



**Product Data Sheet &
General Processing Conditions**

**RTP 2285 HF
Polyetheretherketone (PEEK)
Carbon Fiber
High Flow**

PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS

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

MECHANICAL

| | | | |
|--|----------------------------|-----------|--------|
| Impact Strength, Izod notched 1/8 in (3.2 mm) section | 1.4 ft-lbs/in | 75 J/m | D 256 |
| unnotched 1/8 in (3.2 mm) section | 14.0 ft-lbs/in | 747 J/m | D 4812 |
| Tensile Strength | 39000 psi | 269 MPa | D 638 |
| Tensile Elongation | 1.4 % | 1.4 % | D 638 |
| Tensile Modulus | 4.00 x 10 ⁶ psi | 27580 MPa | D 638 |
| Flexural Strength | 55000 psi | 379 MPa | D 790 |
| Flexural Modulus | 3.70 x 10 ⁶ psi | 25512 MPa | D 790 |

ELECTRICAL

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

THERMAL

| | | | |
|---|----------------------------|----------------------------|--------|
| Deflection Temperature @ 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 |
| Coefficient of Linear Thermal Expansion Flow Direction | 0.1 x 10 ⁻⁵ /°F | 0.2 x 10 ⁻⁵ /°C | E 831 |
| Transverse Direction | 2.5 x 10 ⁻⁵ /°F | 4.5 x 10 ⁻⁵ /°C | E 831 |

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 | 12000 - 18000 psi | 83 - 124 MPa |
| Melt Temperature | 660 - 750 °F | 349 - 399 °C |
| Mold Temperature | 325 - 425 °F | 163 - 218 °C |
| Drying | 3 hrs @ 300 °F | 3 hrs @ 149 °C |
| Moisture Content | 0.10 % | 0.10 % |
| Dew Point | -20 °F | -29 °C |