

Technical Data Sheet



ALCOM LD PC 1000 UV 15027 GY1044-15

Base Polymer	Polycarbonate
Filler/Additive System	special filler, UV stabilised
Special Features	translucent, light scattering, high light diffusion, good flow
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
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	70	%	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)	55	kJ/m ²	ISO 179/1eA
Notched Impact Strength (Charpy, -40°C)	12	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)	17	cm ³ /10min	ISO 1133
MVR temperature	300	°C	-
MVR load	1.2	kg	-
Shrinkage (24h)	0.6 - 0.9	%	ISO 294-4
Physical Properties			
Density	1190	kg/m ³	ISO 1183

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Flammability

Flammability (0.75 mm)

Yellow Card available

Flammability (1.5 mm)

Yellow Card available

Glow Wire (GWFI, 850 °C, 1.0mm)

Glow Wire (GWFI, 850 °C, 2.0mm)

Fire behavior FMVSS (1.0 mm)

V-2

class

UL 94

yes

-

-

HB

class

UL 94

yes

-

-

passed

-

DIN EN 60695

passed

-

DIN EN 60695

passed

-

FMVSS 302/DIN

75200

Optical Properties

Total Transmission T(Y) (d=1,0mm, A, 2°)

16.5

%

ISO 13468

Total Transmission T(Y) (d=2,0mm, A, 2°)

4.5

%

ISO 13468

Haze T(Y) (d=1,0 mm, A, 2°)

95.5

%

ISO 13468

Haze T(Y) (d=2,0 mm, A, 2°)

96

%

ISO 13468

Half Power Angle T(Y) (d=1,0mm, A, 2°)

55

°

-

Half Power Angle T(Y) (d=2,0mm, A, 2°)

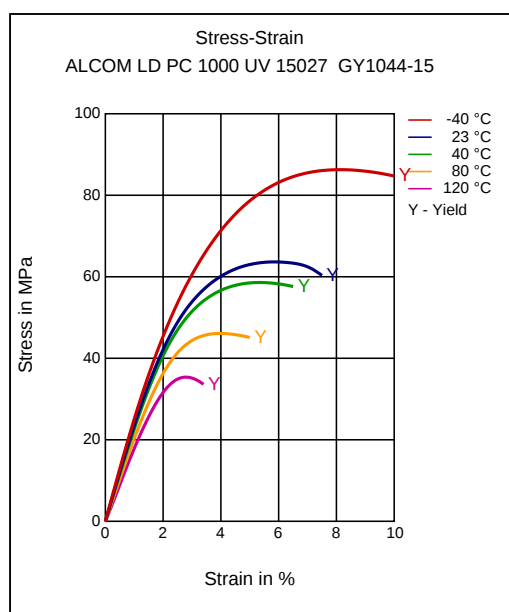
55

°

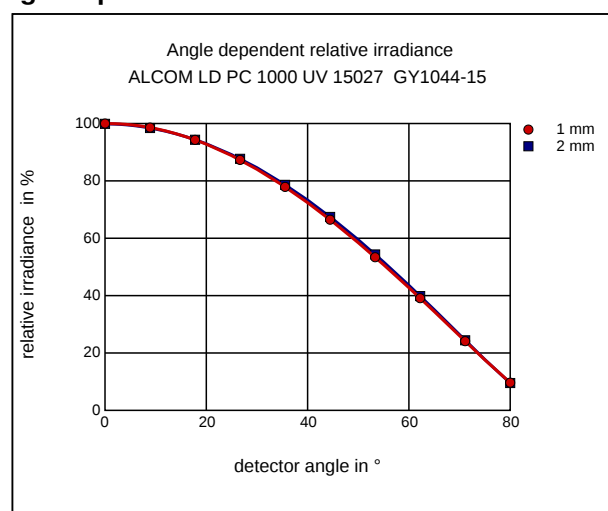
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Diagrams

Stress-Strain



Angle dependent relative irradiance



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 **Alcom[®]**

MOCOM

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Spectrum

