



LARTON AM K/10

Compound based on Polyphenylene Sulphide (PPS). 3D printing version. Carbon fibers. 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 molding	ISO 1183	1.34 g/cm ³
Linear shrinkage at moulding		
Longitudinal (0.078in/8,700psi)	ISO 294-4	0.10 ÷ 0.20 %
Transversal (0.078in/8,700psi)	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°F, injection molding	ISO 179-1eU	14.0 ft.lb/in ²
Notched, at 23°F, injection molding	ISO 179-1eA	1.9 ft.lb/in ²
MECHANICAL PROPERTIES	STANDARD	VALUE MEASURE UNITS
Tensile elongation		
At break (0.196 in/min), 23°F, injection molding	ISO 527	1.8 %
Tensile strength		
At break (0.196 in/min), 23°F, injection molding	ISO 527	21750 psi
Elastic modulus		
Tensile (0.04 in/min), 23°F, injection molding	ISO 527	1650 kpsi
THERMAL PROPERTIES	STANDARD	VALUE MEASURE UNITS
Coefficient of linear thermal expansion (CLTE)		
30°F to 100°F (longitudinal)	ISO 11359	7 × 10 ⁻⁶ K ⁻¹
30°F to 100°F (transversal)	ISO 11359	30 × 10 ⁻⁶ K ⁻¹
VICAT - Softening point		
11 lb (heating rate 250°F/h), injection molding	ISO 306	491 °F
HDT - Heat Deflection Temperature		
66 psi, injection molding	ISO 75	527 °F
264 psi, injection molding	ISO 75	500 °F
Thermal conductivity		
in plane	ASTM E 1461-92	3.5 W/(m·K)
through plane	ASTM E 1461-92	2.1 W/(m·K)
, injection molding	ASTM D 2863	45 %
FLAMMABILITY	STANDARD	VALUE MEASURE UNITS
Flammability rating		
0.125 in. thickness, injection molding	UL 94	V-0
0.060 in. thickness, injection molding	UL 94	V-0
0.030 in. thickness, injection molding	UL 94	V-0

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FLAMMABILITY	STANDARD	VALUE MEASURE UNITS
GWFI - Glow Wire Flammability Index		
0.078 in. thickness, injection molding	IEC 60695-2-12	960 °C
0.040 in. thickness, injection molding	IEC 60695-2-12	960 °C
FLAMMABILITY	STANDARD	VALUE MEASURE UNITS
GWIT - Glow Wire Ignition Test		
0.078 in. thickness, injection molding	IEC 60695-2-13	775 °C
0.040 in. thickness, injection molding	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)		
0.078 in. thickness, 73°F, dry	ASTM D 149	127 kV/mm



FILAMENT EXTRUSION PARAMETERS

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

210 °F

Suggested temperature range of filament production

555 - 590 °F

3D PRINTING SUGGESTED CONDITIONS

VALUE MEASURE UNITS

Filament drying conditions

195 °F

Extruder temperature

590 - 625 °F

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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