Technical Data Sheet

PERLEX® R5553

Polycarbonate
Engineering Plastics

General		
Additive	• Flame Retardant	• UV Stabilizer
Features	• Flame Retardant	• UV Resistant
Uses	• Electrical Parts	
Appearance	• Clear/Transparent	

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.20 g/cm³	1.20 g/cm³	ISO 1183
Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)	12 g/10 min	12 g/10 min	ISO 1133
Molding Shrinkage	0.50 to 0.70 %	0.50 to 0.70 %	
Mechanical	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Tensile Modulus	334000 psi	2300 MPa	ISO 527-2
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/in²	15.0 kJ/m²	ASTM D256
Thermal	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Heat Deflection Temperature			
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
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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.