



**Product Data Sheet &
General Processing Conditions**

**RTP 1205 S-80A
Ester-based Thermoplastic Polyurethane Elastomer (TPUR/TPU)
Glass Fiber**

PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS

PERMANENCE	English	SI Metric	ASTM TEST
Primary Additive	30 %	30 %	
Specific Gravity	1.40	1.40	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	10.0 ft-lbs/in	534 J/m	D 256
unnotched 1/8 in (3.2 mm) section	12.0 ft-lbs/in	641 J/m	D 4812
Tensile Strength	3000 psi	21 MPa	D 638
Tensile Elongation	> 10.0 %	> 10.0 %	D 638
Tensile Modulus	0.07 x 10 ⁶ psi	483 MPa	D 638
Flexural Strength	2200 psi	15 MPa	D 790
Flexural Modulus	0.05 x 10 ⁶ psi	345 MPa	D 790
Hardness Shore A, 10 s delay	90	90	D 2240

THERMAL

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	365 - 425 °F	185 - 218 °C
Mold Temperature	100 - 140 °F	38 - 60 °C
Drying	6 hrs @ 225 °F	6 hrs @ 107 °C
Moisture Content	0.01 %	0.01 %
Dew Point	0 °F	-18 °C

PROCESSING NOTES

Desiccant Type Dryer Required.