

**LATILUB 80-40GRT**

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

Self-lubricating product based on Polyphenylene Sulphide (PPS). Graphite / PTFE. Intrinsically flame retardant.

**General**

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

**Properties <sup>1</sup>**

Physical	Nominal Value	Unit	Test Method
Density (73°F)	1.60	g/cm <sup>3</sup>	ISO 1183
Molding Shrinkage <sup>2</sup>			ISO 294-4
Across Flow : 0.0787 in	0.50 to 0.80	%	
Flow : 0.0787 in	0.45 to 0.75	%	
Water Absorption <sup>3</sup> (Saturation, 73°F)	0.020	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus			ISO 527-1/1
73°F	1.20E+6	psi	
140°F	1.10E+6	psi	
194°F	899000	psi	
248°F	261000	psi	
302°F	123000	psi	
Tensile Stress			ISO 527-2/5
Break, 73°F	7250	psi	
Break, 140°F	6530	psi	
Break, 194°F	5800	psi	
Break, 248°F	3630	psi	
Break, 302°F	2900	psi	
Tensile Strain			ISO 527-2/5
Break, 73°F	0.80	%	
Break, 140°F	1.0	%	
Break, 194°F	1.6	%	
Break, 248°F	4.6	%	
Break, 302°F	5.8	%	
Coefficient of Friction <sup>4</sup>			Internal Method
Dynamic	0.28		
Static	0.24		
Wear Factor <sup>5</sup>	450	10 <sup>-10</sup> in <sup>3</sup> ·min/ft·lb·hr	Internal Method
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (73°F)	0.57	ft·lb/in <sup>2</sup>	ISO 179/1eA
Charpy Unnotched Impact Strength (73°F)	3.3	ft·lb/in <sup>2</sup>	ISO 179/1eU
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	491	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	302	°F	ISO 75-2/A



Vicat Softening Temperature	473 °F	ISO 306/B120
CLTE - Flow (86 to 212°F)	3.1E-5 in/in/°F	ISO 11359-2
CLTE - Transverse (86 to 212°F)	3.1E-5 in/in/°F	ISO 11359-2
Thermal Conductivity		ASTM E1461
-- 6	2.8 Btu·in/hr/ft <sup>2</sup> /°F	
-- 7	5.6 Btu·in/hr/ft <sup>2</sup> /°F	

<b>Electrical</b>	<b>Nominal Value Unit</b>	<b>Test Method</b>
Surface Resistivity	1.0E+5 ohms	ASTM D257
Comparative Tracking Index <sup>8</sup> (Solution A)	125 V	IEC 60112

<b>Flammability</b>	<b>Nominal Value Unit</b>	<b>Test Method</b>
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

<sup>1</sup> Typical properties: these are not to be construed as specifications.

<sup>2</sup> 60 MPa

<sup>3</sup> in air

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

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

<sup>6</sup> through plane

<sup>7</sup> in plane

<sup>8</sup> without surfactant

