




**Product Data Sheet &  
General Processing Conditions**

**RTP 905  
Polysulfone (PSU)  
Glass Fiber  
UL94**  


Glass reinforced polysulfone is a rigid, tough material which maintains its properties over a wide temperature range. Additional attributes include dimensional stability, self-extinguishing behavior and good processing characteristics.

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

<b>PERMANENCE</b>	<b>English</b>	<b>SI Metric</b>	<b>ASTM TEST</b>
Primary Additive	30 %	30 %	
Specific Gravity	1.46	1.46	D 792
Molding Shrinkage			
1/8 in (3.2 mm) section	0.0010 - 0.0030 in/in	0.10 - 0.30 %	D 955
Water Absorption, 24 hrs @ 23°C	0.200 %	0.200 %	D 570

**MECHANICAL**

Impact Strength, Izod			
notched 1/8 in (3.2 mm) section	1.4 ft-lbs/in	75 J/m	D 256
unnotched 1/8 in (3.2 mm) section	8.5 ft-lbs/in	454 J/m	D 4812
Tensile Strength	16000 psi	110 MPa	D 638
Tensile Elongation	2.0 - 3.0 %	2.0 - 3.0 %	D 638
Tensile Modulus	1.20 x 10 <sup>6</sup> psi	8274 MPa	D 638
Flexural Strength	23500 psi	162 MPa	D 790
Flexural Modulus	1.10 x 10 <sup>6</sup> psi	7584 MPa	D 790

**THERMAL**

Deflection Temperature			
@ 264 psi (1820 kPa)	365 °F	185 °C	D 648
Ignition Resistance*			
Flammability	V-0 @ 1/8 in	V-0 @ 3.0 mm	UL94
Flammability	5VA @ 1/8 in	5VA @ 3.0 mm	UL94
Coefficient of Linear Thermal Expansion			
Flow Direction	1.2 x 10 <sup>-5</sup> /°F	2.2 x 10 <sup>-5</sup> /°C	E 831
Transverse Direction	2.7 x 10 <sup>-5</sup> /°F	4.9 x 10 <sup>-5</sup> /°C	E 831

**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.

**GENERAL PROCESSING FOR INJECTION MOLDING**

	<b>English</b>	<b>SI Metric</b>
Injection Pressure	10000 - 18000 psi	69 - 124 MPa
Melt Temperature	630 - 700 °F	332 - 371 °C
Mold Temperature	200 - 300 °F	93 - 149 °C
Drying	4 hrs @ 275 °F	4 hrs @ 135 °C
Moisture Content	0.15 %	0.15 %
Dew Point	-25 °F	-32 °C