



**Product Data Sheet &
General Processing Conditions**

**RTP 4403
High Temperature Nylon (HTN)
Glass Fiber**

PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS

| PERMANENCE | English | SI Metric | ASTM TEST |
|--|-----------------------|------------------|------------------|
| Primary Additive | 20 % | 20 % | |
| Specific Gravity | 1.33 | 1.33 | D 792 |
| Molding Shrinkage 1/8 in (3.2 mm) section | 0.0030 - 0.0050 in/in | 0.30 - 0.50 % | D 955 |
| Water Absorption, 24 hrs @ 23°C | 0.480 % | 0.480 % | D 570 |

MECHANICAL

| | | | |
|--|----------------------------|-------------|--------|
| Impact Strength, Izod notched 1/8 in (3.2 mm) section | 1.1 ft-lbs/in | 59 J/m | D 256 |
| unnotched 1/8 in (3.2 mm) section | 5.0 ft-lbs/in | 267 J/m | D 4812 |
| Tensile Strength | 17000 psi | 117 MPa | D 638 |
| Tensile Elongation | 1.0 - 2.0 % | 1.0 - 2.0 % | D 638 |
| Tensile Modulus | 1.10 x 10 ⁶ psi | 7584 MPa | D 638 |
| Flexural Strength | 24000 psi | 165 MPa | D 790 |
| Flexural Modulus | 1.00 x 10 ⁶ psi | 6895 MPa | D 790 |
| Hardness Rockwell, R | 125 | 125 | D 785 |

THERMAL

| | | | |
|--|--------|--------|-------|
| Deflection Temperature @ 264 psi (1820 kPa) | 490 °F | 254 °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.