

Perlex R5550

Polycarbonate
LyondellBasell Industries
Engineering Plastics

General	
Additive	• Flame Retardant
Features	• Flame Retardant
Uses	• Housings
Appearance	• Clear/Transparent

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.20 g/cm ³	1.20 g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (300°C/1.2 Kg)	12 g/10 min	12 g/10 min	ISO 1133

Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus	334000 psi	2300 MPa	ISO 527-1
Tensile Stress (Yield)	8700 psi	60.0 MPa	ISO 527-2
Tensile Strain (Break)	> 50 %	> 50 %	ISO 527-2
Flexural Modulus	348000 psi	2400 MPa	ISO 178
Flexural Stress	13800 psi	95.0 MPa	ISO 178

Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Notched Izod Impact (Area) (73°F (23°C))	7.14 ft·lb/in ²	15.0 kJ/m ²	ASTM D256

Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			
66 Psi (0.45 Mpa), Unannealed	275 °F	135 °C	ISO 75-2/B
264 Psi (1.8 Mpa), Unannealed	266 °F	130 °C	ISO 75-2/A
Vicat Softening Temperature	293 °F	145 °C	ISO 306/B50

Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Burning Rate			
0.0787 In (2.00 Mm)	< 3.9 in/min	< 100 mm/min	ISO 3795
0.0787 In (2.00 Mm)	< 3.9 in/min	< 100 mm/min	FMVSS 302
Flame Rating			UL 94
0.06 In (1.6 Mm)	V-2	V-2	
0.13 In (3.2 Mm)	V-0	V-0	
Glow Wire Ignition Temperature			IEC 60695-2-13
0.04 In (1.0 Mm)	1760 °F	960 °C	
0.08 In (2.0 Mm)	1760 °F	960 °C	
0.12 In (3.0 Mm)	1760 °F	960 °C	

Notes

These are typical property values not to be construed as specification limits.

