Makrolon® LED2245 DQ

PC

Covestro Deutschland AG

- polycarbonate
- MVR (300 °C/1.2 kg) 34 cm³/10 min
- easy release
- Easy flow
- low viscosity
- translucent material with low diffusion for light guides and thick-wall optical parts

Rheological properties	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	34	cm³/10min	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
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
Notched Impact Strength (Izod), 23°C	12	kJ/m²	ISO 180/1A
Notched Impact Strength (Izod)	12	kJ/m²	ISO 180/1A
Temperature	-20	°C	-

Thermal Properties	Value	Unit	Test Standard
ISO Data			
Glass Transition Temperature (10°C/min)	145	°C	ISO 11357-1/-2
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

Other Properties	Value	Unit	Test Standard
ISO Data			
Water Absorption	0.3	%	Sim. to ISO 62
Humidity absorption	0.12	%	Sim. to ISO 62
Density	1190	kg/m³	ISO 1183
Bulk density	660	kg/m³	-

Test specimen production	Value	Unit	Test Standard
ISO Data			
Injection Molding, melt temperature	280	°C	ISO 294
Injection Molding, mold temperature	80	°C	ISO 294
Injection Molding, injection velocity	200	mm/s	ISO 294

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	120	°C	-
Pre-drying - Time	4	h	-
Processing humidity	≤0.02	%	-
Melt temperature	260 - 300	°C	-
Mold temperature	70 - 120	°C	-
Zone 1	250	°C	-
Zone 2	270 - 290	°C	-
Zone 3	270 - 290	°C	-
Nozzle temperature	270 - 305	°C	-
Back pressure	10 - 20	MPa	-

Characteristics

Processing
Injection Molding

Special Characteristics
Translucent

Additives
Release agent

Features
Light Guiding

Disclaimer

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