

Technical Data Sheet



ALCOM AWL 109/10 GF20 WT1142-12LB

Base Polymer	Acrylonitrile/Butadiene/Styrene/Copolymer, modified with Polycarbonate
Filler/Additive System	special filler, 20 % glass fibres
Special Features	highly reflective, opaque, high heat stabilised, high stiffness
Market Segment	Automotive, Lighting
Application Area	lighting, light blocking components
Typical Applications	light guides, reflectors

Pre-Drying Conditions	in a dry air (dessiccant) dryer 80-90 °C for 2-4 h in an air circulating dryer 80-90 °C for 4-8 h max. moisture content <0,02 %
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Processing Injection Moulding	melt temperature 240-270 °C mould temperature 60-100 °C
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Storage	dry, protected from light
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Properties	Value	Dimension	Test Norm
Mechanical Properties			
Flexural Modulus	6500	MPa	ISO 178
Flexural Strength	100	MPa	ISO 178
Tensile Modulus	6800	MPa	ISO 527
Tensile Strength at Break	65	MPa	ISO 527
Tensile Elongation at Break	1.3	%	ISO 527
Impact Strength (Charpy, 23°C)	17	kJ/m ²	ISO 179/1eU
Notched Impact Strength (Charpy, 23°C)	5.5	kJ/m ²	ISO 179/1eA
Ball Indentation Hardness H358/30	145	MPa	ISO 2039-1
Thermal Properties			
Vicat B50	112	°C	ISO 306
HDT / A (1,8 MPa)	110	°C	ISO 75-1/-2
Rheological Properties			
Melt Index (MVR)	5.5	cm ³ /10min	ISO 1133
MVR temperature	240	°C	-
MVR load	5	kg	-
Shrinkage (24h)	0.1 - 0.4	%	ISO 294-4
Physical Properties			
Density	1360	kg/m ³	ISO 1183
Flammability			
Flammability (1.5 mm)	HB	class	UL 94

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(Last update: 17.08.2023)

Optical Properties

Tristimulus Value Y10 of Reflection (d=2,0mm)	83.5	%	DIN 5033
Tristimulus Value Y10 of Transm.,d=0.5mm	0.1	%	ISO 13468