

LEXAN* ML1010 Resin

Polycarbonate

SABIC Innovative Plastics Europe

Product Description			
Superior performance, improved flow over standard grades at lower temperatures. Internal mold release.			
General			
Additive	• Mold Release		
RoHS Compliance	• RoHS Compliant		
Forms	• Pellets		
Processing Method	• Injection Molding		
Physical	Nominal Value	Unit	Test Method
Density	1.19	g/cm ³	ISO 1183
Melt Volume-Flow Rate (MVR)			ISO 1133
250°C/1.2 kg	12.0	cm ³ /10min	
300°C/1.2 kg	48.0	cm ³ /10min	
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	2350	MPa	ISO 527-2/1
Tensile Stress			ISO 527-2/50
Yield	60.0	MPa	
Break	45.0	MPa	
Tensile Strain			ISO 527-2/50
Yield	5.0	%	
Break	70	%	
Flexural Modulus ²	2400	MPa	ISO 178
Flexural Strength ^{2, 3}	90.0	MPa	ISO 178
Hardness	Nominal Value	Unit	Test Method
Ball Indentation Hardness (H 358/30)	100	MPa	ISO 2039-1
Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature ⁴			
0.45 MPa, Unannealed, 100 mm Span	115	°C	ISO 75-2/Be
1.8 MPa, Unannealed, 100 mm Span	100	°C	ISO 75-2/Ae
Vicat Softening Temperature			
--	120	°C	ISO 306/B50
--	122	°C	ISO 306/B120
Optical	Nominal Value	Unit	Test Method
Refractive Index	1.582		ISO 489
Transmittance (2540 µm)	88.0	%	ASTM D1003
Haze (2540 µm)	1.0	%	ASTM D1003
Injection	Nominal Value	Unit	
Drying Temperature	105	°C	
Drying Time	2.0 to 4.0	hr	
Hopper Temperature	60.0 to 80.0	°C	
Rear Temperature	250 to 270	°C	
Middle Temperature	260 to 280	°C	
Front Temperature	270 to 290	°C	
Nozzle Temperature	260 to 280	°C	
Processing (Melt) Temp	275 to 295	°C	
Mold Temperature	65.0 to 85.0	°C	