



**Product Data Sheet &
General Processing Conditions**

**RTP 4405.3
High Temperature Nylon (HTN)
Glass Fiber**

PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS

PERMANENCE	English	SI Metric	ASTM TEST
Primary Additive	33 %	33 %	
Specific Gravity	1.45	1.45	D 792
Molding Shrinkage 1/8 in (3.2 mm) section	0.0020 - 0.0030 in/in	0.20 - 0.30 %	D 955
Water Absorption, 24 hrs @ 23°C	0.410 %	0.410 %	D 570

MECHANICAL

Impact Strength, Izod notched 1/8 in (3.2 mm) section	1.4 ft-lbs/in	75 J/m	D 256
unnotched 1/8 in (3.2 mm) section	11.0 ft-lbs/in	587 J/m	D 4812
Tensile Strength	26000 psi	179 MPa	D 638
Tensile Elongation	2.3 %	2.3 %	D 638
Tensile Modulus	1.60 x 10 ⁶ psi	11032 MPa	D 638
Flexural Strength	37000 psi	255 MPa	D 790
Flexural Modulus	1.50 x 10 ⁶ psi	10342 MPa	D 790
Hardness Rockwell, R	125	125	D 785

THERMAL

Deflection Temperature @ 264 psi (1820 kPa)	500 °F	260 °C	D 648
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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.

GENERAL PROCESSING FOR INJECTION MOLDING

	English	SI Metric
Injection Pressure	10000 - 15000 psi	69 - 103 MPa
Melt Temperature	590 - 650 °F	310 - 343 °C
Mold Temperature	275 - 325 °F	135 - 163 °C
Drying	4 hrs @ 175 °F	4 hrs @ 79 °C
Moisture Content	0.10 %	0.10 %
Dew Point	-40 °F	-40 °C

PROCESSING NOTES

Desiccant Type Dryer Required.