



**Product Data Sheet &  
General Processing Conditions**

**RTP 1800  
Acrylic (PMMA)  
Base Resin**

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

<b>PERMANENCE</b>	<b>English</b>	<b>SI Metric</b>	<b>ASTM TEST</b>
Specific Gravity	1.18	1.18	D 792
Melt Flow Rate @ 230 °C, / 3.8 kg	8.00 g/10 min	8.00 g/10 min	D 1238
Molding Shrinkage 1/8 in (3.2 mm) section	0.0020 - 0.0100 in/in	0.20 - 1.00 %	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	4.4 ft-lbs/in	232 J/m	D 4812
Tensile Strength	9400 psi	65 MPa	D 638
Tensile Elongation	3.5 - 5.5 %	3.5 - 5.5 %	D 638
Tensile Modulus	0.50 x 10 <sup>6</sup> psi	3448 MPa	D 638
Flexural Strength	13000 psi	90 MPa	D 790
Flexural Modulus	0.50 x 10 <sup>6</sup> psi	3448 MPa	D 790

**THERMAL**

Ignition Resistance* Flammability**	HB @ 1/16 in	HB @ 1.5 mm	D 635
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**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	360 - 425 °F	182 - 218 °C
Mold Temperature	175 - 225 °F	79 - 107 °C
Drying	4 hrs @ 200 °F	4 hrs @ 93 °C
Moisture Content	0.02 %	0.02 %
Dew Point	0 °F	-18 °C

**PROCESSING NOTES**

Desiccant Type Dryer Required.