

LATILUB 80-10T G/40

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

Self-lubricating product based on Polyphenylene Sulphide (PPS). PTFE. Glass fibres. Intrinsically flame retardant. High stiffness.

General

Material Status	• Commercial: Active
Availability	• Africa & Middle East • Europe • North America • Asia Pacific • Latin America
Filler / Reinforcement	• Glass Fiber
Additive	• PTFE Lubricant
Features	• Flame Retardant • Lubricated • High Heat Resistance • Self Lubricating
Uses	• High Temperature Applications

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density (73°F)	1.72	g/cm ³	ISO 1183
Molding Shrinkage ²			ISO 294-4
Across Flow : 0.0787 in	0.60 to 0.90	%	
Flow : 0.0787 in	0.20 to 0.40	%	
Water Absorption ³ (Saturation, 73°F)	0.020	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus			ISO 527-1/1
73°F	2.18E+6	psi	
140°F	2.10E+6	psi	
194°F	2.03E+6	psi	
248°F	1.04E+6	psi	
302°F	841000	psi	
Tensile Stress			ISO 527-2/5
Break, 73°F	24700	psi	
Break, 140°F	21800	psi	
Break, 194°F	19600	psi	
Break, 248°F	14500	psi	
Break, 302°F	10900	psi	
Tensile Strain			ISO 527-2/5
Break, 73°F	1.7	%	
Break, 140°F	1.7	%	
Break, 194°F	2.0	%	
Break, 248°F	3.5	%	
Break, 302°F	4.0	%	
Coefficient of Friction ⁴			Internal Method
Dynamic	0.35		
Static	0.32		
Wear Factor ⁵	1500	10 ⁻¹⁰ in ³ ·min/ft·lb·hr	Internal Method
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)	19	ft·lb/in ²	ISO 179/1eU
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	527	°F	ISO 75-2/B



Deflection Temperature Under Load (264 psi, Unannealed)	500 °F	ISO 75-2/A
Vicat Softening Temperature	482 °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)	2.2E-5 in/in/°F	ISO 11359-2
Thermal Conductivity		ASTM E1461
-- ⁶	2.1 Btu·in/hr/ft ² /°F	
-- ⁷	2.8 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))	460 V/mil	ASTM D149
Comparative Tracking Index ⁸ (Solution A)	125 V	IEC 60112
Flammability	Nominal Value Unit	Test Method
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

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

