



**Product Data Sheet &
General Processing Conditions**

**RTP 1399 X 91176
Polyphenylene Sulfide (PPS)
Encapsulation Grade**

PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS

| PERMANENCE | English | SI Metric | ASTM TEST |
|--|-----------------------|------------------|------------------|
| Specific Gravity | 1.73 | 1.73 | D 792 |
| Molding Shrinkage 1/8 in (3.2 mm) section | 0.0020 - 0.0040 in/in | 0.20 - 0.40 % | D 955 |

MECHANICAL

| | | | |
|--|----------------------------|-------------|--------|
| Impact Strength, Izod notched 1/8 in (3.2 mm) section | 1.5 ft-lbs/in | 80 J/m | D 256 |
| unnotched 1/8 in (3.2 mm) section | 6.5 ft-lbs/in | 347 J/m | D 4812 |
| Tensile Strength | 20000 psi | 138 MPa | D 638 |
| Tensile Elongation | 1.0 - 1.5 % | 1.0 - 1.5 % | D 638 |
| Tensile Modulus | 2.50 x 10 ⁶ psi | 17238 MPa | D 638 |
| Flexural Strength | 29000 psi | 200 MPa | D 790 |
| Flexural Modulus | 2.30 x 10 ⁶ psi | 15858 MPa | D 790 |

ELECTRICAL

| | | | |
|---------------------------------|-----|-----|-------|
| Dielectric Constant, 1 MHz, Dry | 3.9 | 3.9 | D 150 |
|---------------------------------|-----|-----|-------|

THERMAL

| | | | |
|--|---------------|--------------|--------|
| Deflection Temperature @ 264 psi (1820 kPa) | 515 °F | 268 °C | D 648 |
| Ignition Resistance* 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 | 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 % |