



Makrolon® LED2245 EL

PC

Covestro Deutschland AG

Edge lighting material for light guides and optical parts.

Izod notched impact strength (23 °C; 3 mm): 55P kJ/m² (ISO 7391)

Izod notched impact strength (-20 °C; 3 mm): 13C kJ/m² (ISO 7391)

Luminous transmittance (clear transparent materials) (4 mm): >85 % (ISO 13468-2)

Rheological properties	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	34	cm ³ /10min	ISO 1133
Temperature	300	°C	-
Load	1.2	kg	-
Molding shrinkage, parallel	0.7	%	ISO 294-4, 2577
Molding shrinkage, normal	0.7	%	ISO 294-4, 2577

Mechanical Properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	2200	MPa	ISO 527
Yield stress	63	MPa	ISO 527
Yield strain	6	%	ISO 527
Nominal strain at break	>50	%	ISO 527
Stress at Break	60	MPa	ISO 527
Strain at Break	125	%	ISO 527
Puncture - maximum force, +23 °C	4900	N	ISO 6603-2
Puncture - maximum force, -30 °C	5900	N	ISO 6603-2
Puncture energy, +23 °C	50	J	ISO 6603-2
Puncture energy, -30 °C	55	J	ISO 6603-2

Thermal Properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load (1.80 MPa)	125	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	138	°C	ISO 75-1/-2
Vicat softening temperature, 50 °C/h 50N	145	°C	ISO 306
Oxygen index	28	%	ISO 4589-1/-2

Other Properties	Value	Unit	Test Standard
ISO Data			
Density	1190	kg/m ³	ISO 1183

Film Properties	Value	Unit	Test Standard
ISO Data			
Haze	6	-	ISO 14782

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Melt temperature	250 - 300	°C	-
Mold temperature	70 - 110	°C	-

Characteristics

Processing

Injection Molding

Additives

Release agent

Special Characteristics

Transparent

Features

Light Guiding