

Technical Data Sheet



ALCOM LD2 PC 2010 UV WT1142-21

Base Polymer	Polycarbonate
Filler/Additive System	special filler, 10 % glass fibres
Special Features	translucent, light scattering, UV stabilised, injection moulding grade, antisqueak-modified
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 2-4 h 120 °C in an air circulating dryer for 4-12 h max. moisture content <0,02 %
Processing Injection Moulding	melt temperature 290-310 °C mould temperature 80-130 °C
Storage	dry, protected from light

Properties	Value	Dimension	Test Norm
Mechanical Properties			
Flexural Modulus	3600	MPa	ISO 178
Flexural Strength	130	MPa	ISO 178
Tensile Modulus	4100	MPa	ISO 527
Tensile Strength at Break	78	MPa	ISO 527
Tensile Elongation at Break	4.4	%	ISO 527
Impact Strength (Charpy, 23°C)	70	kJ/m ²	ISO 179/1eU
Impact Strength (Charpy, -40°C)	70	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	140	°C	ISO 306
HDT / A (1,8 MPa)	134	°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)	0.3 - 0.5	%	ISO 294-4
Shrinkage (lateral, 24h)	0.4 - 0.6	%	ISO 294-4
Physical Properties			
Density	1260	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, 2.0mm)	passed	-	DIN EN 60695

Optical Properties

Total Transmission T(Y) (d=1,0mm, A, 2°)	74.5	%	ISO 13468
Total Transmission T(Y) (d=2,0mm, A, 2°)	58.5	%	ISO 13468
Total Transmission T(Y) (d=3,0mm, A, 2°)	47	%	ISO 13468
Total Transmission T(Y) (d=4,0mm, A, 2°)	39.5	%	ISO 13468
Haze T(Y) (d=1,0 mm, A, 2°)	95.5	%	ISO 13468
Haze T(Y) (d=2,0 mm, A, 2°)	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°, high res.)	20	°	-
Half Power Angle T(Y) (d=2,0mm, A, 2°, high res.)	37	°	-
Half Power Angle T(Y) (d=3,0mm, A, 2°, high res.)	48	°	-
Half Power Angle T(Y) (d=4,0mm, A, 2°, high res.)	54	°	-

Diagrams

Stress-Strain

