

**LARTON K/40 HM**

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

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

**General**

Material Status	• Commercial: Active
Availability	• Africa & Middle East • Europe • North America • Asia Pacific • Latin America
Filler / Reinforcement	• Carbon Fiber
Features	• Flame Retardant • High Heat Resistance • PFAS Free
Uses	• High Temperature Applications

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

Physical	Nominal Value	Unit	Test Method
Density (73°F)	1.50	g/cm <sup>3</sup>	ISO 1183
Molding Shrinkage <sup>2</sup>			ISO 294-4
Across Flow : 0.0787 in	0.35 to 0.55	%	
Flow : 0.0787 in	0.050 to 0.15	%	
Water Absorption <sup>3</sup> (Saturation, 73°F)	0.020	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus			ISO 527-1/1
73°F	5.08E+6	psi	
140°F	4.21E+6	psi	
194°F	2.47E+6	psi	
248°F	1.74E+6	psi	
302°F	1.39E+6	psi	
Tensile Stress			ISO 527-2/5
Break, 73°F	25400	psi	
Break, 140°F	18100	psi	
Break, 194°F	16700	psi	
Break, 248°F	10900	psi	
Break, 302°F	8700	psi	
Tensile Strain			ISO 527-2/5
Break, 73°F	0.50	%	
Break, 140°F	0.50	%	
Break, 194°F	1.0	%	
Break, 248°F	1.0	%	
Break, 302°F	1.0	%	
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (73°F)	1.7	ft·lb/in <sup>2</sup>	ISO 179/1eA
Charpy Unnotched Impact Strength (73°F)	4.8	ft·lb/in <sup>2</sup>	ISO 179/1eU
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	536	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	518	°F	ISO 75-2/A
Vicat Softening Temperature	491	°F	ISO 306/B120
CLTE - Flow (86 to 212°F)	1.1E-6	in/in/°F	ISO 11359-2
CLTE - Transverse (86 to 212°F)	1.1E-5	in/in/°F	ISO 11359-2
Thermal Conductivity			ASTM E1461



-- 4		2.8 Btu·in/hr/ft <sup>2</sup> /°F	
-- 5		5.6 Btu·in/hr/ft <sup>2</sup> /°F	
<b>Electrical</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Surface Resistivity	50	ohms	ASTM D257
Volume Resistivity	1.0E+2	ohms·cm	ASTM D257
Dielectric Strength (73°F, 0.0787 in, Method A (Short-Time))	51	V/mil	ASTM D149
Comparative Tracking Index <sup>6</sup> (Solution A)	125	V	IEC 60112
<b>Flammability</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
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	

### 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

