



## Product Data Sheet & General Processing Conditions

### RTP 4085 UP Polyphthalamide (PPA) Carbon Fiber Ultra Performance

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

PERMANENCE		STANDARD
Primary Additive	30 %	
Density	1.33 g/cm <sup>3</sup>	ISO 1183
MECHANICAL		
Impact Strength, Izod		
Notched, 4 mm thickness	8 kJ/m <sup>2</sup>	ISO 180/1A
Unnotched, 4 mm thickness	80 kJ/m <sup>2</sup>	ISO 180/1U
Tensile Strength	345 MPa	ISO 527
Tensile Elongation	1.8 %	ISO 527
Tensile Modulus	33000 MPa	ISO 527
Flexural Strength	515 MPa	ISO 178
Flexural Modulus	25500 MPa	ISO 178

#### 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

Injection Pressure	70 - 125 MPa
Injection Pressure	680 - 1240 bar
Melt Temperature	300 - 330 °C
Mold Temperature	135 - 160 °C
Drying	4 - 6 hrs @ 105 °C
Moisture Content	0.05 %
Dew Point	-30 °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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