

Technical Data Sheet



ALCOM LIR PC 1000 UV 14099 BK1203-14

MOCOM

Base Polymer	Polycarbonate
Filler/Additive System	UV stabilised
Special Features	IR-transparent
Market Segment	Automotive, Lighting
Application Area	lighting, IR-transparent
Typical Applications	lamp covers, display elements, operating elements

Pre-Drying Conditions	120 °C in a dry air (dessiccant) dryer for 2-3 h max. moisture content <0,02 %
Processing Injection Moulding	melt temperature 270-310 °C mould temperature 80-110 °C
Storage	dry, protected from light

Properties	Value	Dimension	Test Norm
Mechanical Properties			
Flexural Modulus	2450	MPa	ISO 178
Flexural Stress (3.5% Strain)	76	MPa	ISO 178
Tensile Modulus	2400	MPa	ISO 527
Tensile Stress at Yield	66	MPa	ISO 527
Tensile Elongation at Yield	6	%	ISO 527
Tensile Elongation at Break	90	%	ISO 527
Impact Strength (Charpy, 23°C)	no break	kJ/m ²	ISO 179/1eU
Impact Strength (Charpy, -40°C)	no break	kJ/m ²	ISO 179/1eU
Notched Impact Strength (Charpy, 23°C)	10	kJ/m ²	ISO 179/1eA
Notched Impact Strength (Charpy, -40°C)	10	kJ/m ²	ISO 179/1eA
Thermal Properties			
Vicat B50	142	°C	ISO 306
HDT / A (1,8 MPa)	124	°C	ISO 75-1/-2
Rheological Properties			
Melt Index (MVR)	16	cm ³ /10min	ISO 1133
MVR temperature	300	°C	-
MVR load	1.2	kg	-
Shrinkage (24h)	0.6 - 0.8	%	ISO 294-4
Physical Properties			
Density	1190	kg/m ³	ISO 1183

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Flammability

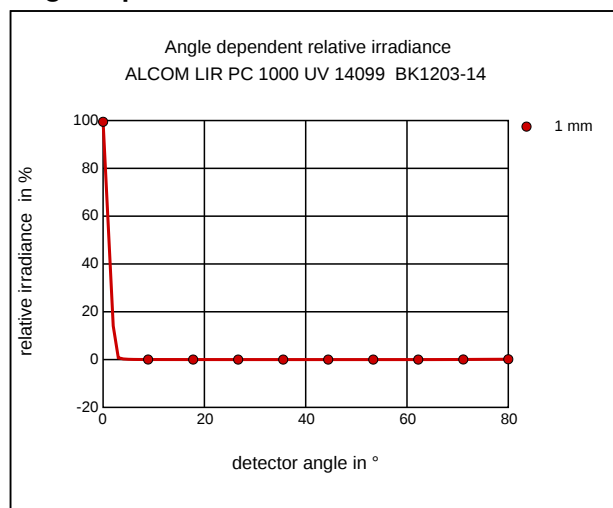
Flammability (0.75 mm)	V-2	class	UL 94
Flammability (1.5 mm)	HB	class	UL 94
Glow Wire (GWFI, 850°C, 1.0mm)	passed	-	DIN EN 60695
Glow Wire (GWFI, 850°C, 2.0mm)	passed	-	DIN EN 60695

Optical Properties

Total Transmission T(Y) (d=1,0mm, A, 2°)	0.2	%	ISO 13468
Spectral Transmission 800nm (d=1,0mm)	93	%	ISO 13468

Diagrams

Angle dependent relative irradiance



Spectrum

