Product Data Sheet &
General Processing Conditions

RTP 4099 X 134218 B
Polyphthalamide (PPA)
Carbon Fiber
Impact Modified
Ultra Performance

PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS

PERMANENCE	English	SI Metric	ASTM TEST
Primary Additive	25 %	25 %	
Specific Gravity	1.24	1.24	D 792
Molding Shrinkage			
1/8 in (3.2 mm) section	0.0005 - 0.0020 in/in	0.05 - 0.20 %	D 955
MECHANICAL			
Impact Strength, Izod			
notched 1/8 in (3.2 mm) section	3.0 ft-lbs/in	160 J/m	D 256
unnotched 1/8 in (3.2 mm) section	24.0 ft-lbs/in	1281 J/m	D 4812
Tensile Strength	35000 psi	241 MPa	D 638
Tensile Elongation	1.0 - 3.0 %	1.0 - 3.0 %	D 638
Tensile Modulus	3.30 x 10^6 psi	22754 MPa	D 638
Flexural Strength	50000 psi	345 MPa	D 790
Flexural Modulus	2.70 x 10^6 psi	18616 MPa	D 790
ELECTRICAL			
Volume Resistivity	< 1E3 ohm.cm	< 1E3 ohm.cm	D 257
THERMAL			
Deflection Temperature			
@ 264 psi (1820 kPa)	528 °F	276 °C	D 648
Ignition Resistance*			
Flammability	HB @ 1/16 in	HB @ 1.5 mm	UL94
Glow Wire Ignitability Temperature	725 °C @ 1/32 in	725 °C @ 0.8 mm	IEC 60695-2-13
Glow Wire Flammability Index	700 °C @ 1/32 in	700 °C @ 0.8 mm	IEC 60695-2-12

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.

GENERAL PROCESSING FOR INJECTION MOLDING

	English	SI Metric
Injection Pressure	10000 - 18000 psi	69 - 124 MPa
Melt Temperature	575 - 625 °F	302 - 329 °C
Mold Temperature	275 - 325 °F	135 - 163 °C
Drying	4 - 6 hrs @ 225 °F	4 - 6 hrs @ 107 °C
Moisture Content	0.05 %	0.05 %
Dew Point	-25 °F	-32 °C

PROCESSING NOTES

Desiccant Type Dryer Required.

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