

CALIBRE™ 603-2 Polycarbonate Resin

Overview

CALIBRE™ 603-2 Resin is specially designed for extrusion of super heavy wall sheet and very complex profiles. This resin offers exceptional high melt strength for effective calibration of complex structures, and excellent surface quality. The resin is UV bulk stabilized, but for outdoor use, co-extrusion with a UV cap is needed. It is recommended to apply a 50 micron layer of CALIBRE™ 320UV.

Applications

- Multi wall sheet extrusion and profile extrusion

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.20 g/cm ³	1.20 g/cm ³	ASTM D792 ISO 1183/B
Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)	1.8 g/10 min	1.8 g/10 min	ASTM D1238 ISO 1133
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus			
0.157 in (4.00 mm), Injection Molded	341000 psi	2350 MPa	ASTM D638
0.157 in (4.00 mm), Injection Molded	348000 psi	2400 MPa	ISO 527-2
Tensile Strength			
Yield, 0.157 in (4.00 mm), Injection Molded	9140 psi	63.0 MPa	ASTM D638 ISO 527-2
Break, 0.157 in (4.00 mm), Injection Molded	7400 psi	51.0 MPa	
Tensile Elongation			
Yield, 0.157 in (4.00 mm), Injection Molded	6.3 %	6.3 %	ASTM D638 ISO 527-2
Break, 0.157 in (4.00 mm), Injection Molded	50 %	50 %	
Flexural Modulus			
0.157 in (4.00 mm), Injection Molded	348000 psi	2400 MPa	ASTM D790 ISO 178
Flexural Strength			
0.157 in (4.00 mm), Injection Molded	13500 psi	93.1 MPa	ASTM D790 ISO 178
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Charpy Notched Impact Strength			
73°F (23°C), Injection Molded	33 ft-lb/in ²	69 kJ/m ²	ISO 179/1eA
Notched Izod Impact			
73°F (23°C), 0.157 in (4.00 mm), Injection Molded	15 ft-lb/in	800 J/m	ASTM D256
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			
66 psi (0.45 MPa), Unannealed	284 °F	140 °C	ASTM D648 ISO 75-2/B
264 psi (1.8 MPa), Unannealed	261 °F	127 °C	ASTM D648 ISO 75-2/A
Vicat Softening Temperature	295 °F	146 °C	ISO 306/B50 ASTM D1525 ¹
Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Flame Rating ² (0.06 in (1.6 mm))	HB	HB	UL 94