



**Product Data Sheet &  
General Processing Conditions**

**RTP 4105  
Polyetherketoneketone (PEKK)  
Glass Fiber**

**PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS**

| <b>PERMANENCE</b>                            | <b>English</b> | <b>SI Metric</b> | <b>ASTM TEST</b> |
|--|----------------|------------------|------------------|
| Primary Additive                             | 30 %           | 30 %             |                  |
| Specific Gravity                             | 1.51           | 1.51             | D 792            |
| Molding Shrinkage<br>1/8 in (3.2 mm) section | 0.0030 in/in   | 0.30 %           | D 955            |

**MECHANICAL**

|  |                            |           |        |
|--|----------------------------|-----------|--------|
| Impact Strength, Izod<br>notched 1/8 in (3.2 mm) section | 1.6 ft-lbs/in              | 85 J/m    | D 256  |
| unnotched 1/8 in (3.2 mm) section                        | 15.0 ft-lbs/in             | 801 J/m   | D 4812 |
| Tensile Strength   | 25500 psi                  | 176 MPa   | D 638  |
| Tensile Elongation                                       | 2.0 %                      | 2.0 %     | D 638  |
| Tensile Modulus  | 1.70 x 10 <sup>6</sup> psi | 11722 MPa | D 638  |
| Flexural Strength  | 38000 psi                  | 262 MPa   | D 790  |
| Flexural Modulus   | 1.60 x 10 <sup>6</sup> psi | 11032 MPa | D 790  |

**THERMAL**

|  |               |              |        |
|--|---------------|--------------|--------|
| Deflection Temperature<br>@ 264 psi (1820 kPa) | > 600 °F      | > 316 °C     | D 648  |
| Ignition Resistance*<br>Flammability**         | V-0 @ 1/16 in | V-0 @ 1.5 mm | D 3801 |

**PROPERTY NOTES**

Data herein is typical and not to be construed as specifications.

Unless otherwise specified, all data listed is for natural or black colored materials. Pigments can affect properties.

\* This rating is not intended to reflect hazards of this or any other material under actual fire conditions.

\*\* Values per RTP Company testing.

**GENERAL PROCESSING FOR INJECTION MOLDING**

|                    | <b>English</b>    | <b>SI Metric</b> |
|--------------------|-------------------|------------------|
| Injection Pressure | 15000 - 20000 psi | 103 - 138 MPa    |
| Melt Temperature   | 710 - 720 °F      | 377 - 382 °C     |
| Mold Temperature   | 300 - 450 °F      | 149 - 232 °C     |
| Drying             | 3 hrs @ 300 °F    | 3 hrs @ 149 °C   |
| Moisture Content   | 0.10 %            | 0.10 %           |
| Dew Point          | -20 °F            | -29 °C           |

**PROCESSING NOTES**

Desiccant Type Dryer Required.