



Product Data Sheet & General Processing Conditions

RTP 281
Nylon 6/6 (PA)
Carbon Fiber

PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS

PERMANENCE		STANDARD
Primary Additive	10 %	
Density	1.18 g/cm ³	ISO 1183
Shrinkage, 4 mm Thickness		
Flow direction	0.20 - 0.40 %	ASTM D 955

MECHANICAL

Impact Strength, Izod		
Notched, 4 mm thickness	3 kJ/m ²	ISO 180/1A
Unnotched, 4 mm thickness	26 kJ/m ²	ISO 180/1U
Tensile Strength	145 MPa	ISO 527
Tensile Elongation	2.0 - 3.0 %	ISO 527
Tensile Modulus	9000 MPa	ISO 527
Flexural Strength	215 MPa	ISO 178
Flexural Modulus	7000 MPa	ISO 178

ELECTRICAL

Volume Resistivity	< 1E5 ohm.cm	IEC 60093
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THERMAL

Ignition Resistance*		
Flammability**	HB @ 1.5 mm	ISO 1210

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

Injection Pressure	70 - 125 MPa
Injection Pressure	680 - 1240 bar
Melt Temperature	275 - 300 °C
Mold Temperature	65 - 105 °C
Drying	4 hrs @ 80 °C
Moisture Content	0.20 %
Dew Point	-25 °C

PROCESSING NOTES

Desiccant Type Dryer Required.

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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