



**Product Data Sheet &  
General Processing Conditions**

**RTP 1399 X 128637 B  
Polyphenylene Sulfide (PPS)  
Thermally Conductive  
Electrically Conductive**

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

| PERMANENCE       | English | SI Metric | ASTM TEST |
|------------------|---------|-----------|-----------|
| Specific Gravity | 1.63    | 1.63      | D 792     |

**MECHANICAL**

|                                   |                            |           |        |
|-----------------------------------|----------------------------|-----------|--------|
| Impact Strength, Izod             |                            |           |        |
| notched 1/8 in (3.2 mm) section   | 0.5 ft-lbs/in              | 27 J/m    | D 256  |
| unnotched 1/8 in (3.2 mm) section | 1.5 ft-lbs/in              | 80 J/m    | D 4812 |
| Tensile Strength                  | 6500 psi                   | 45 MPa    | D 638  |
| Tensile Elongation                | < 1.0 %                    | < 1.0 %   | D 638  |
| Tensile Modulus                   | 1.75 x 10 <sup>6</sup> psi | 12066 MPa | D 638  |
| Flexural Strength                 | 10500 psi                  | 72 MPa    | D 790  |
| Flexural Modulus                  | 1.75 x 10 <sup>6</sup> psi | 12066 MPa | D 790  |

**ELECTRICAL**

|                     |              |              |       |
|---------------------|--------------|--------------|-------|
| Volume Resistivity  | < 1E2 ohm.cm | < 1E2 ohm.cm | D 257 |
| Surface Resistivity | < 1E4 ohm/sq | < 1E4 ohm/sq | D 257 |

**THERMAL**

|                        |                                          |               |           |
|------------------------|------------------------------------------|---------------|-----------|
| Deflection Temperature |                                          |               |           |
| @ 264 psi (1820 kPa)   | 460 °F                                   | 238 °C        | D 648     |
| Ignition Resistance*   |                                          |               |           |
| Flammability**         | V-0 @ 1/16 in                            | V-0 @ 1.5 mm  | D 3801    |
| Thermal Conductivity   |                                          |               |           |
| Through-plane          | 20.83 (BTU.in)/(hr.ft <sup>2</sup> .°F)  | 3.00 W/(m.K)  | E 1530    |
| In-plane               | 152.77 (BTU.in)/(hr.ft <sup>2</sup> .°F) | 22.01 W/(m.K) | E 1461-92 |

**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   | 585 - 625 °F      | 307 - 329 °C   |
| Mold Temperature   | 275 - 350 °F      | 135 - 177 °C   |
| Drying             | 6 hrs @ 300 °F    | 6 hrs @ 149 °C |
| Moisture Content   | 0.04 %            | 0.04 %         |