



**Product Data Sheet &  
General Processing Conditions**

**RTP 1405 TFE 15  
Polyethersulfone (PES)  
Glass Fiber Reinforced  
PTFE Lubricated**

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

| PERMANENCE                                   | English      | SI Metric | ASTM<br>TEST |
|----------------------------------------------|--------------|-----------|--------------|
| Primary Additive                             | 30 %         | 30 %      |              |
| Specific Gravity                             | 1.68         | 1.68      | D 792        |
| Molding Shrinkage<br>1/8 in (3.2 mm) section | 0.0010 in/in | 0.10 %    | D 955        |

**MECHANICAL**

|                                                          |                            |             |        |
|----------------------------------------------------------|----------------------------|-------------|--------|
| Impact Strength, Izod<br>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                        | 11.0 ft-lbs/in             | 587 J/m     | D 4812 |
| Tensile Strength                                         | 17000 psi                  | 117 MPa     | D 638  |
| Tensile Elongation                                       | 2.0 - 3.0 %                | 2.0 - 3.0 % | D 638  |
| Tensile Modulus                                          | 1.50 x 10 <sup>6</sup> psi | 10342 MPa   | D 638  |
| Flexural Strength                                        | 26000 psi                  | 179 MPa     | D 790  |
| Flexural Modulus                                         | 1.30 x 10 <sup>6</sup> psi | 8964 MPa    | D 790  |

**THERMAL**

|                                                |               |              |        |
|------------------------------------------------|---------------|--------------|--------|
| Deflection Temperature<br>@ 264 psi (1820 kPa) | 415 °F        | 213 °C       | D 648  |
| Ignition Resistance*<br>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 - 15000 psi | 69 - 103 MPa   |
| Melt Temperature   | 650 - 710 °F      | 343 - 377 °C   |
| Mold Temperature   | 275 - 350 °F      | 135 - 177 °C   |
| Drying             | 6 hrs @ 300 °F    | 6 hrs @ 149 °C |
| Moisture Content   | 0.04 %            | 0.04 %         |
| Dew Point          | -25 °F            | -32 °C         |

**PROCESSING NOTES**

Desiccant Type Dryer Required.