



**Product Data Sheet &  
General Processing Conditions**

**RTP 200 FR NH  
Nylon 6/6 (PA)  
Unreinforced  
Flame Retardant  
Halogen Free**



RTP 200 FR NH is designed for full compliance to both global regulatory and ecolabel restrictions, while offering V-0 performance at a low specific gravity and cost. The halogen-free nature of this material provides very low corrosivity to equipment as well as low smoke toxicity combustion characteristics.

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

<b>PERMANENCE</b>	<b>English</b>	<b>SI Metric</b>	<b>ASTM TEST</b>
Specific Gravity	1.18	1.18	D 792
Molding Shrinkage 1/8 in (3.2 mm) section	0.0140 - 0.0180 in/in	1.40 - 1.80 %	D 955
Water Absorption, 24 hrs @ 23°C	0.950 %	0.950 %	D 570

**MECHANICAL**

Impact Strength, Izod notched 1/8 in (3.2 mm) section	0.7 ft-lbs/in	37 J/m	D 256
unnotched 1/8 in (3.2 mm) section	13.0 ft-lbs/in	694 J/m	D 4812
Tensile Strength	9500 psi	66 MPa	D 638
Tensile Elongation	> 10.0 %	> 10.0 %	D 638
Tensile Modulus	0.50 x 10 <sup>6</sup> psi	3448 MPa	D 638
Flexural Strength	16500 psi	114 MPa	D 790
Flexural Modulus	0.47 x 10 <sup>6</sup> psi	3241 MPa	D 790
Hardness Rockwell, R	118	118	D 785

**ELECTRICAL**

Volume Resistivity	> 1E15 ohm.cm	> 1E15 ohm.cm	D 257
--------------------	---------------	---------------	-------

**THERMAL**

Deflection Temperature @ 264 psi (1820 kPa)	160 °F	71 °C	D 648
@ 66 psi (455 kPa)	370 °F	188 °C	D 648
Ignition Resistance*			
Flammability	V-0 @ 1/32 in	V-0 @ 0.8 mm	UL94
Glow Wire Ignitability Temperature	960 °C @ 1/32 in	960 °C @ 0.8 mm	IEC 60695-2-13
Glow Wire Flammability Index	960 °C @ 1/32 in	960 °C @ 0.8 mm	IEC 60695-2-12

**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.

**GENERAL PROCESSING FOR INJECTION MOLDING**

	<b>English</b>	<b>SI Metric</b>
--	----------------	------------------

Injection Pressure	10000 - 18000 psi	69 - 124 MPa
Melt Temperature	490 - 530 °F	254 - 277 °C
Mold Temperature	150 - 225 °F	66 - 107 °C
Drying	4 hrs @ 175 °F	4 hrs @ 79 °C
Moisture Content	0.20 %	0.20 %
Dew Point	0 °F	-18 °C

## PROCESSING NOTES

---

Desiccant Type Dryer Required.

20 Jan 2022 JSD

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