

LAPEX A G/30

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

Compound based on Polyethersulphone (PESU). Glass fibres. Intrinsically flame retardant. Low smoke density and low toxicity index. Very high dimensional stability. PFAS-free product.

General

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

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density (73°F)	1.58	g/cm ³	ISO 1183
Molding Shrinkage ²			ISO 294-4
Across Flow : 0.0787 in	0.60 to 0.80	%	
Flow : 0.0787 in	0.30 to 0.40	%	
Water Absorption			ISO 62
Saturation, 73°F ³	1.6	%	
Saturation, 73°F ⁴	0.60	%	
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus			ISO 527-1/1
73°F	1.35E+6	psi	
140°F	1.22E+6	psi	
194°F	1.17E+6	psi	
248°F	1.16E+6	psi	
302°F	1.09E+6	psi	
Tensile Stress			ISO 527-2/5
Break, 73°F	23200	psi	
Break, 140°F	20300	psi	
Break, 194°F	18100	psi	
Break, 248°F	16700	psi	
Break, 302°F	14500	psi	
Tensile Strain			ISO 527-2/5
Break, 73°F	2.4	%	
Break, 140°F	2.2	%	
Break, 194°F	2.1	%	
Break, 248°F	2.0	%	
Break, 302°F	2.3	%	
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (73°F)	4.8	ft·lb/in ²	ISO 179/1eA
Charpy Unnotched Impact Strength (73°F)	26	ft·lb/in ²	ISO 179/1eU
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	428	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	419	°F	ISO 75-2/A
Vicat Softening Temperature	428	°F	ISO 306/B120
CLTE - Flow (86 to 212°F)	8.3E-6	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
-- 5	1.4 Btu·in/hr/ft ² /°F	
-- 6	1.4 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))	690 V/mil	ASTM D149
Comparative Tracking Index ⁷ (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	
Oxygen Index	40 %	ASTM D2863

Notes

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

² 60 MPa

³ in water

⁴ in air

⁵ through plane

⁶ in plane

⁷ without surfactant

