



**Product Data Sheet &  
General Processing Conditions**

**RTP 2099 X 126216 D  
Bio-Based Polylactic Acid (PLA)  
Fast-Cycle Nucleator  
Glass Fiber  
59% Renewable Resource Content**

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

| <b>PERMANENCE</b> | <b>English</b> | <b>SI Metric</b> | <b>ASTM TEST</b> |
|-------------------|----------------|------------------|------------------|
| Primary Additive  | 40 %           | 40 %             |                  |
| Specific Gravity  | 1.57           | 1.57             | D 792            |

**MECHANICAL**

|                                   |                            |           |        |
|-----------------------------------|----------------------------|-----------|--------|
| Impact Strength, Izod             |                            |           |        |
| notched 1/8 in (3.2 mm) section   | 0.9 ft-lbs/in              | 48 J/m    | D 256  |
| unnotched 1/8 in (3.2 mm) section | 5.0 ft-lbs/in              | 267 J/m   | D 4812 |
| Tensile Strength                  | 16500 psi                  | 114 MPa   | D 638  |
| Tensile Elongation                | 1.0 %                      | 1.0 %     | D 638  |
| Tensile Modulus                   | 2.00 x 10 <sup>6</sup> psi | 13790 MPa | D 638  |
| Flexural Strength                 | 21000 psi                  | 145 MPa   | D 790  |
| Flexural Modulus                  | 2.00 x 10 <sup>6</sup> psi | 13790 MPa | D 790  |

**THERMAL**

|                        |        |        |       |
|------------------------|--------|--------|-------|
| Deflection Temperature |        |        |       |
| @ 264 psi (1820 kPa)   | 300 °F | 149 °C | D 648 |
| @ 66 psi (455 kPa)     | 320 °F | 160 °C | D 648 |

**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 | 8000 - 15000 psi   | 55 - 103 MPa      |
| Melt Temperature   | 340 - 380 °F       | 171 - 193 °C      |
| Mold Temperature   | 180 - 220 °F       | 82 - 104 °C       |
| Drying             | 2 - 6 hrs @ 130 °F | 2 - 6 hrs @ 54 °C |
| Moisture Content   | 0.02 %             | 0.02 %            |
| Dew Point          | -40 °F             | -40 °C            |