

NORYL GTX™ Resin GTX910C

(PPE+PA*)

Saudi Basic Industries Corporation (SABIC)

Product Texts

NORYL GTX910C resin is a non-reinforced alloy of Polyphenylene Ether (PPE) + Polyamide (PA). NORYL GTX910C resin exhibits excellent chemical resistance and is targeted for automotive applications such as exterior automotive applications such as wheel covers and wheel trim.

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	19	cm ³ /10min	ISO 1133
Temperature	280	°C	-
Load	2.16	kg	-

ASTM Data			
Melt Flow Index, MFI	15	g/10min	ASTM D 1238
Temperature	280	°C	-
Load	2.16	kg	-
Mold Shrinkage, MD	0.0099	mm/mm	ASTM D 955
Mold Shrinkage, TD	0.0103	mm/mm	ASTM D 955

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	1960	MPa	ISO 527
Yield stress	50	MPa	ISO 527
Yield strain	9	%	ISO 527
Stress at break	47	MPa	ISO 527
Strain at break	69	%	ISO 527
Flexural modulus, 23°C	1540	MPa	ISO 178
Flexural strength	63	MPa	ISO 178
Charpy notched impact strength, +23°C	30	kJ/m ²	ISO 179/1eA
Charpy notched impact strength, -30°C	14	kJ/m ²	ISO 179/1eA
Izod notched impact strength, +23°C	50	kJ/m ²	ISO 180/1A
Izod notched impact strength	16	kJ/m ²	ISO 180/1A
Temperature	-30	°C	-

ASTM Data			
Tensile Modulus	1992	MPa	ASTM D 638
Tensile Strength at Yield	48	MPa	ASTM D 638
Tensile Strength at Break	46	MPa	ASTM D 638
Elongation at Yield	22	%	ASTM D 638
Elongation at Break	63	%	ASTM D 638
Flexural Modulus	1530	MPa	ASTM D 790
Flexural Strength	67	MPa	ASTM D 790
Izod Impact notched, 1/8 in	621	J/m	ASTM D 256
Izod Impact notched, Low-Temperature	166	J/m	ASTM D 256
Temperature	-30	°C	-

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	75	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	159	°C	ISO 75-1/-2
Vicat softening temperature, A	208	°C	ISO 306

ASTM Data			
Coefficient of Thermal Expansion, MD	86	E-6/K	ASTM D 696
Coefficient of Thermal Expansion, TD	86	E-6/K	ASTM D 696
DTUL @ 66 psi	158	°C	ASTM D 648
DTUL @ 264 psi	86	°C	ASTM D 648
Vicat Temperature	172	°C	ASTM D 1525

Other properties	Value	Unit	Test Standard
Water Absorption, 24hr	0.81	%	ASTM D 570
Density	1090	kg/m ³	ASTM D 792

NORYL GTX™ Resin GTX910C

(PPE+PA*)

Saudi Basic Industries Corporation (SABIC)

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	120	°C	-
Pre-drying - Time	3 - 4	h	-
Processing humidity	≤0.02	%	-
Melt temperature	280 - 305	°C	-
Mold temperature	20 - 80	°C	-
Zone 1	260 - 290	°C	-
Zone 2	270 - 300	°C	-
Zone 3	280 - 305	°C	-
Nozzle temperature	280 - 305	°C	-
Screw speed	20 - 100	rpm	-
Back pressure	0.4 - 0.6	MPa	-

Characteristics**Processing**

Injection Molding

Applications

Automotive

Chemical Resistance

General Chemical Resistance

Regional Availability

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