

Product Texts

NORYL GTX™ 914 resin is a non-reinforced alloy of Polyphenylene Ether (PPE) + Polyamide (PA). This injection moldable grade exhibits an ideal combination of impact performance and dimensional stability at elevated temperatures along with excellent chemical resistance and processability. NORYL GTX914 resin may be an excellent candidate for various automotive applications such as tank flaps, exterior trim, and wheel covers.

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	11	cm ³ /10min	ISO 1133
Temperature	280	°C	-
Load	5	kg	-
ASTM Data			
Melt Flow Index, MFI	12	g/10min	ASTM D 1238
Temperature	280	°C	-
Load	5	kg	-

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	2100	MPa	ISO 527
Yield stress	55	MPa	ISO 527
Yield strain	7.5	%	ISO 527
Stress at break	55	MPa	ISO 527
Strain at break	50	%	ISO 527
Flexural modulus	2000	MPa	ISO 178
Charpy notched impact strength, +23°C	30	kJ/m ²	ISO 179/1eA
Charpy notched impact strength, -30°C	15	kJ/m ²	ISO 179/1eA
Izod notched impact strength, +23°C, 4mm	30	kJ/m ²	ISO 180/1A
Izod notched impact strength, -30°C, 4mm	15	kJ/m ²	ISO 180/1A
Ball indentation hardness	90	MPa	ISO 2039-1
ASTM Data			
Tensile Modulus	1950	MPa	ASTM D 638
Tensile Strength at Yield	55	MPa	ASTM D 638
Tensile Strength at Break	55	MPa	ASTM D 638
Elongation at Yield	15	%	ASTM D 638
Elongation at Break	100	%	ASTM D 638
Flexural Modulus	1900	MPa	ASTM D 790
Izod Impact notched, 1/8 in	280	J/m	ASTM D 256
Izod Impact notched, Low-Temperature	120	J/m	ASTM D 256
Temperature	-30	°C	-

Thermal properties	Value	Unit	Test Standard
ISO Data			
Vicat softening temperature, A	245	°C	ISO 306
Vicat softening temperature, B	190	°C	ISO 306
Vicat softening temperature, 120°C/h 50N	195	°C	ISO 306
Coeff. of linear therm. expansion, parallel	90	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	90	E-6/K	ISO 11359-1/-2
Thermal Conductivity	0.23	W/(m K)	DIN 52616
ASTM Data			
DTUL @ 66 psi	180	°C	ASTM D 648
Vicat Temperature	195	°C	ASTM D 1525

Electrical properties	Value	Unit	Test Standard
ISO Data			
Relative permittivity, 1MHz	2.7	-	IEC 62631-2-1
Dissipation factor, 1MHz	240	E-4	IEC 62631-2-1
Comparative tracking index	600	-	IEC 60112

Other properties	Value	Unit	Test Standard
Water absorption	3.5	%	Sim. to ISO 62
Humidity absorption	1.2	%	Sim. to ISO 62
Density	1090	kg/m ³	ISO 1183
Density	1100	kg/m ³	ASTM D 792

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	100 - 120	°C	-
Pre-drying - Time	2 - 3	h	-
Processing humidity	≤0.07	%	-
Melt temperature	280 - 310	°C	-
Mold temperature	80 - 120	°C	-
Feed temperature	60 - 80	°C	-
Zone 1	260 - 280	°C	-
Zone 2	270 - 290	°C	-
Zone 3	280 - 300	°C	-

Characteristics

Processing

Injection Molding

Regional Availability

Asia Pacific

Applications

Automotive