

**LAPEX A G/20**

 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 <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	0.70 to 0.85	%	
Flow : 0.0787 in	0.35 to 0.50	%	
Water Absorption			ISO 62
Saturation, 73°F <sup>3</sup>	1.6	%	
Saturation, 73°F <sup>4</sup>	0.60	%	
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus			ISO 527-1/1
73°F	943000	psi	
140°F	914000	psi	
194°F	899000	psi	
248°F	856000	psi	
302°F	783000	psi	
Tensile Stress			ISO 527-2/5
Break, 73°F	18900	psi	
Break, 140°F	16700	psi	
Break, 194°F	15200	psi	
Break, 248°F	13800	psi	
Break, 302°F	11600	psi	
Tensile Strain			ISO 527-2/5
Break, 73°F	3.1	%	
Break, 140°F	3.1	%	
Break, 194°F	3.2	%	
Break, 248°F	3.2	%	
Break, 302°F	3.4	%	
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (73°F)	3.8	ft·lb/in <sup>2</sup>	ISO 179/1eA
Charpy Unnotched Impact Strength (73°F)	29	ft·lb/in <sup>2</sup>	ISO 179/1eU
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	419	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	410	°F	ISO 75-2/A
Vicat Softening Temperature	410	°F	ISO 306/B120
CLTE - Flow (86 to 212°F)	1.1E-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
-- 5	1.4 Btu·in/hr/ft <sup>2</sup> /°F	
-- 6	1.4 Btu·in/hr/ft <sup>2</sup> /°F	
<b>Electrical</b>	<b>Nominal Value Unit</b>	<b>Test Method</b>
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 <sup>7</sup> (Solution A)	125 V	IEC 60112
<b>Flammability</b>	<b>Nominal Value Unit</b>	<b>Test Method</b>
Flame Rating		UL 94
0.06 in	V-0	
0.12 in	V-0	
Oxygen Index	41 %	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 water

<sup>4</sup> in air

<sup>5</sup> through plane

<sup>6</sup> in plane

<sup>7</sup> without surfactant

