

LARPEEK 50 K/30

 LATI INDUSTRIA TERMOPLASTICI SPA - *Polyetheretherketone*
General Information
Product Description

Compound based on Polyetheretherketone (PEEK). 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	• 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 ¹

Physical	Nominal Value	Unit	Test Method
Density (73°F)	1.40	g/cm ³	ISO 1183
Molding Shrinkage ²			ISO 294-4
Across Flow : 0.0787 in	0.50 to 0.75	%	
Flow : 0.0787 in	0.10 to 0.20	%	
Water Absorption ³ (Saturation, 73°F)	0.070	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus			ISO 527-1/1
73°F	3.34E+6	psi	
140°F	3.05E+6	psi	
194°F	2.90E+6	psi	
248°F	2.76E+6	psi	
302°F	2.32E+6	psi	
Tensile Stress			ISO 527-2/5
Break, 73°F	33400	psi	
Break, 140°F	31900	psi	
Break, 194°F	30500	psi	
Break, 248°F	29000	psi	
Break, 302°F	26100	psi	
Tensile Strain			ISO 527-2/5
Break, 73°F	1.8	%	
Break, 140°F	1.9	%	
Break, 194°F	2.1	%	
Break, 248°F	2.3	%	
Break, 302°F	2.5	%	
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (73°F)	4.3	ft·lb/in ²	ISO 179/1eA
Charpy Unnotched Impact Strength (73°F)	24	ft·lb/in ²	ISO 179/1eU
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	644	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	626	°F	ISO 75-2/A
Vicat Softening Temperature	644	°F	ISO 306/B120
CLTE - Flow (86 to 212°F)	2.8E-6	in/in/°F	ISO 11359-2
CLTE - Transverse (86 to 212°F)	1.4E-5	in/in/°F	ISO 11359-2
Thermal Conductivity			ASTM E1461



-- 4		2.8 Btu·in/hr/ft ² /°F	
-- 5		4.9 Btu·in/hr/ft ² /°F	
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	1.0E+2	ohms	ASTM D257
Volume Resistivity	1.0E+6	ohms·cm	ASTM D257
Dielectric Strength (73°F, 0.0787 in, Method A (Short-Time))	76	V/mil	ASTM D149
Comparative Tracking Index ⁶ (Solution A)	125	V	IEC 60112
Flammability	Nominal Value	Unit	Test Method
Flame Rating			UL 94
0.06 in		V-0	
0.12 in		V-0	
Glow Wire Flammability Index (0.08 in)	1760	°F	IEC 60695-2-12
Glow Wire Ignition Temperature (0.08 in)	1520	°F	IEC 60695-2-13

Notes

¹ Typical properties: these are not to be construed as specifications.

² 60 MPa

³ in air

⁴ through plane

⁵ in plane

⁶ without surfactant

