NORYL GTX™ Resin GTX951W - Europe

(PPE+PA*) Saudi Basic Industries Corporation (SABIC)

Product Texts

NORYL GTX™ 951W resin is a non-reinforced alloy of Polyphenylene Ether (PPE) + Polyamide (PA). This injection moldable grade exhibits high heat resistance, excellent chemical resistance, high melt flow, and added mold release. NORYL GTX951W resin was designed for automotive under-the-hood applications such as power distribution boxes, relay boxes, and junction boxes.

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Density of melt	**955**	kg/m³	-
Thermal conductivity of melt	**0.2**	W/(m K)	-
Spec. heat capacity of melt	**1500**	J/(kg K)	-
Ejection temperature	**216**	°C	-
ASTM Data			
Melt Flow Index, MFI	**65**	g/10min	ASTM D 1238
Temperature	**280**	°C	-
Load	**5**	kg	-
Mold Shrinkage, MD	**1.55**	mm/mm	ASTM D 955
Mold Shrinkage, TD	**1.35**	mm/mm	ASTM D 955

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	**2500**	MPa	ISO 527
Yield stress	**66**	MPa	ISO 527
Strain at break	**50**	%	ISO 527
Flexural modulus	**2370**	MPa	ISO 178
ASTM Data			
Tensile Modulus	**2250**	MPa	ASTM D 638
Tensile Strength at Yield	**65**	MPa	ASTM D 638
Tensile Strength at Break	**57**	MPa	ASTM D 638
Elongation at Yield	**5**	%	ASTM D 638
Elongation at Break	**55**	%	ASTM D 638
Izod Impact notched, 1/8 in	**211**	J/m	ASTM D 256
Izod Impact notched, Low-Temperature	**100**	J/m	ASTM D 256
Temperature	**-30**	°C	-

Thermal properties	Value	Unit	Test Standard
ISO Data			
Coeff. of linear therm. expansion, parallel	**100**	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	**100**	E-6/K	ISO 11359-1/-2

Electrical properties	Value	Unit	Test Standard
ASTM Data			
Dielectric Strength, Short Time	**22.4**	kV/mm	ASTM D 149
Dissipation Factor, 1 MHz	**0.017**	-	ASTM D 150

Other properties	Value	Unit	Test Standard
Density	**1110**	kg/m³	ISO 1183
Density	**1100**	kg/m³	ASTM D 792

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	**95 - 105**	°C	-
Pre-drying - Time	**3 - 4**	h	-
Processing humidity	**≤0.07**	%	-
Melt temperature	**270 - 295**	°C	-
Mold temperature	**65 - 95**	°C	-
Zone 1	**255 - 295**	°C	-
Zone 2	**260 - 295**	°C	-
Zone 3	**265 - 295**	°C	-
Screw speed	**20 - 100**	rpm	-

Back pressure	**0.3 - 1.4**	MPa	-

Characteristics

Processing
Injection Molding

Applications
Automotive

Regional Availability
Europe