LOI	%	ASTM D2863	26
<b><u>Electrical</u></b>			
Dielectric strength at 3,2 mm	kV/mm	ASTM D149	18
Surface resistivity	Ohm	ASTM D257	>10 <sup>15</sup>
Volume resistivity	Ohm,cm	ASTM D257	10 <sup>15</sup>
Dielectric constant at 50 Hz	-	ASTM D150	2.8
Dielectric constant at 1 MHz	-	ASTM D150	2.8
Dissipation factor at 50 Hz	-	ASTM D150	0.0005
Dissipation factor at 1 MHz	-	ASTM D150	0.001
Comparative Tracking Index - CTI	PCL	UL746A	-
Arc Resistance - D-495 - class	PCL	UL746A	-
High Voltage Arc - Tracking Rate – HVTR - class	PCL	UL746A	-

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



**PLASTIQUES HAUTES TECHNOLOGIES**  
 ZA de Malvaisin - 58 rue du Vercors – 38240 LE VERSOUD  
 Tél (33) 04 76 776 990 - Fax (33) 04 76 776 994