Technical Data Sheet

Alcom®

MOCOM

ALCOM LDDC PC 1000 UV 17187 BK1192-17

Base Polymer	Polycarbonate
Filler/Additive System	special filler,UV stabilised
Special Features	translucent,light scattering,high light diffusion
Market Segment	Automotive,Lighting
Application Area	light transparent components,Black Panel-Technology
Typical Applications	display elements,operating elements
Approvals	Stellantis Plastic Material Policy

Pre-Drying Conditions	120 °C in a dry air (dessiccant) dryer for 2-4 h 120 °C in an air circulating dryer for 4-12 h max. moisture content <0,02 %
Processing Injection Moulding	melt temperature 270-310 °C mould temperature 80-110 °C
Storage	dry, protected from light

Properties	Value	Dimension	Test Norm
Mechanical Properties			
Flexural Modulus	2450	MPa	ISO 178
Flexural Stress (3.5% Strain)	76	MPa	ISO 178
Tensile Modulus	2400	MPa	ISO 527
Tensile Stress at Yield	66	MPa	ISO 527
Tensile Elongation at Yield	6	%	ISO 527
Tensile Elongation at Break	95	%	ISO 527
Impact Strength (Charpy, 23°C)	no break	kJ/m²	ISO 179/1eU
Impact Strength (Charpy, -40°C)	no break	kJ/m²	ISO 179/1eU
Notched Impact Strength (Charpy, 23°C)	11	kJ/m²	ISO 179/1eA
Notched Impact Strength (Charpy, -40°C)	11	kJ/m²	ISO 179/1eA
Thermal Properties			
Vicat B50	142	°C	ISO 306
HDT / A (1,8 MPa)	124	°C	ISO 75-1/-2
Rheological Properties			
Melt Index (MVR)	20	cm³/10min	ISO 1133
MVR temperature	300	°C	-
MVR load	1.2	kg	-
Shrinkage (24h)	0.6 - 0.9	%	ISO 294-4
Physical Properties			
Density	1190	kg/m³	ISO 1183

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Optical Properties

Total Transmission T(Y) (d=1,0mm, A, 2°)	48	%	ISO 13468
Total Transmission T(Y) (d=2,0mm, A, 2°)	24	%	ISO 13468
Total Transmission T(Y) (d=3,0mm, A, 2°)	12	%	ISO 13468
Total Transmission T(Y) (d=4,0mm, A, 2°)	6	%	ISO 13468
Haze T(Y) (d=1,0 mm, A, 2°)	83	%	ISO 13468
Haze T(Y) (d=2,0 mm, A, 2°)	93.5	%	ISO 13468
Haze T(Y) (d=3,0 mm, A, 2°)	95	%	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°)	1	°	-
Half Power Angle T(Y) (d=2,0mm, A, 2°)	2	°	-
Half Power Angle T(Y) (d=3,0mm, A, 2°)	7	°	-
Half Power Angle T(Y) (d=4,0mm, A, 2°)	23	°	-

Diagrams

Stress-Strain