



**Product Data Sheet &  
General Processing Conditions**

**RTP 1307 MS 5  
Polyphenylene Sulfide (PPS)**

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

| <b>PERMANENCE</b>               | <b>English</b> | <b>SI Metric</b> | <b>ASTM TEST</b> |
|---------------------------------|----------------|------------------|------------------|
| Primary Additive                | 40 %           | 40 %             |                  |
| Specific Gravity                | 1.75           | 1.75             | D 792            |
| Molding Shrinkage               |                |                  |                  |
| 1/8 in (3.2 mm) section         | 0.0020 in/in   | 0.20 %           | D 955            |
| Water Absorption, 24 hrs @ 23°C | 0.020 %        | 0.020 %          | D 570            |

**MECHANICAL**

|                                   |                            |           |        |
|-----------------------------------|----------------------------|-----------|--------|
| Impact Strength, Izod             |                            |           |        |
| notched 1/8 in (3.2 mm) section   | 1.7 ft-lbs/in              | 91 J/m    | D 256  |
| unnotched 1/8 in (3.2 mm) section | 8.0 ft-lbs/in              | 427 J/m   | D 4812 |
| Tensile Strength                  |                            |           |        |
| Break                             | 23500 psi                  | 162 MPa   | D 638  |
| Tensile Elongation                |                            |           |        |
| Break                             | 1.5 %                      | 1.5 %     | D 638  |
| Tensile Modulus                   | 2.40 x 10 <sup>6</sup> psi | 16548 MPa | D 638  |
| Flexural Strength                 | 34000 psi                  | 234 MPa   | D 790  |
| Flexural Modulus                  | 2.30 x 10 <sup>6</sup> psi | 15858 MPa | D 790  |
| Hardness                          |                            |           |        |
| Rockwell, R                       | 123                        | 123       | D 785  |

**THERMAL**

|                        |               |              |        |
|------------------------|---------------|--------------|--------|
| Deflection Temperature |               |              |        |
| @ 264 psi (1820 kPa)   | 505 °F        | 263 °C       | D 648  |
| Ignition Resistance*   |               |              |        |
| Flammability**         | V-0 @ 1/32 in | V-0 @ 0.8 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   | 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 %           |