

Technical Data Sheet



ALCOM LB POM 1000 18008 WT1005-18

Base Polymer	Polyoxymethylene Copolymer
Filler/Additive System	special filler
Special Features	highly reflective, opaque
Market Segment	Automotive, Lighting
Application Area	lighting, light blocking components
Typical Applications	light guides, reflectors

Pre-Drying Conditions	in a dry air (dessiccant) dryer 100-110 °C for 2-3 h in an air circulating dryer 100-110 °C for 3-5 h max. moisture content <0,10 %
Processing Injection Moulding	melt temperature 190-230 °C mould temperature 60-120 °C
Storage	dry, protected from light

Properties	Value	Dimension	Test Norm
Mechanical Properties			
Flexural Modulus	2800	MPa	ISO 178
Flexural Stress (3.5% Strain)	75	MPa	ISO 178
Tensile Modulus	2800	MPa	ISO 527
Tensile Stress at Yield	60	MPa	ISO 527
Tensile Elongation at Yield	7.6	%	ISO 527
Tensile Elongation at Break	20	%	ISO 527
Impact Strength (Charpy, 23°C)	100	kJ/m ²	ISO 179/1eU
Impact Strength (Charpy, -40°C)	100	kJ/m ²	ISO 179/1eU
Notched Impact Strength (Charpy, 23°C)	5	kJ/m ²	ISO 179/1eA
Notched Impact Strength (Charpy, -40°C)	4.5	kJ/m ²	ISO 179/1eA
Thermal Properties			
Vicat B50	149	°C	ISO 306
HDT / A (1,8 MPa)	102	°C	ISO 75-1/-2
DSC (Melt Point)	170	°C	ISO 11357
Rheological Properties			
Melt Index (MVR)	22	cm ³ /10min	ISO 1133
MVR temperature	190	°C	-
MVR load	2.16	kg	-
Shrinkage (lengthwise, 24h)	2.1 - 2.5	%	ISO 294-4
Shrinkage (lateral, 24h)	1.9 - 2.3	%	ISO 294-4

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Physical Properties

Density	1480	kg/m ³	ISO 1183
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Flammability

Flammability (1.5 mm)	HB	class	UL 94
Glow Wire (GWFI, 550 °C, 1.0mm)	passed	-	DIN EN 60695
Glow Wire (GWFI, 600 °C, 2.0mm)	passed	-	DIN EN 60695
Glow Wire (GWIT, 575 °C, 1.0mm)	passed	-	DIN EN 60695
Glow Wire (GWIT, 625 °C, 2.0mm)	passed	-	DIN EN 60695

Optical Properties

Tristimulus Value Y10 of Reflection (d=2,0mm)	90	%	DIN 5033
Tristimulus Value Y10 of Transm.,d=0.5mm	1	%	ISO 13468