NORYL™ Resin PX5373 - Americas

(PPE+PPS)-GF20 — Saudi Basic Industries Corporation (SABIC)

Product Texts

NORYL™ PX5373 resin is a 20% glass reinforced blend of polyphenylene ether (PPE) + high impact polystyrene (HIPS). This injection moldable grade contains non-brominated, non-chlorinated flame retardant and carries a UL94 flame rating of 5VA at 2mm and V1 at 1.5mm along with UL746C Outdoor Suitability rating of F1 and RTI of 110C. NORYL SE1GFN2 exhibits high heat resistance, good dielectric strength, dimensional stability, hydrolytic stability, and very low moisture absorption. This material is an excellent candidate for a variety of applications such as solar frames, unattended power supply (UPS) inverter/charger, indoor and outdoor electrical enclosures / housings / connectors, and wall plates / sockets / switches.

Mechanical properties	Value	Unit	Test Standard
ASTM Data			
Tensile Strength at Break	**106**	MPa	ASTM D 638
Elongation at Break	**5**	%	ASTM D 638
Rockwell Hardness	**L106**	-	ASTM D 785
Izod Impact notched, 1/8 in	**106**	J/m	ASTM D 256
Izod Impact notched, Low-Temperature	**96**	J/m	ASTM D 256
Temperature	**-40**	°C	-

Thermal properties	Value	Unit	Test Standard
ISO Data			
Burning behav. at 1.5 mm nom. thickn.	**V-1**	class	IEC 60695-11-10
Thickness tested	**1.5**	mm	-
Burning behav. at thickness h	**V-0**	class	IEC 60695-11-10
Thickness tested	**6.0**	mm	-

Electrical properties	Value	Unit	Test Standard
ASTM Data			
Dielectric Strength, Short Time	**23.6**	kV/mm	ASTM D 149
Dissipation Factor, 60 Hz	**0.0016**	-	ASTM D 150
Dielectric Constant, 60 Hz	**2.98**	-	ASTM D 150

Other properties	Value	Unit	Test Standard
Density	**1230**	kg/m³	ASTM D 792

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	**110 - 120**	°C	-
Pre-drying - Time	**3 - 4**	h	-
Processing humidity	**≤0.02**	%	-
Melt temperature	**300 - 325**	°C	-
Mold temperature	**80 - 110**	°C	-
Zone 1	**265 - 315**	°C	-
Zone 2	**275 - 320**	°C	-
Zone 3	**290 - 325**	°C	-
Screw speed	**20 - 100**	rpm	-
Back pressure	**0.3 - 0.7**	MPa	-

Characteristics

Processing
Injection Molding

Additives
Flame retarding agent

Special Characteristics
Flame retardant

Chemical Resistance
Hydrolytically Stable

Applications
Automotive

Regional Availability
North America