

## CALIBRE™ 300-3 Polycarbonate Resin

### Overview

CALIBRE™ 300-3 polycarbonate resins offer exceptional impact resistance, heat distortion resistance and optical clarity as well as high melt strength for various extrusion processes. CALIBRE 300-3 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
- Sheet, film and profile extrusion

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.20 g/cm <sup>3</sup>	1.20 g/cm <sup>3</sup>	ASTM D792 ISO 1183/B
Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)	3.0 g/10 min	3.0 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 Modulus	334000 psi	2300 MPa	ISO 527-1/1
Tensile Stress			ISO 527-2/50
Yield	8700 psi	60.0 MPa	
Break	10400 psi	72.0 MPa	
Tensile Strain			ISO 527-2/50
Yield	6.0 %	6.0 %	
Break	150 %	150 %	
Flexural Modulus <sup>1</sup>	348000 psi	2400 MPa	ISO 178
Flexural Stress <sup>1</sup>	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)	6.7 ft-lb/in <sup>2</sup>	14 kJ/m <sup>2</sup>	
73°F (23°C)	36 ft-lb/in <sup>2</sup>	75 kJ/m <sup>2</sup>	
Notched Izod Impact			
73°F (23°C)	18 ft-lb/in	960 J/m	ASTM D256
73°F (23°C)	44 ft-lb/in <sup>2</sup>	93 kJ/m <sup>2</sup>	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	259 °F	126 °C	
Vicat Softening Temperature	309 °F	154 °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