



## Product Data Sheet & General Processing Conditions

### RTP 4203 Thermoplastic Polyimide (TPI) Glass Fiber

Properties are based on annealed specimens.

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

PERMANENCE	English	SI Metric	ASTM TEST
Primary Additive	20 %	20 %	
Specific Gravity	1.45	1.45	D 792
Molding Shrinkage 1/8 in (3.2 mm) section	0.0100 in/in	1.00 %	D 955

#### MECHANICAL

Impact Strength, Izod notched 1/8 in (3.2 mm) section	1.9 ft-lbs/in	101 J/m	D 256
unnotched 1/8 in (3.2 mm) section	16.5 ft-lbs/in	881 J/m	D 4812
Tensile Strength	20000 psi	138 MPa	D 638
Tensile Elongation	3.5 %	3.5 %	D 638
Tensile Modulus	1.10 x 10 <sup>6</sup> psi	7584 MPa	D 638
Flexural Strength	31000 psi	214 MPa	D 790
Flexural Modulus	1.00 x 10 <sup>6</sup> psi	6895 MPa	D 790

#### THERMAL

Deflection Temperature @ 264 psi (1820 kPa)	550 °F	288 °C	D 648
Ignition Resistance* Flammability**	V-0 @ 1/16 in	V-0 @ 1.5 mm	D 3801

#### 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	20000 - 28000 psi	138 - 193 MPa
Melt Temperature	750 - 780 °F	399 - 416 °C
Mold Temperature	350 - 450 °F	177 - 232 °C
Drying	6 hrs @ 400 °F	6 hrs @ 204 °C
Moisture Content	0.01 %	0.01 %
Dew Point	-40 °F	-40 °C

#### PROCESSING NOTES

Desiccant Type Dryer Required.

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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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