

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

Special Characteristics

Transparent

Additives

Release agent

Features

Light Guiding

Disclaimer

Liability Exclusion

These guide values are measured and provided by the product manufacturer and have been determined on standardised test specimens and can be affected by pigmentation, mould design and processing conditions. M-Base has taken the guide values from the producer's original Technical Data Sheet. **ALBIS AND M-BASE ARE THEREFORE NOT RESPONSIBLE FOR THE ACCURACY OF THE GUIDE VALUES AND CANNOT GIVE ANY WARRANTY WITH REGARD TO THEIR CORRECTNESS.**

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