

Product Data Sheet & General Processing Conditions

RTP 2099 X 115375 B
Bio-Based Polylactic Acid (PLA)
PLA-PMMA Alloy
Impact Modified
39% Renewable Resource Content

PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS

			ASTM
PERMANENCE	English	SI Metric	TEST
Specific Gravity	1.17	1.17	D 792
MECHANICAL			
Impact Strength, Izod			
notched 1/8 in (3.2 mm) section	2.2 ft-lbs/in	117 J/m	D 256
unnotched 1/8 in (3.2 mm) section	No Break	No Break	D 4812
Tensile Strength	6000 psi	41 MPa	D 638
Tensile Elongation	> 10.0 %	> 10.0 %	D 638
Tensile Modulus	0.30 x 10^6 psi	2068 MPa	D 638
Flexural Strength	10000 psi	69 MPa	D 790
Flexural Modulus	0.35 x 10^6 psi	2413 MPa	D 790
THERMAL			
Deflection Temperature			
@ 66 psi (455 kPa)	135 °F	57 °C	D 648
Ignition Resistance* Flammability**	HB @ 1/16 in	HB @ 1.5 mm	D 635

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

	English	SI Metric	
Injection Pressure	8000 - 15000 psi	55 - 103 MPa	
Melt Temperature	330 - 380 °F	166 - 193 °C	
Mold Temperature	50 - 75 °F	10 - 24 °C	
Drying	2 - 6 hrs @ 125 °F	2 - 6 hrs @ 52 °C	
Moisture Content	0.02 %	0.02 %	
Dew Point	-40 °F	-40 °C	
PROCESSING NOTES			

Desiccant Type Dryer Required.

For detailed processing information, see the PLA Molding Guide on the RTP Company website. www.rtpcompany.com/pla

3 Oct 2011 CAO

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.

No information supplied by RTP Company constitutes a warranty regarding product performance or use. Any information regarding performance or use is only offered as suggestion for investigation for use, based upon RTP Company or other customer experience. RTP Company makes no warranties, expressed or implied, concerning the suitability or fitness of any of its products for any particular purpose. It is the responsibility of the customer to determine that the product is safe, lawful and technically suitable for the intended use. The disclosure of information herein is not a license to operate under, or a recommendation to infringe any patents.

RTP COMPANY • 580 EAST FRONT STREET • WINONA, MN 55987 • 507-454-6900