

Product Texts

NORYL PPX™ 640 resin is a 40% glass reinforced alloy of polyphenylene ether (PPE) + Polypropylene (PP). This injection moldable grade exhibits high stiffness along with temperature performance, impact resistance, hydrolytic stability, and dimensional stability. NORYL PPX640 resin is an excellent candidate for applications requiring a good chemical resistance and high stiffness.

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	3	cm ³ /10min	ISO 1133
Temperature	260	°C	-
Load	5	kg	-

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	9700	MPa	ISO 527
Stress at break	100	MPa	ISO 527
Strain at break	2.2	%	ISO 527
Flexural modulus	8500	MPa	ISO 178
Charpy impact strength, +23°C	50	kJ/m ²	ISO 179/1eU
Charpy impact strength, -30°C	35	kJ/m ²	ISO 179/1eU
Charpy notched impact strength, +23°C	14	kJ/m ²	ISO 179/1eA
Charpy notched impact strength, -30°C	12	kJ/m ²	ISO 179/1eA
Izod impact strength, +23°C, 4mm	35	kJ/m ²	ISO 180/1U
Izod impact strength, -30°C, 4mm	30	kJ/m ²	ISO 180/1U
Izod notched impact strength, +23°C, 4mm	13	kJ/m ²	ISO 180/1A
Izod notched impact strength, -30°C, 4mm	10	kJ/m ²	ISO 180/1A
Ball indentation hardness	100	MPa	ISO 2039-1

Thermal properties	Value	Unit	Test Standard
ISO Data			
Vicat softening temperature, B	138	°C	ISO 306
Vicat softening temperature, 120°C/h 50N	140	°C	ISO 306
Coeff. of linear therm. expansion, parallel	16	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	95	E-6/K	ISO 11359-1/-2
Glow Wire Flammability Index (GWFI)	750	°C	IEC 60695-2-12
GWFI - thickness tested (1)	3.2	mm	-

Electrical properties	Value	Unit	Test Standard
ISO Data			
Relative permittivity, 1MHz	2.9	-	IEC 62631-2-1
Dissipation factor, 1MHz	4	E-4	IEC 62631-2-1
Volume resistivity	>1E13	Ohm*m	IEC 62631-3-1
Surface resistivity	>1E15	Ohm	IEC 62631-3-2
Comparative tracking index	425	-	IEC 60112

Other properties	Value	Unit	Test Standard
Density	1300	kg/m ³	ISO 1183

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	65 - 75	°C	-
Pre-drying - Time	2 - 4	h	-
Processing humidity	≤0.02	%	-
Melt temperature	260 - 305	°C	-
Mold temperature	40 - 65	°C	-
Feed temperature	60 - 80	°C	-
Zone 1	245 - 290	°C	-
Zone 2	250 - 290	°C	-
Zone 3	255 - 300	°C	-

NORYL PPX™ Resin PPX640 - Europe

(PPE+PP)-GF40

Saudi Basic Industries Corporation (SABIC)

Characteristics

Processing

Injection Molding

Regional Availability

Europe

Chemical Resistance

Hydrolytically Stable