CALIBRE™ 701-15
Polycarbonate Resin

Overview

CALIBRE™ 701-15 Series resins are formulated and produced to supply both clarity and enhanced ignition resistance. They do so while maintaining excellent physical properties and processability. The CALIBRE 701-15 series products are available in 2 additive packages: CALIBRE 701: Mold release. CALIBRE 703: Mold release and UV stabilizer.

Main Characteristics

- Underwriters Laboratory Inc. (UL)

Applications:

- Industrial switches
- Circuit breakers
- Plugs, socket and switches
- Street lights
- Safety lights
- Reflectors

Physical	Nominal Value	(English)	Nominal Value	(SI)	Test Method
Density	1.20	g/cm³	1.20	g/cm³	ISO 1183/A
Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)	15	g/10 min	15	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	9570	psi	66.0	MPa	
Tensile Strain					ISO 527-2/50
Yield	6.0	%	6.0	%	
Break	120	%	120	%	
Flexural Modulus [1, 2]	348000	psi	2400	MPa	ISO 178
Flexural Stress [1, 2]	14500	psi	100	MPa	ISO 178
Impact	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Charpy Notched Impact Strength (73°F (23°C))	9.5	ft·lb/in²	20	kJ/m²	ISO 179/1eA
Notched Izod Impact Strength (73°F (23°C))	39	ft·lb/in²	83	kJ/m²	ISO 180/A
Thermal	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Heat Deflection Temperature					
66 psi (0.45 MPa), Annealed	288	°F	142	°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	282	°F	139	°C	ISO 75-2/A
Vicat Softening Temperature	297	°F	147	°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 [3]					UL 94
0.06 in (1.6 mm)	V-2		V-2		
0.13 in (3.2 mm)	V-0		V-0		