



**Product Data Sheet &
General Processing Conditions**

**RTP 4087
Polyphthalamide (PPA)
Carbon Fiber Reinforced**

PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS

PERMANENCE		STANDARD
Primary Additive	40 %	
Density	1.38 g/cm ³	ISO 1183
Shrinkage, 4 mm Thickness		
Flow direction	0.05 - 0.20 %	ASTM D 955

MECHANICAL		
Impact Strength, Izod		
Notched, 4 mm thickness	7 kJ/m ²	ISO 180/1A
Unnotched, 4 mm thickness	45 kJ/m ²	ISO 180/1U
Tensile Strength	300 MPa	ISO 527
Tensile Elongation	1.0 %	ISO 527
Tensile Modulus	35000 MPa	ISO 527
Flexural Strength	435 MPa	ISO 178
Flexural Modulus	29000 MPa	ISO 178

ELECTRICAL		
Volume Resistivity	< 1E2 ohm.cm	IEC 60093

THERMAL		
Heat Deflection Temperature		
@ 1.80 MPa	277 °C	ISO 75
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	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.