

CALIBRE™ 302EP-35

Polycarbonate Resin

Overview CALIBRE™ 302EP-35 is a high flow, UV stabilized polycarbonate resin with excellent heat resistance and optical clarity.

Main Characteristics

- High Flow
- UV Stabilized
- High Heat Resistance

Applications

- Film

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.19 g/cm ³	1.19 g/cm ³	ASTM D792
Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)	35 g/10 min	35 g/10 min	ASTM D1238
Molding Shrinkage - Flow	5.0E-3 to 7.0E-3 in/in	0.50 to 0.70 %	ASTM D955
Water Absorption			ASTM D570
24 hr, 73°F (23°C)	0.15 %	0.15 %	
Equilibrium, 73°F (23°C), 50% RH	0.32 %	0.32 %	
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength ¹			ASTM D638
Yield	9000 psi	62.1 MPa	
Break	7000 psi	48.3 MPa	
Tensile Elongation ¹			ASTM D638
Yield	5.7 %	5.7 %	
Break	81 %	81 %	
Flexural Modulus ²	356000 psi	2450 MPa	ASTM D790
Flexural Strength ²	13900 psi	95.8 MPa	ASTM D790
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Notched Izod Impact (73°F (23°C))	12 ft-lb/in	640 J/m	ASTM D256
Instrumented Dart Impact ³			ASTM D3763
73°F (23°C), Total Energy	550 in-lb	62.1 J	
Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Rockwell Hardness (R-Scale)	122	122	ASTM D785
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			ASTM D648
66 psi (0.45 MPa), Unannealed	278 °F	137 °C	
264 psi (1.8 MPa), Unannealed	251 °F	122 °C	
Vicat Softening Temperature	295 °F	146 °C	ASTM D1525 ⁴
Optical	Nominal Value (English)	Nominal Value (SI)	Test Method
Transmittance (39.4 mil (1000 µm))	89.0 %	89.0 %	ASTM D1003
Haze (39.4 mil (1000 µm))	0.600 %	0.600 %	ASTM D1003