



**Product Data Sheet &  
General Processing Conditions**

**RTP 1499 P X 102560  
Polyphenylenesulfone (PPSU)  
PTFE Lubricated**

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

| <b>PERMANENCE</b>                            | <b>English</b>        | <b>SI Metric</b> | <b>ASTM TEST</b> |
|--|-----------------------|------------------|------------------|
| Specific Gravity                             | 1.40                  | 1.40             | D 792            |
| Molding Shrinkage<br>1/8 in (3.2 mm) section | 0.0060 - 0.0080 in/in | 0.60 - 0.80 %    | D 955            |

**MECHANICAL**

|  |                            |          |        |
|--|----------------------------|----------|--------|
| Impact Strength, Izod<br>notched 1/8 in (3.2 mm) section | 3.0 ft-lbs/in              | 160 J/m  | D 256  |
| unnotched 1/8 in (3.2 mm) section                        | No Break                   | No Break | D 4812 |
| Tensile Strength   | 8000 psi                   | 55 MPa   | D 638  |
| Tensile Elongation                                       | > 10.0 %                   | > 10.0 % | D 638  |
| Tensile Modulus  | 0.25 x 10 <sup>6</sup> psi | 1724 MPa | D 638  |
| Flexural Strength  | 12000 psi                  | 83 MPa   | D 790  |
| Flexural Modulus   | 0.30 x 10 <sup>6</sup> psi | 2068 MPa | D 790  |

**ELECTRICAL**

|                     |               |               |                       |
|---------------------|---------------|---------------|-----------------------|
| Volume Resistivity  | > 1E14 ohm.cm | > 1E14 ohm.cm | D 257                 |
| Surface Resistivity | > 1E14 ohm/sq | > 1E14 ohm/sq | D 257<br>ESD STM11.11 |

**THERMAL**

|  |               |              |        |
|--|---------------|--------------|--------|
| Deflection Temperature<br>@ 264 psi (1820 kPa) | 400 °F        | 204 °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**

|                    | <b>English</b>    | <b>SI Metric</b> |
|--------------------|-------------------|------------------|
| 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   |
| Dew Point          | -25 °F            | -32 °C           |