



**Product Data Sheet &  
General Processing Conditions**

**RTP 2285 A  
Polyetherketone (PEK)  
Carbon Fiber**

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

| PERMANENCE                                   | English      | SI Metric | ASTM<br>TEST |
|----------------------------------------------|--------------|-----------|--------------|
| Primary Additive                             | 30 %         | 30 %      |              |
| Specific Gravity                             | 1.41         | 1.41      | D 792        |
| Molding Shrinkage<br>1/8 in (3.2 mm) section | 0.0005 in/in | 0.05 %    | D 955        |

**MECHANICAL**

|                                                          |                            |           |        |
|----------------------------------------------------------|----------------------------|-----------|--------|
| Impact Strength, Izod<br>notched 1/8 in (3.2 mm) section | 1.5 ft-lbs/in              | 80 J/m    | D 256  |
| unnotched 1/8 in (3.2 mm) section                        | 14.0 ft-lbs/in             | 747 J/m   | D 4812 |
| Tensile Strength                                         | 38000 psi                  | 262 MPa   | D 638  |
| Tensile Elongation                                       | 1.6 %                      | 1.6 %     | D 638  |
| Tensile Modulus                                          | 3.80 x 10 <sup>6</sup> psi | 26201 MPa | D 638  |
| Flexural Strength                                        | 55000 psi                  | 379 MPa   | D 790  |
| Flexural Modulus                                         | 3.60 x 10 <sup>6</sup> psi | 24822 MPa | D 790  |

**ELECTRICAL**

|                    |              |              |       |
|--------------------|--------------|--------------|-------|
| Volume Resistivity | < 1E5 ohm.cm | < 1E5 ohm.cm | D 257 |
|--------------------|--------------|--------------|-------|

**THERMAL**

|                                                |               |              |        |
|------------------------------------------------|---------------|--------------|--------|
| Deflection Temperature<br>@ 264 psi (1820 kPa) | > 600 °F      | > 316 °C     | D 648  |
| Ignition Resistance*                           |               |              |        |
| 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**

|                    | English           | SI Metric      |
|--------------------|-------------------|----------------|
| Injection Pressure | 10000 - 20000 psi | 69 - 138 MPa   |
| Melt Temperature   | 725 - 775 °F      | 385 - 413 °C   |
| Mold Temperature   | 355 - 425 °F      | 179 - 218 °C   |
| Drying             | 2 hrs @ 355 °F    | 2 hrs @ 179 °C |
| Moisture Content   | 0.10 %            | 0.10 %         |
| Dew Point          | -20 °F            | -29 °C         |

**PROCESSING NOTES**

Desiccant Type Dryer Required.