



**Product Data Sheet &  
General Processing Conditions**

**RTP 4099 X 117359 D  
Polyphthalamide (PPA)  
LDS Platable  
Glass Fiber  
Mineral**

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

<b>PERMANENCE</b>	<b>English</b>	<b>SI Metric</b>	<b>ASTM TEST</b>
Specific Gravity	1.59	1.59	D 792
Molding Shrinkage 1/8 in (3.2 mm) section	0.0040 in/in	0.40 %	D 955

**MECHANICAL**

Impact Strength, Izod notched 1/8 in (3.2 mm) section	1.0 ft-lbs/in	53 J/m	D 256
unnotched 1/8 in (3.2 mm) section	10.0 ft-lbs/in	534 J/m	D 4812
Tensile Strength	16500 psi	114 MPa	D 638
Tensile Elongation	2.0 %	2.0 %	D 638
Tensile Modulus	1.50 x 10 <sup>6</sup> psi	10342 MPa	D 638
Flexural Strength	24500 psi	169 MPa	D 790
Flexural Modulus	1.40 x 10 <sup>6</sup> psi	9653 MPa	D 790

**ELECTRICAL**

Dielectric Constant, 1 MHz, Dry	3.9	3.9	D 150
Dissipation Factor, 1 MHz, Dry	0.0200	0.0200	D 150

**THERMAL**

Deflection Temperature @ 66 psi (455 kPa)	535 °F	279 °C	D 648
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**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**

	<b>English</b>	<b>SI Metric</b>
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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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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