

CALIBRE™ 200-10

Polycarbonate Resin

Overview

CALIBRE™ 200-10 Series are produced in compliance with the US Food and Drug Administration (FDA) and EU food contact regulations. They provide excellent impact resistance, heat distortion resistance and optical clarity. The CALIBRE 200-10 series products are available in 2 additive packages: CALIBRE 200: No mold release or UV Stabilizer. CALIBRE 201: Mold release

Govt. and Industry Standards:

- U.S. FDA 21 CFR 177.1580
- Underwriters Laboratory (UL)
- EU food contact 2011/10/EC

Applications:

- Food and processor housings
- Liquid containers
- Food utensils
- Packaging applications

Automotive Specifications

- FORD ESF-M4D100-A1

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.20 g/cm ³	1.20 g/cm ³	ISO 1183/A
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
Notched Izod Impact Strength (73°F (23°C))	42 ft-lb/in ²	88 kJ/m ²	ISO 180/4A
Unnotched Izod Impact Strength (73°F (23°C))	No Break	No Break	ISO 180
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Heat Deflection Temperature			
66 psi (0.45 MPa), Annealed	291 °F	144 °C	ISO 75-2/B
264 psi (1.8 MPa), Unannealed	257 °F	125 °C	ISO 75-2/A
264 psi (1.8 MPa), Annealed	286 °F	141 °C	ISO 75-2/A
Vicat Softening Temperature	300 °F	149 °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)	250 V	250 V	

Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Flame Rating ²			UL 94
0.06 in (1.6 mm)	HB	HB	
0.13 in (3.2 mm)	HB	HB	
Optical	Nominal Value (English)	Nominal Value (SI)	Test Method
Transmittance	87.0 to 91.0 %	87.0 to 91.0 %	ASTM D1003

Notes

These are typical properties only and are not to be construed as specifications. Users should confirm results by their own tests.

¹ 0.079 in/min (2.0 mm/min)

² This rating not intended to reflect hazards presented by this or any other material under actual fire conditions.



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