

NORYL GTX™ Resin APS130

(PPE+PPS)-GF30

Saudi Basic Industries Corporation (SABIC)

Product Texts

NORYL GTX™ APS130 resin is a 30% glass reinforced alloy of Polyphenylene Ether (PPE) + Polyphenylene Sulfide (PPS). This injection moldable grade has high stiffness, excellent chemical resistance, and high heat resistance. NORYL GTX APS130 resin is an excellent candidate for automotive under-the-hood applications such as ignition systems and electrical components.

Processing/Physical Characteristics	Value	Unit	Test Standard
ASTM Data			
Melt Flow Index, MFI	29.1	g/10min	ASTM D 1238
Temperature	300	°C	-
Load	5	kg	-

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	6640	MPa	ISO 527
Stress at break	120	MPa	ISO 527
Strain at break	1.5	%	ISO 527
Flexural modulus	8110	MPa	ISO 178
Charpy impact strength, +23°C	59	kJ/m ²	ISO 179/1eU
Charpy impact strength, -30°C	22	kJ/m ²	ISO 179/1eU
Charpy notched impact strength, -30°C	6	kJ/m ²	ISO 179/1eA
Charpy notched impact strength, +23°C, 3mm	21	kJ/m ²	ISO 179/1eA
ASTM Data			
Flexural Modulus	8430	MPa	ASTM D 790
Flexural Strength	156	MPa	ASTM D 790
Izod Impact notched, 1/8 in	88	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 0.45 MPa	264	°C	ISO 75-1/-2
ASTM Data			
DTUL @ 66 psi	267	°C	ASTM D 648

Electrical properties	Value	Unit	Test Standard
ISO Data			
Comparative tracking index	150	-	IEC 60112
ASTM Data			
Dielectric Strength, Short Time	22.1	kV/mm	ASTM D 149
Dielectric Constant, 60 Hz	3.3	-	ASTM D 150
Surface Resistivity	1E16	Ohm	ASTM D 257
Volume Resistivity	1.2E17	Ohm*cm	ASTM D 257

Other properties	Value	Unit	Test Standard
Density	1440	kg/m ³	ISO 1183
Water Absorption, 24hr	0.02	%	ASTM D 570
Density	1440	kg/m ³	ASTM D 792

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	120 - 150	°C	-
Pre-drying - Time	4 - 8	h	-
Processing humidity	≤0.02	%	-
Melt temperature	300 - 330	°C	-
Mold temperature	95 - 150	°C	-
Zone 1	280 - 315	°C	-
Zone 2	290 - 320	°C	-
Zone 3	295 - 330	°C	-
Screw speed	50 - 100	rpm	-
Back pressure	0.7 - 1.4	MPa	-

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Characteristics

Processing

Injection Molding

Regional Availability

North America, Europe, Asia Pacific, South and Central America

Applications

Automotive