# LATER 4 G/20-V0

## LATI INDUSTRIA TERMOPLASTICI SPA - *Polybutylene Terephthalate*

### General Information

| | | | |
|---|---|---|---|
| **Product Description** | | | |
| Compound based on Polybutylene Terephthalate (PBT). Glass fibres. Flame retardant, UL94 V-0 class, with brominated flame retardants, free of PBB/PBDE. | | | |
| **General** | | | |
| Material Status | • Commercial: Active | | |
| Availability | • Africa & Middle East<br>• Asia Pacific | • Europe<br>• Latin America | • North America |
| Filler / Reinforcement | • Glass Fiber | | |
| Additive | • Flame Retardant | | |
| Features | • Brominated | • Flame Retardant | |

### Properties [1]

| Physical | Nominal Value | Unit | Test Method |
|---|---|---|---|
| Density (73°F) | 1.53 | g/cm³ | ISO 1183 |
| Molding Shrinkage [2] | | | ISO 294-4 |
| Across Flow : 0.0787 in | 1.1 to 1.4 | % | |
| Flow : 0.0787 in | 0.50 to 0.80 | % | |
| Water Absorption [3] (Saturation, 73°F) | 0.16 | % | ISO 62 |
| **Mechanical** | **Nominal Value** | **Unit** | **Test Method** |
| Tensile Modulus | | | ISO 527-1/1 |
| 73°F | 1.12E+6 | psi | |
| 140°F | 696000 | psi | |
| 194°F | 464000 | psi | |
| 248°F | 363000 | psi | |
| 302°F | 261000 | psi | |
| Tensile Stress | | | ISO 527-2/5 |
| Break, 73°F | 15200 | psi | |
| Break, 140°F | 9430 | psi | |
| Break, 194°F | 8700 | psi | |
| Break, 248°F | 7250 | psi | |
| Break, 302°F | 5800 | psi | |
| Tensile Strain | | | ISO 527-2/5 |
| Break, 73°F | 2.2 | % | |
| Break, 140°F | 8.0 | % | |
| Break, 194°F | 8.5 | % | |
| Break, 248°F | 9.0 | % | |
| Break, 302°F | 12 | % | |
| **Impact** | **Nominal Value** | **Unit** | **Test Method** |
| Charpy Notched Impact Strength (73°F) | 3.8 | ft·lb/in² | ISO 179/1eA |
| Charpy Unnotched Impact Strength (73°F) | 21 | ft·lb/in² | 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) | 374 | °F | ISO 75-2/A |
| Vicat Softening Temperature | 392 | °F | ISO 306/B120 |
| CLTE - Flow (86 to 212°F) | 1.9E-5 | in/in/°F | ISO 11359-2 |
| CLTE - Transverse (86 to 212°F) | 4.2E-5 | in/in/°F | ISO 11359-2 |
| Thermal Conductivity | | | ASTM E1461 |

| | | | |
|---|---|---|---|
| -- [4] | 1.4 | Btu·in/hr/ft²/°F | |
| -- [5] | 1.4 | Btu·in/hr/ft²/°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)) | 530 | V/mil | ASTM D149 |
| Comparative Tracking Index [6] (Solution A) | 200 | 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 | |
| Oxygen Index | 30 | % | ASTM D2863 |

**Notes**

[1] Typical properties: these are not to be construed as specifications.

[2] 60 MPa

[3] in air

[4] through plane

[5] in plane

[6] without surfactant