

LARPEEK 10

LATI INDUSTRIA TERMOPLASTICI SPA - *Polyetheretherketone*

General Information

Product Description

Product made of Polyetheretherketone (PEEK). Unfilled. 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	
Features	• Flame Retardant	• High Heat Resistance	• PFAS Free
Uses	• High Temperature Applications		

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density (73°F)	1.30	g/cm ³	ISO 1183
Molding Shrinkage ²			ISO 294-4
Across Flow : 0.0787 in	0.90 to 1.3	%	
Flow : 0.0787 in	0.80 to 1.2	%	
Water Absorption ³ (Saturation, 73°F)	0.10	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus			ISO 527-1/1
73°F	508000	psi	
140°F	479000	psi	
194°F	464000	psi	
248°F	450000	psi	
302°F	334000	psi	
Tensile Stress			ISO 527-2/5
Yield, 73°F	13800	psi	
Yield, 140°F	11600	psi	
Yield, 194°F	8700	psi	
Yield, 248°F	7250	psi	
Yield, 302°F	5080	psi	
Tensile Stress			ISO 527-2/5
Break, 73°F	10900	psi	
Break, 140°F	9430	psi	
Break, 194°F	No Break		
Break, 248°F	No Break		
Break, 302°F	No Break		
Tensile Strain			ISO 527-2/5
Yield, 73°F	5.5	%	
Yield, 140°F	4.4	%	
Yield, 194°F	3.9	%	
Yield, 248°F	3.0	%	
Yield, 302°F	2.0	%	
Tensile Strain			ISO 527-2/5
Break, 73°F	20	%	
Break, 140°F	55	%	
Break, 194°F	> 50	%	
Break, 248°F	> 50	%	



Break, 302°F	> 50 %	
Coefficient of Friction ⁴		Internal Method
Dynamic	0.26	
Static	0.32	
Wear Factor ⁵	790 10 ⁻¹⁰ in ³ ·min/ft·lb·hr	Internal Method
Impact	Nominal Value Unit	Test Method
Charpy Notched Impact Strength (73°F)	2.9 ft·lb/in ²	ISO 179/1eA
Charpy Unnotched Impact Strength (73°F)	No Break	ISO 179/1eU
Thermal	Nominal Value Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	401 °F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	311 °F	ISO 75-2/A
Vicat Softening Temperature	536 °F	ISO 306/B120
CLTE - Flow (86 to 212°F)	2.5E-5 in/in/°F	ISO 11359-2
CLTE - Transverse (86 to 212°F)	2.8E-5 in/in/°F	ISO 11359-2
Thermal Conductivity		ASTM E1461
⁶	2.1 Btu·in/hr/ft ² /°F	
⁷	2.1 Btu·in/hr/ft ² /°F	
Electrical	Nominal Value Unit	Test Method
Surface Resistivity	1.0E+12 ohms	ASTM D257
Dielectric Strength (73°F, 0.0787 in, Method A (Short-Time))	560 V/mil	ASTM D149
Comparative Tracking Index ⁸ (Solution A)	175 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
Oxygen Index	35 %	ASTM D2863

Notes

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

² 60 MPa

³ in air

⁴ ISO 7148-2 (speed 0.126 m/s, load 10N)

⁵ ISO 7148-2 (speed 0.126 m/s, load 10N, path length 13.6km)

⁶ through plane

⁷ in plane

⁸ Without surfactant

