



**Product Data Sheet &  
General Processing Conditions**

**RTP 1005 TFE 15 Z  
Polybutylene Terephthalate (PBT)  
Glass Fiber Reinforced  
PTFE Lubricated  
FDA Compliant Ingredients**

**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                             | 1.65           | 1.65             | 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 | 1.9 ft-lbs/in              | 101 J/m     | D 256  |
| unnotched 1/8 in (3.2 mm) section                        | 13.0 ft-lbs/in             | 694 J/m     | D 4812 |
| Tensile Strength   | 16000 psi                  | 110 MPa     | D 638  |
| Tensile Elongation                                       | 2.0 - 4.0 %                | 2.0 - 4.0 % | D 638  |
| Tensile Modulus  | 1.40 x 10 <sup>6</sup> psi | 9653 MPa    | D 638  |
| Flexural Strength  | 28000 psi                  | 193 MPa     | D 790  |
| Flexural Modulus   | 1.35 x 10 <sup>6</sup> psi | 9308 MPa    | D 790  |

**THERMAL**

|  |              |             |       |
|--|--------------|-------------|-------|
| Deflection Temperature<br>@ 264 psi (1820 kPa) | 405 °F       | 207 °C      | D 648 |
| Ignition Resistance*<br>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**

|                    | <b>English</b>    | <b>SI Metric</b> |
|--------------------|-------------------|------------------|
| 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.