



**Product Data Sheet &
General Processing Conditions**

**RTP 4487
High Temperature Nylon (HTN)
Carbon Fiber**

PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS

PERMANENCE	English	SI Metric	ASTM TEST
Primary Additive	40 %	40 %	
Specific Gravity	1.38	1.38	D 792
Molding Shrinkage			
1/8 in (3.2 mm) section	0.0005 - 0.0020 in/in	0.05 - 0.20 %	D 955
Water Absorption, 24 hrs @ 23°C	0.370 %	0.370 %	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	12.0 ft-lbs/in	641 J/m	D 4812
Tensile Strength	36000 psi	248 MPa	D 638
Tensile Elongation	1.1 %	1.1 %	D 638
Tensile Modulus	5.00 x 10 ⁶ psi	34475 MPa	D 638
Flexural Strength	52000 psi	359 MPa	D 790
Flexural Modulus	4.00 x 10 ⁶ psi	27580 MPa	D 790
Hardness			
Rockwell, R	125	125	D 785

THERMAL

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

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.