

Technical Data Sheet



ALCOM LDDC PMMA 1000 UV 18124 BK1074-11

Base Polymer	Polymethylmethacrylate
Filler/Additive System	UV stabilised
Special Features	translucent
Market Segment	Automotive,Lighting
Application Area	lighting,light transparent components,Black Panel-Technology
Typical Applications	lamp covers,display elements,operating elements

Pre-Drying Conditions	80 °C in a dry air (dessiccant) dryer for 3-4 h 80 °C in an air circulating dryer for 4-6 h max. moisture content <0,02 %
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Processing Injection Moulding	melt temperature 220-280 °C mould temperature 50-80 °C
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Storage	dry, protected from light
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Properties	Value	Dimension	Test Norm
Mechanical Properties			
Flexural Modulus	3300	MPa	ISO 178
Flexural Strength	100	MPa	ISO 178
Tensile Modulus	3300	MPa	ISO 527
Tensile Strength at Break	70	MPa	ISO 527
Tensile Elongation at Break	4	%	ISO 527
Impact Strength (Charpy, 23°C)	21	kJ/m ²	ISO 179/1eU
Impact Strength (Charpy, -40°C)	20	kJ/m ²	ISO 179/1eU
Thermal Properties			
Vicat B50	107	°C	ISO 306
HDT / A (1,8 MPa)	89	°C	ISO 75-1/-2
Rheological Properties			
Melt Index (MVR)	5	cm ³ /10min	ISO 1133
MVR temperature	230	°C	-
MVR load	3.8	kg	-
Shrinkage (24h)	0.6 - 0.8	%	ISO 294-4
Physical Properties			
Density	1180	kg/m ³	ISO 1183
Flammability			
Flammability (1.5 mm)	HB	class	UL 94
Glow Wire (GWFI, 650°C, 1.0mm)	passed	-	DIN EN 60695

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Glow Wire (GWFI, 650°C, 2.0mm)	passed	-	DIN EN 60695
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Optical Properties

Total Transmission T(Y) (d=1,0mm, A, 2°)	41.5	%	ISO 13468
Total Transmission T(Y) (d=4,0mm, A, 2°)	4.5	%	ISO 13468
Haze T(Y) (d=1,0 mm, A, 2°)	3	%	ISO 13468
Haze T(Y) (d=4,0 mm, A, 2°)	4.5	%	ISO 13468
Half Power Angle T(Y) (d=1,0mm, A, 2°)	1	°	-