

SABIC Innovative Plastics Lexan® 4251R PPC+PC

Category : Polymer , Thermoplastic , Polyphthalate Carbonate

Material Notes:

High heat polycarbonate copolymer blend with an excellent balance of heat resistance, processability, and impact strength. Available in a range of opaque colors.

Order this product through the following link:

http://www.lookpolymers.com/polymer_SABIC-Innovative-Plastics-Lexan-4251R-PPCPC.php

Physical Properties	Metric	English	Comments
Specific Gravity	1.20 g/cc	1.20 g/cc	ASTM D792
Density	1.10 g/cc	0.0397 lb/in ³	ISO 1183
Moisture Absorption	0.0900 %	0.0900 %	23°C / 50% RH; ISO 62
Water Absorption at Saturation	0.24 %	0.24 %	ISO 62
Linear Mold Shrinkage, Flow	0.0060 - 0.0080 cm/cm @Thickness 3.20 mm	0.0060 - 0.0080 in/in @Thickness 0.126 in	SABIC Method
Melt Flow	5.6 g/10 min @Load 1.20 kg, Temperature 300 °C	5.6 g/10 min @Load 2.65 lb, Temperature 572 °F	ASTM D1238
Melt Index of Compound	31 g/10 min @Load 2.16 kg, Temperature 330 °C	31 g/10 min @Load 4.76 lb, Temperature 626 °F	MVR [cm ³ /10 min]; ISO 1133

Mechanical Properties	Metric	English	Comments
Tensile Strength at Break	59.0 MPa	8560 psi	50 mm/min; ISO 527
	63.0 MPa	9140 psi	Type I, 50 mm/min; ASTM D638
Tensile Strength, Yield	62.0 MPa	8990 psi	50 mm/min; ISO 527
	64.0 MPa	9280 psi	Type I, 50 mm/min; ASTM D638
Elongation at Break	96.1 %	96.1 %	50 mm/min; ISO 527
	102 %	102 %	Type I, 50 mm/min; ASTM D638
Elongation at Yield	6.6 %	6.6 %	50 mm/min; ISO 527
	6.7 %	6.7 %	Type I, 50 mm/min; ASTM D638
Tensile Modulus	2.16 GPa	313 ksi	1 mm/min; ISO 527

Mechanical Properties	2.18 GPa Metric	316 ksi English	50 mm/min; ASTM D638 Comments
Flexural Yield Strength	101 MPa	14600 psi	1.3 mm/min, 50 mm span; ASTM D790
Flexural Modulus	2.04 GPa	296 ksi	2 mm/min; ISO 178
	2.23 GPa	323 ksi	1.3 mm/min, 50 mm span; ASTM D790
Izod Impact, Notched	6.39 J/cm	12.0 ft-lb/in	ASTM D256
	3.31 J/cm @Temperature -30.0 °C	6.20 ft-lb/in @Temperature -22.0 °F	ASTM D256
Izod Impact, Notched (ISO)	43.0 kJ/m²	20.5 ft-lb/in²	80*10*4; ISO 180/1A
	20.0 kJ/m² @Temperature -30.0 °C	9.52 ft-lb/in² @Temperature -22.0 °F	80*10*4; ISO 180/1A
Charpy Impact, Notched	4.80 J/cm²	22.8 ft-lb/in²	Edgew 80*10*4 sp=62mm; ISO 179/1eA
Dart Drop, Total Energy	75.0 J @Temperature 23.0 °C	55.3 ft-lb @Temperature 73.4 °F	ASTM D3763
	78.0 J @Temperature -30.0 °C	57.5 ft-lb @Temperature -22.0 °F	ASTM D3763

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	61.6 µm/m-°C @Temperature -40.0 - 40.0 °C	34.2 µin/in-°F @Temperature -40.0 - 104 °F	ASTM E 831
	61.6 µm/m-°C @Temperature -40.0 - 40.0 °C	34.2 µin/in-°F @Temperature -40.0 - 104 °F	ISO 11359-2
CTE, linear, Transverse to Flow	67.3 µm/m-°C @Temperature -40.0 - 40.0 °C	37.4 µin/in-°F @Temperature -40.0 - 104 °F	ASTM E 831
	67.3 µm/m-°C @Temperature -40.0 - 40.0 °C	37.4 µin/in-°F @Temperature -40.0 - 104 °F	ISO 11359-2
Deflection Temperature at 1.8 MPa (264 psi)	134 °C	273 °F	Flatw 80*10*4 sp=64mm; ISO 75/Af
	136 °C @Thickness 3.20 mm	277 °F @Thickness 0.126 in	unannealed; ASTM D648

Thermal Properties Vicat Softening Point	Metric 155 °C	English 313 °F	Comments Rate B/50; ISO 306
	156 °C	313 °F	Rate B/50; ASTM D1525
	157 °C	315 °F	Rate B/120; ISO 306

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com

Email : sales@lookpolymers.com

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China