

Technical Data Sheet



ALCOM PC 740/4 GF20 UV WT1105-13LD

Base Polymer	Polycarbonate
Filler/Additive System	20 % glass fibres,special filler,UV stabilised
Special Features	translucent,light scattering,high light diffusion
Market Segment	Automotive,Lighting
Application Area	lighting,light transparent components
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 290-320 °C mould temperature 80-130 °C
Storage	dry, protected from light

Properties	Value	Dimension	Test Norm
Mechanical Properties			
Flexural Modulus	5800	MPa	ISO 178
Flexural Strength	150	MPa	ISO 178
Tensile Modulus	6000	MPa	ISO 527
Tensile Strength at Break	95	MPa	ISO 527
Tensile Elongation at Break	2.7	%	ISO 527
Impact Strength (Charpy, 23°C)	50	kJ/m ²	ISO 179/1eU
Impact Strength (Charpy, -40°C)	45	kJ/m ²	ISO 179/1eU
Notched Impact Strength (Charpy, 23°C)	7.5	kJ/m ²	ISO 179/1eA
Notched Impact Strength (Charpy, -40°C)	6	kJ/m ²	ISO 179/1eA
Thermal Properties			
Vicat B50	145	°C	ISO 306
HDT / A (1,8 MPa)	140	°C	ISO 75-1/-2
Rheological Properties			
Melt Index (MVR)	11	cm ³ /10min	ISO 1133
MVR temperature	300	°C	-
MVR load	1.2	kg	-
Shrinkage (lengthwise, 24h)	0.4 - 0.7	%	ISO 294-4
Shrinkage (lateral, 24h)	0.4 - 0.8	%	ISO 294-4
Physical Properties			
Density	1340	kg/m ³	ISO 1183
Flammability			
Flammability (0.75 mm)	V-2	class	UL 94

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Flammability (1.5 mm)

Glow Wire (GWFI, 850 °C, 1.0mm)

Glow Wire (GWFI, 850 °C, 2.0mm)

HB

passed

passed

class

-

-

UL 94

DIN EN 60695

DIN EN 60695

Optical Properties

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

53

%

ISO 13468

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

37

%

ISO 13468

Total Transmission T(Y) (d=3,0mm, A, 2°)

27

%

ISO 13468

Total Transmission T(Y) (d=4,0mm, A, 2°)

21

%

ISO 13468

Haze T(Y) (d=1,0 mm, A, 2°)

95.5

%

ISO 13468

Haze T(Y) (d=2,0 mm, A, 2°)

95.5

%

ISO 13468

Haze T(Y) (d=3,0 mm, A, 2°)

95.5

%

ISO 13468

Haze T(Y) (d=4,0 mm, A, 2°)

95.5

%

ISO 13468

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

47

°

-

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

60

°

-

Half Power Angle T(Y) (d=3,0mm, A, 2°)

62

°

-

Half Power Angle T(Y) (d=4,0mm, A, 2°)

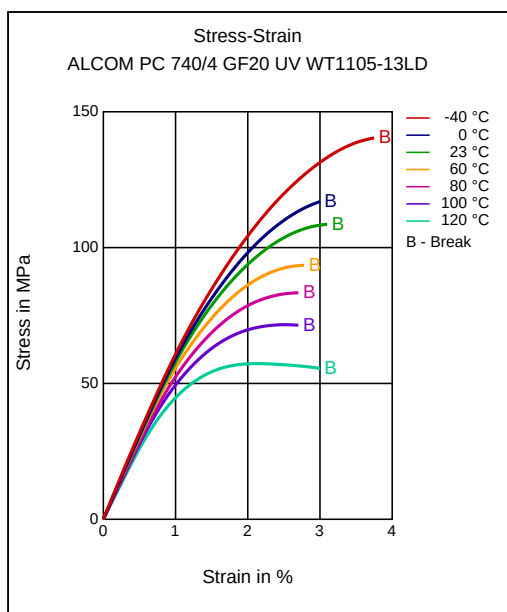
63

°

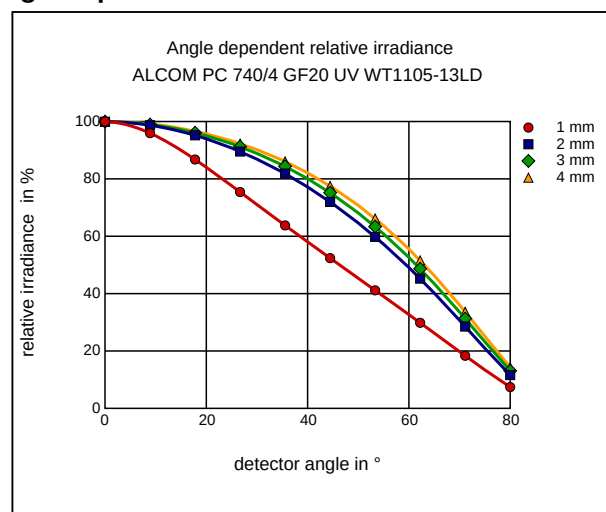
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Diagrams

Stress-Strain



Angle dependent relative irradiance



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Spectrum

