

LATILUB 82-20T

LATI INDUSTRIA TERMOPLASTICI SPA - *Polyamide 12*

General Information

Product Description

Self-lubricating product based on Polyamide 12 (PA 12). PTFE.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Additive	• PTFE Lubricant		
Features	• Lubricated	• Self Lubricating	

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density (73°F)	1.14	g/cm ³	ISO 1183
Molding Shrinkage ²			ISO 294-4
Across Flow : 0.0787 in	1.5 to 1.8	%	
Flow : 0.0787 in	0.70 to 1.0	%	
Water Absorption ³ (Saturation, 73°F)	0.60	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus			ISO 527-1/1
73°F	174000	psi	
140°F	72500	psi	
194°F	43500	psi	
248°F	33400	psi	
302°F	21800	psi	
Tensile Stress			ISO 527-2/5
Yield, 73°F	5080	psi	
Yield, 140°F	2180	psi	
Yield, 194°F	1890	psi	
Yield, 248°F	1310	psi	
Yield, 302°F	870	psi	
Tensile Stress			ISO 527-2/5
Break, 73°F	> 7250	psi	
Break, 140°F	> 7250	psi	
Break, 194°F	> 7250	psi	
Break, 248°F	> 7250	psi	
Break, 302°F	> 7250	psi	
Tensile Strain			ISO 527-2/5
Yield, 73°F	> 10	%	
Yield, 140°F	> 10	%	
Yield, 194°F	> 10	%	
Yield, 248°F	> 10	%	
Yield, 302°F	> 10	%	
Tensile Strain			ISO 527-2/5
Break, 73°F	> 50	%	
Break, 140°F	> 50	%	
Break, 194°F	> 50	%	
Break, 248°F	> 50	%	
Break, 302°F	> 50	%	



Coefficient of Friction ⁴		Internal Method
Dynamic	0.24	
Static	0.21	
Wear Factor ⁵	400 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)	203 °F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	104 °F	ISO 75-2/A
Vicat Softening Temperature	275 °F	ISO 306/B120
CLTE - Flow (86 to 212°F)	5.0E-5 in/in/°F	ISO 11359-2
CLTE - Transverse (86 to 212°F)	5.0E-5 in/in/°F	ISO 11359-2
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))	640 V/mil	ASTM D149

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)

