

CALIBRE™ 300-30 Polycarbonate Resin

Overview

CALIBRE™ 300-30 polycarbonate resins offer very high flow with excellent impact resistance, heat distortion resistance and optical clarity. CALIBRE 300-30 contains no mold release or UV stabilizer and is available in natural transparent colour only.

Govt. and Industry Standards:

- Underwriters Laboratory, Inc. (UL)

Applications:

- Blending
- Compounding

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)	30 g/10 min	30 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 Modulus	334000 psi	2300 MPa	ISO 527-1/1
Tensile Stress			ISO 527-2/50
Yield	8700 psi	60.0 MPa	
Break	9430 psi	65.0 MPa	
Tensile Strain			ISO 527-2/50
Yield	6.0 %	6.0 %	
Break	110 %	110 %	
Flexural Modulus ¹	348000 psi	2400 MPa	ISO 178
Flexural Stress ¹	14100 psi	97.0 MPa	ISO 178
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-22°F (-30°C)	5.2 ft·lb/in ²	11 kJ/m ²	
73°F (23°C)	7.1 ft·lb/in ²	15 kJ/m ²	
Notched Izod Impact			
73°F (23°C)	11 ft·lb/in	580 J/m	ASTM D256
73°F (23°C)	33 ft·lb/in ²	69 kJ/m ²	ISO 180/A
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			ISO 75-2/A
264 psi (1.8 MPa), Unannealed	250 °F	121 °C	
Vicat Softening Temperature	293 °F	145 °C	ISO 306/B50
Optical	Nominal Value (English)	Nominal Value (SI)	Test Method
Refractive Index	1.586	1.586	ISO 489
Light Transmittance (118.1 mil (3000 µm))	87.0 to 91.0 %	87.0 to 91.0 %	ASTM D1003
Haze	< 1.00 %	< 1.00 %	ASTM D1003