

Technical Data Sheet



ALCOM LDDC PC 1000 UV 18045 WT1048-18

Base Polymer	Polycarbonate
Filler/Additive System	special filler, UV stabilised
Special Features	light scattering, translucent, easy release (demoulding), easy flow, processing stabilised
Market Segment	Automotive, Lighting
Application Area	lighting, light transparent components, White Panel-Technology
Typical Applications	lamp covers, display elements, operating elements
Approvals	Stellantis Plastic Material Policy

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 %
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Processing Injection Moulding	melt temperature 270-310 °C mould temperature 80-110 °C
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Storage	dry, protected from light
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Properties	Value	Dimension	Test Norm
Mechanical Properties			
Flexural Modulus	2450	MPa	ISO 178
Flexural Stress (3.5% Strain)	76	MPa	ISO 178
Tensile Modulus	2200	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)	9	kJ/m ²	ISO 179/1eA
Notched Impact Strength (Charpy, -40°C)	9	kJ/m ²	ISO 179/1eA
Thermal Properties			
Vicat B50	139	°C	ISO 306
HDT / A (1,8 MPa)	122	°C	ISO 75-1/-2
Rheological Properties			
Melt Index (MVR)	35	cm ³ /10min	ISO 1133
MVR temperature	300	°C	-
MVR load	1.2	kg	-
Shrinkage (24h)	0.6 - 0.9	%	ISO 294-4

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Physical Properties

Density	1190	kg/m ³	ISO 1183
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Optical Properties

Total Transmission T(Y) (d=1,0mm, A, 2°)	20	%	ISO 13468
Total Transmission T(Y) (d=2,0mm, A, 2°)	10.5	%	ISO 13468
Total Transmission T(Y) (d=3,0mm, A, 2°)	6.5	%	ISO 13468
Haze T(Y) (d=1,0 mm, A, 2°)	95	%	ISO 13468
Haze T(Y) (d=2,0 mm, A, 2°)	95	%	ISO 13468
Haze T(Y) (d=3,0 mm, A, 2°)	95	%	ISO 13468
Half Power Angle T(Y) (d=1,0mm, A, 2°)	58	°	-
Half Power Angle T(Y) (d=2,0mm, A, 2°)	59	°	-
Half Power Angle T(Y) (d=3,0mm, A, 2°)	60	°	-

Diagrams

Stress-Strain

