



**Product Data Sheet &  
General Processing Conditions**

**RTP 199 X 70815  
Polypropylene (PP)  
Long Glass Fiber  
Chemically Coupled  
Heat Stabilized**

**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	1.13	1.13	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	4.5 ft-lbs/in	240 J/m	D 256
unnotched 1/8 in (3.2 mm) section	17.5 ft-lbs/in	934 J/m	D 4812
Tensile Strength	15950 psi	110 MPa	D 638
Tensile Elongation	2.0 - 3.0 %	2.0 - 3.0 %	D 638
Tensile Modulus	1.01 x 10 <sup>6</sup> psi	6998 MPa	D 638
Flexural Strength	24650 psi	170 MPa	D 790
Flexural Modulus	0.94 x 10 <sup>6</sup> psi	6481 MPa	D 790

**THERMAL**

Deflection Temperature @ 264 psi (1820 kPa)	315 °F	157 °C	D 648
Ignition Resistance*			
Flammability** Automotive**	HB @ 1/16 in ≤ 4.0 in/min @ 1/16 in	HB @ 1.5 mm ≤ 102 mm/min @ 1.6 mm	D 635 FMVSS 302
Glow Wire Ignitability Temperature**	775 °C @ 1/32 in	775 °C @ 0.8 mm	IEC 60695-2-13
Coefficient of Linear Thermal Expansion			
Flow Direction	1.3 x 10 <sup>-5</sup> /°F	2.4 x 10 <sup>-5</sup> /°C	E 831
Transverse Direction	6.8 x 10 <sup>-5</sup> /°F	12.3 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.

\*\* 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	440 - 500 °F	227 - 260 °C
Mold Temperature	90 - 150 °F	32 - 66 °C
Drying	2 hrs @ 175 °F	2 hrs @ 79 °C

**PROCESSING NOTES**

Use a reverse barrel profile. To maximize fiber length, the following injection barrel, screw, and tip designs should be followed. L/D

ratio 16/1 - 22/1, Compression ratio 2:1, Flight depth 0.200 in (5 mm) minimum, in feed section, Screw diameter 0.65 - 0.80 in (16.5 - 20 mm) minimum, Compression section length 12 - 13 diameters, Check ring valve assembly - free flow type no restrictions, Nozzle orifice 0.250 in (6 mm) diameter. Feed throat from hopper to machine must have sufficient opening to prevent bridging of long pellet composition.

16 Feb 2015 MAB

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.

No information supplied by RTP Company constitutes a warranty regarding product performance or use. Any information regarding performance or use is only offered as suggestion for investigation for use, based upon RTP Company or other customer experience. RTP Company makes no warranties, expressed or implied, concerning the suitability or fitness of any of its products for any particular purpose. It is the responsibility of the customer to determine that the product is safe, lawful and technically suitable for the intended use. The disclosure of information herein is not a license to operate under, or a recommendation to infringe any patents.

RTP COMPANY • 580 EAST FRONT STREET • WINONA, MN 55987 • 507-454-6900