



## Product Data Sheet & General Processing Conditions

### RTP 284 C Nylon 11 (PA) Carbon Fiber 74% Renewable Resource Content\*

\*Based on % of total compound weight.

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

PERMANENCE	English	SI Metric	ASTM TEST
Primary Additive	25 %	25 %	
Specific Gravity	1.15	1.15	D 792
Molding Shrinkage			
1/8 in (3.2 mm) section	0.0005 - 0.0015 in/in	0.05 - 0.15 %	D 955

#### MECHANICAL

Impact Strength, Izod			
notched 1/8 in (3.2 mm) section	4.0 ft-lbs/in	214 J/m	D 256
unnotched 1/8 in (3.2 mm) section	20.0 ft-lbs/in	1068 J/m	D 4812
Tensile Strength	22000 psi	152 MPa	D 638
Tensile Elongation	4.0 - 5.0 %	4.0 - 5.0 %	D 638
Tensile Modulus	1.90 x 10 <sup>6</sup> psi	13100 MPa	D 638
Flexural Strength	33500 psi	231 MPa	D 790
Flexural Modulus	1.50 x 10 <sup>6</sup> psi	10342 MPa	D 790

#### THERMAL

Ignition Resistance*			
Flammability**	HB @ 1/16 in	HB @ 1.5 mm	D 635

#### 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.

\*\* Values per RTP Company testing.

#### GENERAL PROCESSING FOR INJECTION MOLDING

	English	SI Metric
Injection Pressure	10000 - 15000 psi	69 - 103 MPa
Melt Temperature	435 - 550 °F	224 - 288 °C
Mold Temperature	100 - 150 °F	38 - 66 °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.

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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.

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