

## Technical Data Sheet



# ALCOM LD2 PC 1000 UV 14011 GY1013-14

Base Polymer	Polycarbonate
Special Features	high light transmission,light scattering,easy flow,UV stabilised
Market Segment	Automotive,Lighting
Application Area	lighting,light transparent components
Typical Applications	lamp covers,display elements,operating elements
Approvals	GS93016

Pre-Drying Conditions	120 °C in a dry air (dessiccant) dryer for 2-4 h 120 °C in an air circulating dryer for 4-12 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
<b>Mechanical Properties</b>			
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	70	%	ISO 527
Impact Strength (Charpy, 23°C)	no break	kJ/m <sup>2</sup>	ISO 179/1eU
Impact Strength (Charpy, -40°C)	no break	kJ/m <sup>2</sup>	ISO 179/1eU
Notched Impact Strength (Charpy, 23°C)	12	kJ/m <sup>2</sup>	ISO 179/1eA
Notched Impact Strength (Charpy, -40°C)	12	kJ/m <sup>2</sup>	ISO 179/1eA
<b>Thermal Properties</b>			
Vicat B50	142	°C	ISO 306
HDT / A (1,8 MPa)	124	°C	ISO 75-1/-2
<b>Rheological Properties</b>			
Melt Index (MVR)	35	cm <sup>3</sup> /10min	ISO 1133
MVR temperature	300	°C	-
MVR load	1.2	kg	-
Shrinkage (24h)	0.6 - 0.9	%	ISO 294-4
<b>Physical Properties</b>			
Density	1190	kg/m <sup>3</sup>	ISO 1183

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**Flammability**

Flammability (0.75 mm)	V-2	class	UL 94
Yellow Card available	yes	-	-
Flammability (1.5 mm)	HB	class	UL 94
Yellow Card available	yes	-	-
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°)	80	%	ISO 13468
Total Transmission T(Y) (d=2,0mm, A, 2°)	68	%	ISO 13468
Total Transmission T(Y) (d=3,0mm, A, 2°)	59.5	%	ISO 13468
Total Transmission T(Y) (d=4,0mm, A, 2°)	52	%	ISO 13468
Haze T(Y) (d=1,0 mm, A, 2°)	3	%	ISO 13468
Haze T(Y) (d=2,0 mm, A, 2°)	3	%	ISO 13468
Haze T(Y) (d=3,0 mm, A, 2°)	4	%	ISO 13468
Haze T(Y) (d=4,0 mm, A, 2°)	4	%	ISO 13468
Half Power Angle T(Y) (d=1,0mm, A, 2°)	1	°	-
Half Power Angle T(Y) (d=2,0mm, A, 2°)	1	°	-
Half Power Angle T(Y) (d=3,0mm, A, 2°)	1	°	-
Half Power Angle T(Y) (d=4,0mm, A, 2°)	2	°	-

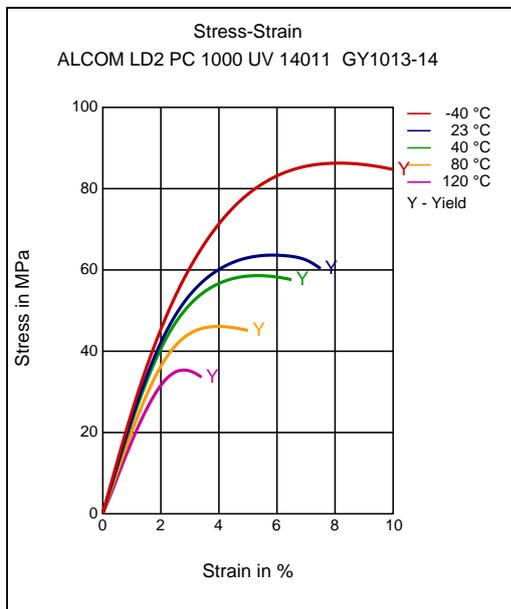
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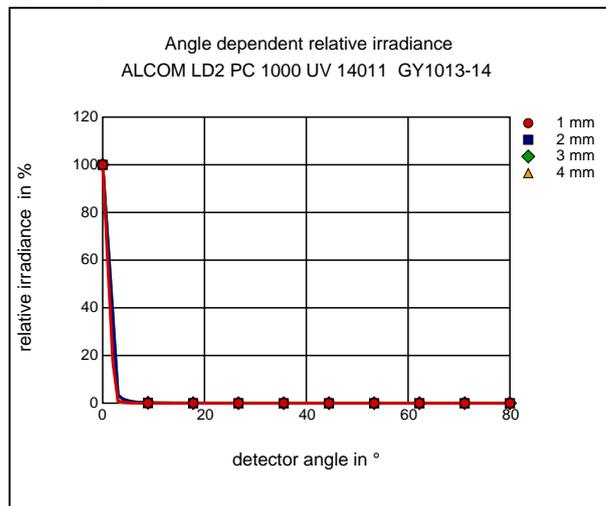
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Diagrams

Stress-Strain



Angle dependent relative irradiance



Spectrum

