Technical Data Sheet

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ALCOM LB POM 1000 18008 WT1005-18

(Last update: 12.04.2024)

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/m²	ISO 179/1eU
Impact Strength (Charpy, -40°C)	100	kJ/m²	ISO 179/1eU
Notched Impact Strength (Charpy, 23°C)	5	kJ/m²	ISO 179/1eA
Notched Impact Strength (Charpy, -40°C)	4.5	kJ/m²	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	cm³/10min	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/m³	ISO 1183
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

Disclaimer
These are guide values and not a specification. The test values mentioned are representative values only and not binding minimum or maximum figures. These test values have been determined on standardised test specimens and can be affected by pigmentation, mould design and processing conditions

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- Medical devices described in list A according IVDD (98/79/EG) or risk class D in EU 2017/746 in vitro diagnostic medical devices (IVDR)
- Bodily implant applications for greater than 30 days (permanent implants) in any risk class
- Critical components in any medical device that supports or sustains human life

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