

Technical Data Sheet



ALCOM LDDC PMMA 1000 UV BK1075-21

Base Polymer	Polymethylmethacrylate
Filler/Additive System	special filler
Special Features	high light transmission,UV stabilised,injection moulding grade
Market Segment	Automotive,Lighting
Application Area	lighting,light transparent components
Typical Applications	lamp covers,display elements,operating elements

Pre-Drying Conditions	80 °C in a dry air (dessiccant) dryer for 3-4 h max. moisture content <0,02 %
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Processing Injection Moulding	melt temperature 220-260 °C mould temperature 60-90 °C
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Storage	dry, protected from light
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Properties	Value	Dimension	Test Norm
Mechanical Properties			
Flexural Modulus	3500	MPa	ISO 178
Flexural Strength	115	MPa	ISO 178
Tensile Modulus	3400	MPa	ISO 527
Tensile Strength at Break	70	MPa	ISO 527
Tensile Elongation at Break	3.6	%	ISO 527
Impact Strength (Charpy, 23 °C)	20	kJ/m ²	ISO 179/1eU
Impact Strength (Charpy, -40 °C)	20	kJ/m ²	ISO 179/1eU
Notched Impact Strength (Charpy, 23 °C)	1.5	kJ/m ²	ISO 179/1eA
Notched Impact Strength (Charpy, -40 °C)	1.5	kJ/m ²	ISO 179/1eA
Thermal Properties			
Vicat B50	105	°C	ISO 306
HDT / A (1,8 MPa)	86	°C	ISO 75-1/-2
Rheological Properties			
Melt Index (MVR)	3	cm ³ /10min	ISO 1133
MVR temperature	230	°C	-
MVR load	3.8	kg	-
Shrinkage (24h)	0.5 - 0.8	%	ISO 294-4
Physical Properties			
Density	1190	kg/m ³	ISO 1183
Optical Properties			
Total Transmission T(Y) (d=1,0mm, A, 2°)	30	%	ISO 13468
Total Transmission T(Y) (d=2,0mm, A, 2°)	10	%	ISO 13468

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Haze T(Y) (d=1,0 mm, A, 2°)	8	%	ISO 13468
Haze T(Y) (d=2,0 mm, A, 2°)	12	%	ISO 13468
Half Power Angle T(Y) (d=1,0mm, A, 2°, high res.)	1	°	-
Half Power Angle T(Y) (d=2,0mm, A, 2°, high res.)	1	°	-