NORYL GTX™ Resin GTX810 - Europe

(PPE+PA*)-GF10 — Saudi Basic Industries Corporation (SABIC)

Product Texts

NORYL GTX™ 810 resin is a 10% glass reinforced alloy of Polyphenylene Ether (PPE) + Polyamide (PA). This injection moldable grade has high stiffness (flexural modulus 3000 MPa), excellent chemical resistance, and high heat resistance. NORYL GTX GTX810 resin is an excellent candidate for a wide variety of applications including electrical and lighting components, security (CCTV) housings.

UL Yellow Card Link E45329-101009462

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	**8**	cm³/10min	ISO 1133
Temperature	**280**	°C	-
Load	**5**	kg	-

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	**3200**	MPa	ISO 527
Yield stress	**65**	MPa	ISO 527
Yield strain	**3.5**	%	ISO 527
Stress at break	**65**	MPa	ISO 527
Strain at break	**6**	%	ISO 527
Flexural modulus	**2900**	MPa	ISO 178
Charpy impact strength, +23°C	**60**	kJ/m²	ISO 179/1eU
Charpy impact strength, -30°C	**40**	kJ/m²	ISO 179/1eU
Izod impact strength, +23°C, 4mm	**50**	kJ/m²	ISO 180/1U
Izod impact strength, -30°C, 4mm	**40**	kJ/m²	ISO 180/1U
Ball indentation hardness	**90**	MPa	ISO 2039-1

Thermal properties	Value	Unit	Test Standard
ISO Data			
Vicat softening temperature, B	**200**	°C	ISO 306
Vicat softening temperature, 120°C/h 50N	**205**	°C	ISO 306
Coeff. of linear therm. expansion, parallel	**60**	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	**80**	E-6/K	ISO 11359-1/-2
Burning behav. at 1.5 mm nom. thickn.	**HB**	class	IEC 60695-11-10
Thickness tested	**1.5**	mm	-
Thermal Conductivity	**0.24**	W/(m K)	DIN 52616

Other properties	Value	Unit	Test Standard
Water absorption	**3.3**	%	Sim. to ISO 62
Humidity absorption	**1.11**	%	Sim. to ISO 62
Density	**1160**	kg/m³	ISO 1183

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	**100 - 110**	°C	-
Pre-drying - Time	**2 - 3**	h	-
Processing humidity	**≤0.07**	%	-
Melt temperature	**280 - 300**	°C	-
Mold temperature	**80 - 100**	°C	-
Feed temperature	**60 - 80**	°C	-
Zone 1	**260 - 280**	°C	-
Zone 2	**270 - 290**	°C	-
Zone 3	**280 - 300**	°C	-

Characteristics

Processing	Regional Availability
Injection Molding	Europe

Applications
Automotive