

## Technical Data Sheet

### 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 °F dew point).

Physical Property	Nominal Value	Unit	Test Method
Density	1.38	g/cc	ASTM D792
Melt Flow Index (MFI) (190 °C/ 2.16 kg)	5.0-12.0	g/10 min	ASTM D1238
HDT	100-120	°C	ASTM D648
Tensile Strength	300-400	kgf/cm <sup>2</sup>	ASTM D638
Tensile Elongation	< 20	%	ASTM D638

### Process Information

BG4400 needs to be process with low moisture content. It is recommended that the moisture level be less than 1,000 (preferable less than 700 ppm). Part in mold X'talization may be achieved with prudent application of processing parameters.

Processing Parameters to Achieve X'talization	
	°C
Barrel-Rear	165
Barrel-Middle	170-180
Barrel-Front	180-195
Nozzle	205
Mold Temp. for X'talization	85-100
Mold Time for X'talization	20-40 s

AFC Ecoplastics | (<https://anbio.com.vn/> | [info@anbio.com.vn](mailto:info@anbio.com.vn))

The information presented here was acquired by AFC Ecoplastics from the producer of the product or material or original provider. However, AFC Ecoplastics assumes no responsibility or liability for the accuracy of the information contained on this website and strongly encourages that upon final product or material selection information is validated with the manufacturer.