

**LARTON AM K/10**

 LATI INDUSTRIA TERMOPLASTICI SPA - *Polyphenylene Sulfide*
**General Information**
**Product Description**

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.

**General**

Material Status	<ul style="list-style-type: none"> <li>Commercial: Active</li> </ul>
Availability	<ul style="list-style-type: none"> <li>Africa &amp; Middle East</li> <li>Asia Pacific</li> <li>Europe</li> <li>Latin America</li> <li>North America</li> </ul>
Filler / Reinforcement	<ul style="list-style-type: none"> <li>Carbon Fiber</li> </ul>
Features	<ul style="list-style-type: none"> <li>Flame Retardant</li> <li>High Heat Resistance</li> <li>PFAS Free</li> </ul>
Uses	<ul style="list-style-type: none"> <li>Additive Manufacturing (3D Printing)</li> <li>High Temperature Applications</li> </ul>

**Properties <sup>1</sup>**

Physical	Nominal Value	Unit	Test Method
Density (73°F)	1.34	g/cm <sup>3</sup>	ISO 1183
Molding Shrinkage <sup>2</sup>			ISO 294-4
Across Flow : 0.0787 in	0.55 to 0.85	%	
Flow : 0.0787 in	0.10 to 0.20	%	
Water Absorption <sup>3</sup> (Saturation, 73°F)	0.030	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus (73°F)	1.67E+6	psi	ISO 527-1/1
Tensile Stress (Break, 73°F)	21800	psi	ISO 527-2/5
Tensile Strain (Break, 73°F)	1.8	%	ISO 527-2/5
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (73°F)	1.9	ft·lb/in <sup>2</sup>	ISO 179/1eA
Charpy Unnotched Impact Strength (73°F)	14	ft·lb/in <sup>2</sup>	ISO 179/1eU
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	527	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	500	°F	ISO 75-2/A
Vicat Softening Temperature	491	°F	ISO 306/B120
CLTE - Flow (86 to 212°F)	3.9E-6	in/in/°F	ISO 11359-2
CLTE - Transverse (86 to 212°F)	1.7E-5	in/in/°F	ISO 11359-2
Thermal Conductivity			ASTM E1461
<sup>4</sup>	2.1	Btu·in/hr/ft <sup>2</sup> /°F	
<sup>5</sup>	3.5	Btu·in/hr/ft <sup>2</sup> /°F	
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	1.0E+3	ohms	ASTM D257
Dielectric Strength (73°F, 0.0787 in, Method A (Short-Time))	130	V/mil	ASTM D149
Comparative Tracking Index <sup>6</sup> (Solution A)	125	V	IEC 60112
Flammability	Nominal Value	Unit	Test Method
Flame Rating			UL 94
0.030 in	V-0		
0.06 in	V-0		
0.12 in	V-0		
Glow Wire Flammability Index			IEC 60695-2-12
0.04 in	1760	°F	
0.08 in	1760	°F	



Glow Wire Ignition Temperature		IEC 60695-2-13
0.04 in	1430 °F	
0.08 in	1430 °F	
Oxygen Index	45 %	ASTM D2863

#### Notes

<sup>1</sup> Typical properties: these are not to be construed as specifications.

<sup>2</sup> 60 MPa

<sup>3</sup> in air

<sup>4</sup> through plane

<sup>5</sup> in plane

<sup>6</sup> without surfactant

