

**LATICONTER 52/11 GR/70**

 LATI INDUSTRIA TERMOPLASTICI SPA - *Polypropylene Homopolymer*
**General Information**
**Product Description**

High thermal conductivity product based on Polypropylene homopolymer (PPh). Graphite. PFAS-free product.

**General**

|                 |                             |                        |                 |
|-----------------|-----------------------------|------------------------|-----------------|
| Material Status | • Commercial: Active        |                        |                 |
| Availability    | • Africa & Middle East      | • Europe               | • North America |
|                 | • Asia Pacific              | • Latin America        |                 |
| Additive        | • Graphite Powder Lubricant |                        |                 |
| Features        | • Homopolymer               | • PFAS Free            |                 |
|                 | • Lubricated                | • Thermally Conductive |                 |

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

| Physical  | Nominal Value | Unit                          | Test Method  |
|---|---------------|-------------------------------|--------------|
| Density (73°F)  | 1.56          | g/cm <sup>3</sup>             | ISO 1183     |
| Molding Shrinkage <sup>2</sup>                          |               |                               | ISO 294-4    |
| Across Flow : 0.0787 in                                 | 0.45 to 0.85  | %                             |              |
| Flow : 0.0787 in  | 0.45 to 0.80  | %                             |              |
| Water Absorption <sup>3</sup> (Saturation, 73°F)        | 0.030         | %                             | ISO 62       |
| Mechanical  | Nominal Value | Unit                          | Test Method  |
| Tensile Modulus (73°F)                                  | 943000        | psi                           | ISO 527-1/1  |
| Tensile Stress (Break, 73°F)                            | 3630          | psi                           | ISO 527-2/5  |
| Tensile Strain (Break, 73°F)                            | 0.80          | %                             | ISO 527-2/5  |
| Impact  | Nominal Value | Unit                          | Test Method  |
| Charpy Notched Impact Strength                          |               |                               | ISO 179/1eA  |
| -4°F  | 1.3           | ft·lb/in <sup>2</sup>         |              |
| 73°F  | 1.4           | ft·lb/in <sup>2</sup>         |              |
| Charpy Unnotched Impact Strength                        |               |                               | ISO 179/1eU  |
| -4°F  | 2.0           | ft·lb/in <sup>2</sup>         |              |
| 73°F  | 2.3           | ft·lb/in <sup>2</sup>         |              |
| Thermal   | Nominal Value | Unit                          | Test Method  |
| Deflection Temperature Under Load (66 psi, Unannealed)  | 311           | °F                            | ISO 75-2/B   |
| Deflection Temperature Under Load (264 psi, Unannealed) | 257           | °F                            | ISO 75-2/A   |
| Vicat Softening Temperature                             | 221           | °F                            | ISO 306/B120 |
| CLTE - Flow (86 to 212°F)                               | 6.4E-5        | in/in/°F                      | ISO 11359-2  |
| CLTE - Transverse (86 to 212°F)                         | 6.4E-5        | in/in/°F                      | ISO 11359-2  |
| Thermal Conductivity                                    |               |                               | ASTM E1461   |
| <sup>4</sup>  | 17            | Btu·in/hr/ft <sup>2</sup> /°F |              |
| <sup>5</sup>  | 140           | Btu·in/hr/ft <sup>2</sup> /°F |              |
| Electrical  | Nominal Value | Unit                          | Test Method  |
| Surface Resistivity                                     | 80            | ohms                          | ASTM D257    |
| Volume Resistivity                                      | 4.0E+2        | ohms·cm                       | ASTM D257    |

**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> through plane

<sup>5</sup> in plane
