

Product Texts

NORYL GTX™ 679 resin is a conductive, mineral reinforced alloy of Polyphenylene Ether (PPE) + Polyamide (PA). This injection moldable grade is optimized to allow for primer-less electrostatic painting. NORYL GTX679 resin has improved impact / elongation, and the mineral content allows for the material to be used in structural applications such as metal and thermoset resin replacement. This material is available only in black.

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	14	cm ³ /10min	ISO 1133
Temperature	220	°C	-
Load	5	kg	-
ASTM Data			
Melt Flow Index, MFI	16	g/10min	ASTM D 1238
Temperature	280	°C	-
Load	5	kg	-

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	4790	MPa	ISO 527
Yield stress	61	MPa	ISO 527
Yield strain	2	%	ISO 527
Stress at break	61	MPa	ISO 527
Strain at break	5	%	ISO 527
Flexural modulus	4440	MPa	ISO 178
Charpy notched impact strength, +23°C	3	kJ/m ²	ISO 179/1eA
Izod notched impact strength, +23°C, 4mm	4	kJ/m ²	ISO 180/1A
Izod notched impact strength, -30°C, 4mm	3	kJ/m ²	ISO 180/1A
ASTM Data			
Tensile Modulus	4450	MPa	ASTM D 638
Tensile Strength at Yield	64	MPa	ASTM D 638
Tensile Strength at Break	62	MPa	ASTM D 638
Elongation at Yield	3	%	ASTM D 638
Elongation at Break	4	%	ASTM D 638
Flexural Modulus	4000	MPa	ASTM D 790
Izod Impact notched, 1/8 in	39	J/m	ASTM D 256
Izod Impact notched, Low-Temperature	31	J/m	ASTM D 256
Temperature	-30	°C	-

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 0.45 MPa	184	°C	ISO 75-1/-2
Vicat softening temperature, B	185	°C	ISO 306
Vicat softening temperature, 120°C/h 50N	188	°C	ISO 306
ASTM Data			
DTUL @ 66 psi	185	°C	ASTM D 648
Vicat Temperature	185	°C	ASTM D 1525

Other properties	Value	Unit	Test Standard
Water absorption	3.6	%	Sim. to ISO 62
Humidity absorption	0.7	%	Sim. to ISO 62
Density	1240	kg/m ³	ISO 1183
Density	1240	kg/m ³	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	275 - 300	°C	-
Mold temperature	65 - 95	°C	-

NORYL GTX™ Resin GTX679 - Americas

(PPE+PA*)-MF

Saudi Basic Industries Corporation (SABIC)

Zone 1	260 - 300	°C	-
Zone 2	265 - 300	°C	-
Zone 3	270 - 300	°C	-
Screw speed	20 - 100	rpm	-
Back pressure	0.3 - 1.4	MPa	-

Characteristics**Processing**

Injection Molding

Regional Availability

North America

Applications

Automotive