



**Product Data Sheet &
General Processing Conditions**

**RTP 400 HI
Polystyrene (PS)
High Impact**

PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS

PERMANENCE	English	SI Metric	ASTM TEST
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	2.0 ft-lbs/in	107 J/m	D 256
unnotched 1/8 in (3.2 mm) section	20.0 ft-lbs/in	1068 J/m	D 4812
Tensile Strength	3500 psi	24 MPa	D 638
Tensile Elongation	> 10.0 %	> 10.0 %	D 638
Tensile Modulus	0.30 x 10 ⁶ psi	2068 MPa	D 638
Flexural Strength	7000 psi	48 MPa	D 790
Flexural Modulus	0.33 x 10 ⁶ psi	2275 MPa	D 790

THERMAL

Deflection Temperature @ 264 psi (1820 kPa)	170 °F	77 °C	D 648
@ 66 psi (455 kPa)	185 °F	85 °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

	English	SI Metric
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