

LATILUB 80-10T K/15

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

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

General

| | | | |
|------------------------|---------------------------------|--------------------|-----------------|
| Material Status | • Commercial: Active | | |
| Availability | • Africa & Middle East | • Europe | • North America |
| | • Asia Pacific | • Latin America | |
| Filler / Reinforcement | • Carbon 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) | 1.46 | g/cm ³ | ISO 1183 |
| Molding Shrinkage ² | | | ISO 294-4 |
| Across Flow : 0.0787 in | 0.45 to 0.65 | % | |
| Flow : 0.0787 in | 0.15 to 0.30 | % | |
| Water Absorption ³ (Saturation, 73°F) | 0.030 | % | ISO 62 |
| Mechanical | Nominal Value | Unit | Test Method |
| Tensile Modulus | | | ISO 527-1/1 |
| 73°F | 2.26E+6 | psi | |
| 140°F | 2.18E+6 | psi | |
| 194°F | 1.81E+6 | psi | |
| 248°F | 827000 | psi | |
| 302°F | 624000 | psi | |
| Tensile Stress | | | ISO 527-2/5 |
| Break, 73°F | 20300 | psi | |
| Break, 140°F | 17400 | psi | |
| Break, 194°F | 15200 | psi | |
| Break, 248°F | 9430 | psi | |
| Break, 302°F | 6530 | psi | |
| Tensile Strain | | | ISO 527-2/5 |
| Break, 73°F | 1.0 | % | |
| Break, 140°F | 1.0 | % | |
| Break, 194°F | 1.1 | % | |
| Break, 248°F | 2.1 | % | |
| Break, 302°F | 2.3 | % | |
| Coefficient of Friction ⁴ | | | Internal Method |
| Dynamic | 0.25 | | |
| Static | 0.22 | | |
| Wear Factor ⁵ | 350 | 10 ⁻¹⁰ in ³ ·min/ft·lb·hr | Internal Method |
| Impact | Nominal Value | Unit | Test Method |
| Charpy Notched Impact Strength | | | ISO 179/1eA |
| -4°F | 1.7 | ft·lb/in ² | |
| 73°F | 2.0 | ft·lb/in ² | |
| Charpy Unnotched Impact Strength | | | ISO 179/1eU |



| | | | |
|--|----------------------|-----------------------------------|--------------------|
| -4°F | | 7.1 ft·lb/in ² | |
| 73°F | | 9.5 ft·lb/in ² | |
| Thermal | Nominal Value | Unit | Test Method |
| Deflection Temperature Under Load (66 psi, Unannealed) | 536 | °F | ISO 75-2/B |
| Deflection Temperature Under Load (264 psi, Unannealed) | 518 | °F | ISO 75-2/A |
| Vicat Softening Temperature | 491 | °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 |
| -- 6 | | 2.1 Btu·in/hr/ft ² /°F | |
| -- 7 | | 3.5 Btu·in/hr/ft ² /°F | |
| Electrical | Nominal Value | Unit | Test Method |
| Surface Resistivity | 1.0E+2 | ohms | ASTM D257 |
| Volume Resistivity | 1.0E+3 | ohms·cm | ASTM D257 |
| Dielectric Strength (73°F, 0.0787 in, Method A (Short-Time)) | 76 | 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

