

BG2000 - TECHNICAL DATA SHEET

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PRODUCT DESCRIPTION

BG2000 is a biodegradable Compound with 20% bio-based, composed primarily from PBAT- a kind of Biodegradable resin. This compound for film blowing applications.

APPLICATION

BG2000 is designed for blown film processing. With low MI, BG2000 can produce very thin film (Minimum : 13 microns). BG2000 can be processed on conventional blown film equipment. The material is stable in the molten state, provided that proper drying procedures are followed.

Main application: Rollbag, Compost bag, Heavy weight shopping bag etc and more

STRENGTH OF ANBIO BG2000

- ① BG2000 is printable, weldable and can be mechanically recycled
- ② When incinerated, BG2000 does not generate any noxious side-products and hazardous gases.
- ③ BG2000 is competitively priced
- ④ BG2000 is easy to make an extrusion on conventional blow machine
- ⑤ Excellent down-gauging potential (low film thickness possible)
- ⑥ High wet- resistance when used for organic waste collection
- ⑦ Good tensile strength and therefore carrying capacity
- ⑧ Balanced combination of puncture and tear resistance
- ⑨ We can supply to a customer grade that satisfies the individual customer's need

PROCESSING INFORMATION

In-line drying is recommended for BG2000 resins. A moisture content of less than 0.25% (25 ppm) is recommended to prevent viscosity degradation. Polymer is supplied in foil lined boxes or bags dried to <0.25% when packaged.

Item	Unit	Value
Cylinder	°C	130~150
Head	°C	150~160
Dies	°C	160~170

The resin should not be exposed to atmospheric conditions after drying. Keep the package sealed until ready to use and promptly dry and reseal any unused material. The drying curves for both amorphous and crystalline resins are shown to the right. It is important to consider accurate initial moisture, when calculating necessary drying time.

Film's physical property is the best at BUR (Blow-Up Ratio): 3-4.

**AVERAGE PHYSICAL AND MECHANICAL PROPERTIES**

Item	Conditions	Method	Unit	Value
Density	-	ASTM D792	g/ml	1.25
MFI	190°C/2.16kg	ASTM D1238	g/10min	2~5
Acid Value	-	ASTM D974	KOHmg/g	<1.5
Melt Temperature	-	ASTM 3418	°C	120~125
Tensile Strength (MD)	-	ASTM D638	kgf/cm ²	>110
Tensile Strength (TD)	-	ASTM D638	kgf/cm ²	>100
Elongation (MD)	-	ASTM D638	%	>300
Elongation (TD)	-	ASTM D638	%	>400
Tear Strength (MD)	-	ASTM D1004	kgf/cm	>110

* Thickness 30 μ m

BULK STORAGE RECOMMENDATIONS

The resin silos recommended and used by Anbio are designed to maintain dry air in the silo and to be isolated from the outside air. This design would be in contrast to an open, vented to atmosphere system that we understand to be a typical polystyrene resin silo. Key features that are added to a typical (example: polystyrene) resin silo to achieve this objective include a cyclone and rotary valve loading system and pressure vessel relief valves. The dry air put to the system is sized to the resin flow rate out of the silo. Not too much dry air would be needed and there may be excess instrument air (-30°F dew point) available in the plant to meet the needs for dry air. Our estimate is 10 scfm for a 20,000 lb/hr rate resin usage. Typically, resin manufacturers specify aluminum or stainless steel silos for their own use and avoid epoxy-lined steel.