

Technical Data Sheet



ALCOM LD2 MBS 1000 UV 18013 WT1021-18

Base Polymer	Polystyrene Copolymers, other
Special Features	translucent,high light diffusion,light scattering,good flow,processing stabilised,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	65 °C in a dry air (dessiccant) dryer for 2-3 h max. moisture content <0,02 %
Processing Injection Moulding	melt temperature 200-240 °C mould temperature 30-60 °C
Storage	dry, protected from light

Properties	Value	Dimension	Test Norm
Mechanical Properties			
Flexural Modulus	1600	MPa	ISO 178
Flexural Stress (3.5% Strain)	37	MPa	ISO 178
Tensile Modulus	1700	MPa	ISO 527
Tensile Stress at Yield	27	MPa	ISO 527
Tensile Elongation at Yield	11	%	ISO 527
Tensile Elongation at Break	60	%	ISO 527
Impact Strength (Charpy, 23°C)	no break	kJ/m ²	ISO 179/1eU
Impact Strength (Charpy, -40°C)	20	kJ/m ²	ISO 179/1eU
Notched Impact Strength (Charpy, 23°C)	10	kJ/m ²	ISO 179/1eA
Notched Impact Strength (Charpy, -40°C)	2	kJ/m ²	ISO 179/1eA
Thermal Properties			
Vicat B50	61	°C	ISO 306
Rheological Properties			
Melt Index (MVR)	75	cm ³ /10min	ISO 1133
MVR temperature	220	°C	-
MVR load	10	kg	-
Shrinkage (24h)	0.3 - 0.7	%	ISO 294-4
Physical Properties			
Density	1040	kg/m ³	ISO 1183
Flammability			
Glow Wire (GWFI, 550°C, 1.0mm)	passed	-	DIN EN 60695
Glow Wire (GWFI, 550°C, 2.0mm)	passed	-	DIN EN 60695

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(Last update: 27.11.2020)

Optical Properties

Total Transmission T(Y) (d=1,0mm, A, 2°)	77.5	%	ISO 13468
Total Transmission T(Y) (d=2,0mm, A, 2°)	62.5	%	ISO 13468
Total Transmission T(Y) (d=3,0mm, A, 2°)	52.5	%	ISO 13468
Total Transmission T(Y) (d=4,0mm, A, 2°)	45	%	ISO 13468
Haze T(Y) (d=1,0 mm, A, 2°)	93.5	%	ISO 13468
Haze T(Y) (d=2,0 mm, A, 2°)	95.5	%	ISO 13468
Haze T(Y) (d=3,0 mm, A, 2°)	95.5	%	ISO 13468
Haze T(Y) (d=4,0 mm, A, 2°)	95.5	%	ISO 13468
Half Power Angle T(Y) (d=1,0mm, A, 2°)	2	°	-
Half Power Angle T(Y) (d=2,0mm, A, 2°)	28	°	-
Half Power Angle T(Y) (d=3,0mm, A, 2°)	44	°	-
Half Power Angle T(Y) (d=4,0mm, A, 2°)	52	°	-