



**Product Data Sheet &  
General Processing Conditions**

**RTP 1201 S-90A  
Ester-based Thermoplastic Polyurethane  
Elastomer (TPUR/TPU)  
Glass Fiber**

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

<b>PERMANENCE</b>	<b>English</b>	<b>SI Metric</b>	<b>ASTM TEST</b>
Primary Additive	10 %	10 %	
Specific Gravity	1.27	1.27	D 792
Molding Shrinkage 1/8 in (3.2 mm) section	0.0010 - 0.0030 in/in	0.10 - 0.30 %	D 955

**MECHANICAL**

Impact Strength, Izod notched 1/8 in (3.2 mm) section	12.3 ft-lbs/in	657 J/m	D 256
unnotched 1/8 in (3.2 mm) section	17.0 ft-lbs/in	908 J/m	D 4812
Tensile Strength	2500 psi	17 MPa	D 638
Tensile Elongation	> 10.0 %	> 10.0 %	D 638
Tensile Modulus	0.05 x 10 <sup>6</sup> psi	345 MPa	D 638
Flexural Strength	1400 psi	10 MPa	D 790
Flexural Modulus	0.04 x 10 <sup>6</sup> psi	276 MPa	D 790
Hardness			
Shore A, 10 s delay	85	85	D 2240
Shore D, instantaneous	55	55	D 2240

**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	365 - 425 °F	185 - 218 °C
Mold Temperature	60 - 140 °F	16 - 60 °C
Drying	2 - 3 hrs @ 200 °F	2 - 3 hrs @ 93 °C
Moisture Content	0.01 %	0.01 %

**PROCESSING NOTES**

Desiccant Type Dryer Required.