



**Product Data Sheet &  
General Processing Conditions**

**RTP 803 TFE 15  
Acetal (POM)  
Glass Fiber  
PTFE Lubricated**

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

| <b>PERMANENCE</b>                            | <b>English</b>        | <b>SI Metric</b> | <b>ASTM<br/>TEST</b> |
|----------------------------------------------|-----------------------|------------------|----------------------|
| Primary Additive                             | 20 %                  | 20 %             |                      |
| Specific Gravity                             | 1.63                  | 1.63             | D 792                |
| Molding Shrinkage<br>1/8 in (3.2 mm) section | 0.0030 - 0.0060 in/in | 0.30 - 0.60 %    | D 955                |

**MECHANICAL**

|                                                          |                            |             |        |
|----------------------------------------------------------|----------------------------|-------------|--------|
| Impact Strength, Izod<br>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                        | 11.0 ft-lbs/in             | 587 J/m     | D 4812 |
| Tensile Strength                                         | 14000 psi                  | 97 MPa      | D 638  |
| Tensile Elongation                                       | 2.0 - 3.0 %                | 2.0 - 3.0 % | D 638  |
| Tensile Modulus                                          | 0.90 x 10 <sup>6</sup> psi | 6206 MPa    | D 638  |
| Flexural Strength                                        | 21000 psi                  | 145 MPa     | D 790  |
| Flexural Modulus                                         | 0.90 x 10 <sup>6</sup> psi | 6206 MPa    | D 790  |

**ELECTRICAL**

|                    |                    |                    |       |
|--------------------|--------------------|--------------------|-------|
| Volume Resistivity | 1E14 - 1E16 ohm.cm | 1E14 - 1E16 ohm.cm | D 257 |
|--------------------|--------------------|--------------------|-------|

**THERMAL**

|                                                |              |             |       |
|------------------------------------------------|--------------|-------------|-------|
| Deflection Temperature<br>@ 264 psi (1820 kPa) | 300 °F       | 149 °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   | 360 - 425 °F      | 182 - 218 °C     |
| Mold Temperature   | 175 - 225 °F      | 79 - 107 °C      |
| Drying             | 2 hrs @ 250 °F    | 2 hrs @ 121 °C   |
| Moisture Content   | 0.15 %            | 0.15 %           |
| Dew Point          | -25 °F            | -32 °C           |

**PROCESSING NOTES**

Desiccant Type Dryer Required.