



**Product Data Sheet &
General Processing Conditions**

**RTP 4099 X 137099 D
Polyphthalamide (PPA)
Thermally Conductive
Electrically Conductive**

PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS

PERMANENCE	English	SI Metric	ASTM TEST
Specific Gravity	1.63	1.63	D 792

MECHANICAL

Impact Strength, Izod			
notched 1/8 in (3.2 mm) section	0.8 ft-lbs/in	40 J/m	D 256
unnotched 1/8 in (3.2 mm) section	5.0 ft-lbs/in	267 J/m	D 4812
Tensile Strength	15000 psi	103 MPa	D 638
Tensile Elongation	1.0 %	1.0 %	D 638
Tensile Modulus	1.70 x 10 ⁶ psi	11722 MPa	D 638
Flexural Strength	20000 psi	138 MPa	D 790
Flexural Modulus	1.80 x 10 ⁶ psi	12411 MPa	D 790

ELECTRICAL

Surface Resistivity	< 1E6 ohm/sq	< 1E6 ohm/sq	D 257
---------------------	--------------	--------------	-------

THERMAL

Deflection Temperature @ 264 psi (1820 kPa)	> 450 °F	> 232 °C	D 648
Thermal Conductivity			
Through-plane	8.33 (BTU.in)/(hr.ft ² .°F)	1.20 W/(m.K)	E 1530
In-plane	41.66 (BTU.in)/(hr.ft ² .°F)	6.00 W/(m.K)	E 1461-92

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

	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.