

Anbio BG4400

Polylactic Acid
AFC Ecoplastics

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Technical Data

Product Description

BG4400 is a biodegradable polymer that may use for injection molding producing heat resistant articles, such as cutlery, trays, cups, baby toys - etc. After crystallization (X'talization), BG4400 will have excellent heat resistance properties. BG4400 is made primarily with polylactic acid polymer (PLA). It will degrade in compost environment producing: carbon dioxide, water and biomass.

Features:

- Good Processing when dried properly (< 1,000 ppm moisture)
- Does not produce noxious off gas
- Agency rating: US FDA 175.300 EU 10/2011 EC 1907/2006
- In-line drying is needed to control moisture which will cause processing issues
- Good Printability without pre-treatment
- Good Weldability
- Meets requirements for compostable degradable polymers: DIN EN 13492 and ASTM D6400
- Bulk storage possible in dry silo (maintaining a -30 0 F dew point).

General

Material Status	• Commercial: Active
Literature ¹	• Technical Datasheet (English)
Availability	• Asia Pacific • North America
Features	• Biodegradable • Gas-fading Resistant • Good Printability • High Heat Resistance • Good Processability • Weldable
Uses	• Cups • Household Goods • Toys • Trays
Agency Ratings	• ASTM D6400 • DIN EN 13492 • EC 1907/2006 (REACH) • EU 10/2011 • FDA 21 CFR 175.300
Forms	• Pellets
Processing Method	• Injection Molding

Physical	Nominal Value Unit	Test Method
Density / Specific Gravity	1.38 g/cm ³	ASTM D792
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	5.0 to 12 g/10 min	ASTM D1238

Mechanical	Nominal Value Unit	Test Method
Tensile Strength	29.4 to 39.2 MPa	ASTM D638
Tensile Elongation (Break)	< 20 %	ASTM D638

Thermal	Nominal Value Unit	Test Method
Heat Deflection Temperature	100 to 120 °C	ASTM D638

Injection	Nominal Value Unit
Rear Temperature	165 °C
Middle Temperature	170 to 180 °C
Front Temperature	180 to 195 °C
Nozzle Temperature	205 °C
Mold Temperature	85 to 100 °C

Notes

¹ These links provide you with access to supplier literature. We work hard to keep them up to date; however you may find the most current literature from the supplier.

² Typical properties: these are not to be construed as specifications.

