

CALIBRE™ 1602 LTD Polycarbonate Resin

Overview

CALIBRE™ 1602 LTD Polycarbonate Resin is designed to have good low temperature impact resistance compared to standard polycarbonate. The material has improved impact performance after heat aging relative to standard polycarbonate. The polymer features a good balance of mechanical properties. This material is opaque in color.

Main Characteristics

- Long-term impact performance
- Good low temperature impact resistance
- UV stabilizer and mold release

Applications

- Injection molding applications
- Opaque applications
- Durables, Mining hats

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.17 g/cm ³	1.17 g/cm ³	ASTM D792 ISO 1183
Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)	6.0 g/10 min	6.0 g/10 min	ASTM D1238 ISO 1133
Water Absorption			ISO 62
Saturation, 73°F (23°C)	0.32 %	0.32 %	
Equilibrium, 73°F (23°C), 50% RH	0.12 %	0.12 %	
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength ¹ (Yield)	8250 psi	56.9 MPa	ASTM D638
Flexural Modulus	297000 psi	2050 MPa	ASTM D790
Flexural Strength	11300 psi	78.0 MPa	ASTM D790
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Notched Izod Impact			ASTM D256
-40°F (-40°C)	9.0 ft·lb/in	480 J/m	
73°F (23°C)	10 ft·lb/in	540 J/m	
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			ASTM D648
66 psi (0.45 MPa), Annealed	277 °F	136 °C	
264 psi (1.8 MPa), Unannealed	239 °F	115 °C	
264 psi (1.8 MPa), Annealed	270 °F	132 °C	
Injection	Nominal Value (English)	Nominal Value (SI)	
Drying Temperature	248 °F	120 °C	
Drying Time	4.0 hr	4.0 hr	