

**HiFill® PEEK 2150 A YAG BK107**

 Techmer Polymer Modifiers - *Polyetheretherketone*
**General Information**
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|                   |                                  |
|-------------------|----------------------------------|
| Material Status   | • Commercial: Active             |
| Availability      | • North America                  |
| Features          | • Laser Markable • Low Viscosity |
| Appearance        | • Black                          |
| Forms             | • Pellets                        |
| Processing Method | • Injection Molding              |

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

|   | Nominal Value | Unit     | Test Method |
|---|---------------|----------|-------------|
| <b>Physical</b>   |               |          |             |
| Density / Specific Gravity                              | 1.30          |          | ASTM D792   |
| Molding Shrinkage - Flow (0.125 in)                     | 1.6E-3        | in/in    | ASTM D955   |
| Water Absorption (24 hr)                                | 0.12          | %        | ASTM D570   |
| <b>Mechanical</b>                                       |               |          |             |
| Tensile Strength (Yield)                                | 13500         | psi      | ASTM D638   |
| Tensile Elongation (Yield)                              | 70            | %        | ASTM D638   |
| Flexural Modulus  | 595000        | psi      | ASTM D790   |
| Flexural Strength                                       | 25000         | psi      | ASTM D790   |
| <b>Impact</b>   |               |          |             |
| Notched Izod Impact (73°F, 0.125 in)                    | 2.2           | ft-lb/in | ASTM D256   |
| <b>Hardness</b>   |               |          |             |
| Rockwell Hardness (R-Scale)                             | 105           |          | ASTM D785   |
| <b>Thermal</b>  |               |          |             |
| Deflection Temperature Under Load (264 psi, Unannealed) | 320           | °F       | ASTM D648   |
| CLTE - Flow   | 2.6E-5        | in/in/°F | ASTM D696   |
| <b>Electrical</b>                                       |               |          |             |
| Volume Resistivity                                      | > 1.0E+15     | ohms·cm  | ASTM D257   |
| Dielectric Strength (Method A (Short-Time))             | 300           | V/mil    | ASTM D149   |
| <b>Flammability</b>                                     |               |          |             |
| Flame Rating (0.16 in)                                  | V-0           |          | UL 94       |

**Processing Information**

|                        | Nominal Value | Unit |
|------------------------|---------------|------|
| <b>Injection</b>       |               |      |
| Drying Temperature     | 300           | °F   |
| Drying Time            | 2.0 to 4.0    | hr   |
| Rear Temperature       | 680 to 730    | °F   |
| Middle Temperature     | 680 to 730    | °F   |
| Front Temperature      | 680 to 730    | °F   |
| Processing (Melt) Temp | 680 to 720    | °F   |
| Mold Temperature       | 350 to 425    | °F   |
| Back Pressure          | 50.0 to 100   | psi  |
| Screw Speed            | 50 to 100     | rpm  |

