



**Product Data Sheet &
General Processing Conditions**

**RTP 1005
Polybutylene Terephthalate (PBT)
Glass Fiber**

PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS

| PERMANENCE | English | SI Metric | ASTM TEST |
|----------------------------------------------|-----------------------|------------------|------------------|
| Primary Additive | 30 % | 30 % | |
| Specific Gravity | 1.53 | 1.53 | D 792 |
| Molding Shrinkage 1/8 in (3.2 mm) section | 0.0020 - 0.0040 in/in | 0.20 - 0.40 % | D 955 |

MECHANICAL

| | | | |
|----------------------------------------------------------|----------------------------|----------|--------|
| Impact Strength, Izod notched 1/8 in (3.2 mm) section | 1.8 ft-lbs/in | 96 J/m | D 256 |
| unnotched 1/8 in (3.2 mm) section | 14.0 ft-lbs/in | 747 J/m | D 4812 |
| Tensile Strength | 18000 psi | 124 MPa | D 638 |
| Tensile Elongation | 3.5 % | 3.5 % | D 638 |
| Tensile Modulus | 1.40 x 10 ⁶ psi | 9653 MPa | D 638 |
| Flexural Strength | 27500 psi | 190 MPa | D 790 |
| Flexural Modulus | 1.30 x 10 ⁶ psi | 8964 MPa | D 790 |

THERMAL

| | | | |
|------------------------------------------------|--------------|-------------|-------|
| Deflection Temperature @ 264 psi (1820 kPa) | 415 °F | 213 °C | D 648 |
| Ignition Resistance* Flammability** | HB @ 1/16 in | HB @ 1.5 mm | D 635 |

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 - 15000 psi | 69 - 103 MPa |
| Melt Temperature | 460 - 520 °F | 238 - 271 °C |
| Mold Temperature | 175 - 225 °F | 79 - 107 °C |
| Drying | 4 hrs @ 250 °F | 4 hrs @ 121 °C |
| Moisture Content | 0.03 % | 0.03 % |
| Dew Point | -20 °F | -29 °C |

PROCESSING NOTES

Desiccant Type Dryer Required.