



LARTON AM K/10

Compound based on Polyphenylene Sulphide (PPS). 3D printing version. Carbon fibres. Intrinsically flame retardant. Very good chemical resistance. Very good thermal properties. Low smoke density and low toxicity index. PFAS-free product.

The products mentioned herein are not suitable for applications in contact with foodstuffs or for potable water transportation, or for toy manufacturing.

The products mentioned herein are not suitable for applications in the pharmaceutical, medical or dental sector.

PHYSICAL PROPERTIES	STANDARD	VALUE MEASURE UNITS
Density		
injection moulding	ISO 1183	1.34 g/cm ³
Linear shrinkage at moulding		
Longitudinal (2.0mm/60MPa)	ISO 294-4	0.10 ÷ 0.20 %
Transversal (2.0mm/60MPa)	ISO 294-4	0.55 ÷ 0.85 %
Dimensional stability	---	40
Moisture absorption		
saturation, in air	ISO 62-4	0.03 %
MECHANICAL PROPERTIES	STANDARD	VALUE MEASURE UNITS
CHARPY impact strength		
Unnotched, at 23°C, injection moulding	ISO 179-1eU	30.0 kJ/m ²
Notched, at 23°C, injection moulding	ISO 179-1eA	4.0 kJ/m ²
MECHANICAL PROPERTIES	STANDARD	VALUE MEASURE UNITS
Tensile elongation		
At break (5 mm/min), 23°C, injection moulding	ISO 527	1.8 %
Tensile strength		
At break (5 mm/min), 23°C, injection moulding	ISO 527	150 MPa
Elastic modulus		
Tensile (1 mm/min), 23°C, injection moulding	ISO 527	11500 MPa
THERMAL PROPERTIES	STANDARD	VALUE MEASURE UNITS
Coefficient of linear thermal expansion (CLTE)		
30°C to 100°C (longitudinal)	ISO 11359	7 × 10 ⁻⁶ K ⁻¹
30°C to 100°C (transversal)	ISO 11359	30 × 10 ⁻⁶ K ⁻¹
VICAT - Softening point		
50 N (heating rate 120°C/h), injection moulding	ISO 306	255 °C
HDT - Heat Deflection Temperature		
0.45 MPa, injection moulding	ISO 75	275 °C
1.81 MPa, injection moulding	ISO 75	260 °C
Thermal conductivity		
in plane	ASTM E 1461-92	0.5 W/(m·K)
through plane	ASTM E 1461-92	0.3 W/(m·K)
, injection moulding	ASTM D 2863	45 %
FLAMMABILITY	STANDARD	VALUE MEASURE UNITS
Flammability rating		
3 mm thickness, injection moulding	UL 94	V-0
1.5 mm thickness, injection moulding	UL 94	V-0
0.75 mm thickness, injection moulding	UL 94	V-0

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FLAMMABILITY	STANDARD	VALUE MEASURE UNITS
GWFI - Glow Wire Flammability Index		
2 mm thickness, injection moulding	IEC 60695-2-12	960 °C
1 mm thickness, injection moulding	IEC 60695-2-12	960 °C
FLAMMABILITY	STANDARD	VALUE MEASURE UNITS
GWIT - Glow Wire Ignition Test		
2 mm thickness, injection moulding	IEC 60695-2-13	775 °C
1 mm thickness, injection moulding	IEC 60695-2-13	775 °C
ELECTRICAL PROPERTIES	STANDARD	VALUE MEASURE UNITS
Electrical resistivity		
surface, dry	ASTM D 257 / D 4496	1E3 ohm
Dielectric strength (short period)		
2 mm thickness, 23°C, dry	ASTM D 149	5 kV/mm



FILAMENT EXTRUSION PARAMETERS

Material drying (at least 4h @ ...)

VALUE MEASURE UNITS

100 °C

Suggested temperature range of filament production

290 - 310 °C

3D PRINTING SUGGESTED CONDITIONS

VALUE MEASURE UNITS

Filament drying conditions

90 °C

Extruder temperature

310 - 330 °C

Chamber conditioning

OFF

Nozzle type

Steel

Closed, thermally controlled chamber suggested

Annealing conditions (per mm)

1h @ 130°C

APPROVALS

Please, check our site or contact LATI for details.

CONTACTS

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