NORYL PPX™ Resin PPX7110 - Europe

(PPE+PP) Saudi Basic Industries Corporation (SABIC)

Product Texts

NORYL PPX™ 7110 resin is a non-reinforced alloy of polyphenylene ether (PPE) + Polypropylene (PP). This injection moldable grade exhibits high impact resistance and good heat resistance along with hydrolytic and dimensional stability. NORYL PPX7110 resin is an excellent candidate for applications requiring high impact, chemical resistance, and good heat performance.

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	**12.9**	cm³/10min	ISO 1133
Temperature	**280**	°C	-
Load	**5**	kg	-

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	**1500**	MPa	ISO 527
Yield stress	**34**	MPa	ISO 527
Yield strain	**6**	%	ISO 527
Stress at break	**30**	MPa	ISO 527
Strain at break	**50**	%	ISO 527
Flexural modulus	**1700**	MPa	ISO 178
Charpy impact strength, +23°C	**N**	kJ/m²	ISO 179/1eU
Charpy impact strength, -30°C	**38**	kJ/m²	ISO 179/1eU
Charpy notched impact strength, +23°C	**25**	kJ/m²	ISO 179/1eA
Charpy notched impact strength, -30°C	**5**	kJ/m²	ISO 179/1eA
Izod impact strength, +23°C, 4mm	**N**	kJ/m²	ISO 180/1U
Izod impact strength, -30°C, 4mm	**N**	kJ/m²	ISO 180/1U
Izod notched impact strength, +23°C, 4mm	**25**	kJ/m²	ISO 180/1A
Izod notched impact strength, -30°C, 4mm	**9**	kJ/m²	ISO 180/1A
Ball indentation hardness	**65**	MPa	ISO 2039-1

Thermal properties	Value	Unit	Test Standard
ISO Data			
Vicat softening temperature, B	**95**	°C	ISO 306
Vicat softening temperature, 120°C/h 50N	**100**	°C	ISO 306
Coeff. of linear therm. expansion, parallel	**90**	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	**120**	E-6/K	ISO 11359-1/-2

Electrical properties	Value	Unit	Test Standard
ISO Data			
Relative permittivity, 1MHz	**2.2**	-	IEC 62631-2-1
Dissipation factor, 1MHz	**6**	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	**600**	-	IEC 60112

Other properties	Value	Unit	Test Standard
Density	**970**	kg/m³	ISO 1183

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	**60 - 65**	°C	-
Pre-drying - Time	**2 - 4**	h	-
Processing humidity	**≤0.02**	%	-
Melt temperature	**260 - 290**	°C	-
Mold temperature	**40 - 60**	°C	-
Feed temperature	**60 - 80**	°C	-
Zone 1	**225 - 275**	°C	-
Zone 2	**240 - 285**	°C	-
Zone 3	**250 - 290**	°C	-

Characteristics

Processing
Injection Molding, Sheet Extrusion

Applications
Automotive

Regional Availability
Europe