

NORYL™ Resin PX1860 - Americas

(PPE+PS)

Saudi Basic Industries Corporation (SABIC)

Product Texts

NORYL PX1860 is an unfilled, injection moldable modified polyphenylene ether resin. Designed for good dimensional stability and high flow, this resin also uses non-chlorinated, non-brominated FR additives to achieve a V1 UL94 rating at 1.5 mm with a specific density of 1.1 g/cm³. NORYL PX1860 may be an excellent material candidate for Flat Panel TV enclosure applications requiring good rheological properties, heat resistance, hydrolysis resistance, low density and thin wall flame resistance.

UL Yellow Card Link [E121562-100062409](https://www.ul.com/yellow-card/E121562-100062409)

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	34	cm ³ /10min	ISO 1133
Temperature	280	°C	-
Load	2.16	kg	-
Density of melt	975	kg/m ³	-
Thermal conductivity of melt	0.17	W/(m K)	-
Spec. heat capacity of melt	1910	J/(kg K)	-
Ejection temperature	93	°C	-

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	2510	MPa	ISO 527
ASTM Data			
Tensile Modulus	3140	MPa	ASTM D 638
Tensile Strength at Yield	52	MPa	ASTM D 638
Tensile Strength at Break	49	MPa	ASTM D 638
Elongation at Yield	3.6	%	ASTM D 638
Elongation at Break	7.3	%	ASTM D 638
Flexural Modulus	2770	MPa	ASTM D 790

Thermal properties	Value	Unit	Test Standard
ISO Data			
Coeff. of linear therm. expansion, parallel	85.2	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	85.8	E-6/K	ISO 11359-1/-2
Burning behav. at 1.5 mm nom. thickn.	V-1	class	IEC 60695-11-10
Thickness tested	1.5	mm	-

Electrical properties	Value	Unit	Test Standard
ISO Data			
Volume resistivity	>1E13	Ohm*m	IEC 62631-3-1
Surface resistivity	1E14	Ohm	IEC 62631-3-2
Comparative tracking index	250	-	IEC 60112
ASTM Data			
Surface Resistivity	1E14	Ohm	ASTM D 257
Volume Resistivity	>1E15	Ohm*cm	ASTM D 257

Other properties	Value	Unit	Test Standard
Water absorption	0.13	%	Sim. to ISO 62
Humidity absorption	0.02	%	Sim. to ISO 62
Density	1100	kg/m ³	ASTM D 792

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Melt temperature	250 - 285	°C	-
Mold temperature	40 - 65	°C	-

Characteristics

Processing

Injection Molding

Regional Availability

North America