



**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

PERMANENCE	English	SI Metric	ASTM TEST
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 ⁶ psi	3448 MPa	D 638
Flexural Strength	16500 psi	114 MPa	D 790
Flexural Modulus	0.47 x 10 ⁶ psi	3241 MPa	D 790
Hardness Rockwell, R	118	118	D 785

ELECTRICAL

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

	English	SI Metric
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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.