



## Product Data Sheet & General Processing Conditions

### RTP 1203 S-90A Ester-based Thermoplastic Polyurethane Elastomer (TPUR/TPU) Glass Fiber

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

PERMANENCE	English	SI Metric	ASTM TEST
Primary Additive	20 %	20 %	
Specific Gravity	1.35	1.35	D 792
Molding Shrinkage 1/8 in (3.2 mm) section	0.0020 - 0.0030 in/in	0.20 - 0.30 %	D 955

#### MECHANICAL

Impact Strength, Izod notched 1/8 in (3.2 mm) section	13.0 ft-lbs/in	694 J/m	D 256
unnotched 1/8 in (3.2 mm) section	No Break	No Break	D 4812
Tensile Strength	6500 psi	45 MPa	D 638
Tensile Elongation	> 30.0 %	> 30.0 %	D 638
Tensile Modulus	0.08 x 10 <sup>6</sup> psi	552 MPa	D 638
Flexural Strength	3200 psi	22 MPa	D 790
Flexural Modulus	0.08 x 10 <sup>6</sup> psi	552 MPa	D 790
Hardness Shore A, 10 s delay	90	90	D 2240

#### 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.

#### GENERAL PROCESSING FOR INJECTION MOLDING

	English	SI Metric
Injection Pressure	8000 - 15000 psi	55 - 103 MPa
Melt Temperature	415 - 425 °F	213 - 218 °C
Mold Temperature	60 - 140 °F	16 - 60 °C
Drying	3 - 4 hrs @ 200 °F	3 - 4 hrs @ 93 °C
Moisture Content	< 0.02 %	< 0.02 %

#### PROCESSING NOTES

Desiccant Type Dryer Required.

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This information is intended to be used only as a guideline for designers and processors of modified thermoplastics. Because design and processing is complex, a set solution will not solve all problems. Observation on a "trial and error" basis may be required to achieve desired results.

Data are obtained from specimens molded under carefully controlled conditions from representative samples of the compound described herein. Properties may be materially affected by molding techniques applied and by the size and shape of the item molded. No assurance can be implied that all molded articles will have the same properties as those listed.

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