Wednesday, May 13, 2026

# HiFill® PEEK LCF40 2000

**Techmer Polymer Modifiers - *Polyetheretherketone***

Units SI

**Action** **Legend (Open)**

## General Information

| General | |
|---|---|
| Material Status | • Commercial: Active |
| Availability | • North America |
| Filler / Reinforcement | • Long Carbon Fiber, 40% Filler by Weight |
| Features | • Good Flow |
| Appearance | • Black |
| Forms | • Pellets |
| Processing Method | • Injection Molding |

## Properties [1]

| Physical | Nominal Value | Unit | Test Method |
|---|---|---|---|
| Density / Specific Gravity | 1.45 | g/cm³ | ASTM D792 |
| Molding Shrinkage - Flow (3.18 mm) | 0.10 | % | ASTM D955 |
| Water Absorption (24 hr) | 0.12 | % | ASTM D570 |
| **Mechanical** | **Nominal Value** | **Unit** | **Test Method** |
| Tensile Modulus | 40700 | MPa | ASTM D638 |
| Tensile Strength (Break) | 276 | MPa | ASTM D638 |
| Tensile Elongation (Break) | 0.80 | % | ASTM D638 |
| Flexural Modulus | 30300 | MPa | ASTM D790 |
| Flexural Strength | 414 | MPa | ASTM D790 |
| **Impact** | **Nominal Value** | **Unit** | **Test Method** |
| Notched Izod Impact (23°C, 3.18 mm) | 110 | J/m | ASTM D256 |
| Unnotched Izod Impact | 800 | J/m | ASTM D4812 |
| **Hardness** | **Nominal Value** | **Unit** | **Test Method** |
| Rockwell Hardness (R-Scale) | 118 | | ASTM D785 |
| **Thermal** | **Nominal Value** | **Unit** | **Test Method** |
| Deflection Temperature Under Load (1.8 MPa, Unannealed) | 288 | °C | ASTM D648 |
| CLTE - Flow | 1.1E-5 | cm/cm/°C | ASTM D696 |
| **Electrical** | **Nominal Value** | **Unit** | **Test Method** |
| Volume Resistivity | < 1.0E+6 | ohms·cm | ASTM D257 |

## Processing Information

| Injection | Nominal Value | Unit |
|---|---|---|
| Drying Temperature | 149 | °C |
| Drying Time | 2.0 to 4.0 | hr |
| Rear Temperature | 360 to 388 | °C |
| Middle Temperature | 360 to 388 | °C |
| Front Temperature | 360 to 388 | °C |
| Processing (Melt) Temp | 360 to 382 | °C |
| Mold Temperature | 177 to 218 | °C |
| Back Pressure | 0.345 to 0.689 | MPa |
| Screw Speed | 50 to 100 | rpm |

## Notes

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

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