

CALIBRE™ 301V-10

Polycarbonate Resin

Overview

CALIBRE™ 300V-10 Series polycarbonate resins offer exceptional impact resistance, heat distortion resistance, optical clarity and meet UL94 V-2 rating. The CALIBRE 300V series products are available in 3 additive packages: CALIBRE 301V: Mold release. CALIBRE 302V: UV stabilizer. CALIBRE 303V: Mould release and UV stabilizer.

Govt and Industry Standards:

- CSA (Canadian Standards Association)
- UL (Underwriters Laboratory, Inc.)

Applications:

- Electronic components
- Lighting
- Storage media housings

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.20 g/cm ³	1.20 g/cm ³	ISO 1183/B
Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)	10 g/10 min	10 g/10 min	ISO 1133
Molding Shrinkage - Flow	5.0E-3 to 7.0E-3 in/in	0.50 to 0.70 %	ISO 294-4
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus	334000 psi	2300 MPa	ISO 527-2/50
Tensile Stress			ISO 527-2/50
Yield	8700 psi	60.0 MPa	
Break	10300 psi	71.0 MPa	
Tensile Strain			ISO 527-2/50
Yield	6.0 %	6.0 %	
Break	150 %	150 %	
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 (73°F (23°C))	17 ft-lb/in ²	35 kJ/m ²	ISO 179/1eA
Notched Izod Impact (73°F (23°C))	17 ft-lb/in	900 J/m	ISO 180/4A
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Heat Deflection Temperature			
66 psi (0.45 MPa), Annealed	286 °F	141 °C	ISO 75-2/B
264 psi (1.8 MPa), Unannealed	252 °F	122 °C	ISO 75-2/A
264 psi (1.8 MPa), Annealed	280 °F	138 °C	ISO 75-2/A
Vicat Softening Temperature	295 °F	146 °C	ISO 306/B50
Ball Indentation Temperature	257 °F	125 °C	IEC 60335-1
Electrical	Nominal Value (English)	Nominal Value (SI)	Test Method
Comparative Tracking Index			IEC 60112
0.0787 in (2.00 mm), Solution A	250 V	250 V	
Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Flame Rating ²			UL 94
0.06 in (1.6 mm)	V-2	V-2	
0.13 in (3.2 mm)	V-2	V-2	