



**Product Data Sheet &  
General Processing Conditions**

**RTP 400  
Polystyrene (PS)  
General Purpose**

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

<b>PERMANENCE</b>	<b>English</b>	<b>SI Metric</b>	<b>ASTM TEST</b>
Specific Gravity	1.04	1.04	D 792
Molding Shrinkage 1/8 in (3.2 mm) section	0.0030 - 0.0070 in/in	0.30 - 0.70 %	D 955

**MECHANICAL**

Impact Strength, Izod notched 1/8 in (3.2 mm) section	0.4 ft-lbs/in	21 J/m	D 256
unnotched 1/8 in (3.2 mm) section	3.0 ft-lbs/in	160 J/m	D 4812
Tensile Strength	7700 psi	53 MPa	D 638
Tensile Elongation	2.0 - 3.0 %	2.0 - 3.0 %	D 638
Tensile Modulus	0.43 x 10 <sup>6</sup> psi	2965 MPa	D 638
Flexural Strength	12000 psi	83 MPa	D 790
Flexural Modulus	0.46 x 10 <sup>6</sup> psi	3172 MPa	D 790

**THERMAL**

Deflection Temperature @ 264 psi (1820 kPa)	180 °F	82 °C	D 648
@ 66 psi (455 kPa)	205 °F	96 °C	D 648
Ignition Resistance*			
Flammability**	HB @ 1/16 in	HB @ 1.5 mm	D 635

**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	410 - 480 °F	210 - 249 °C
Mold Temperature	100 - 150 °F	38 - 66 °C
Drying	2 hrs @ 180 °F	2 hrs @ 82 °C