

# Bio dolomer

*Biodegradable Polymers*

**Product Information**

*Version 1.4 Mars 2018*

## *Biodolomer® B*

*Biodegradable compound for bottle blowing.  
Contain 70 - 90 % of renewable resources*

® = Biodolomer is a registered trademark of GAIA

### **Product Description**

Biodolomer® B is a biodegradable biomaterial developed for the bottle blowing process.

It is basically a compound of a biodegradable aliphatic-aromatic copolyester (PBAT), polylactic acid (PLA) and calcium carbonate.

Bidolomer® B consists of 70 - 90 % of renewable resources depending on application.

**GAIA BioMaterials AB**



**Makadamgatan 5, 254 64 Helsingborg  
Sweden**



**+46 (0)42 300 39 99**



**info@gaiabiomaterials.com**

**Product description**

Our Biodolomer® B exhibits the following properties:

- Opaque
- High strength and stiffness
- Good thermo stability up to 210 °C
- Good processability
- Printable

**Compostability and Biodegradability**

Biodolomer® B fulfills the requirements of the existing standards for compostable and biodegradable polymers, because it can be degraded by microorganisms.

The biodegradation process in soil depends on the specific environment (climate, soil quality, population of microorganisms).

**Food Regulatory Status**

Biodolomer® B is one of the few compostable polymers, which complies in its composition with the European food stuff legislation for food contact, EU Directive 10 / 2011 / EC with amendment 2016/1416 and US food contact notification for the main components: e. g. FCN 178, 475 and 907. Specific limitations and more details are given on request. The converter or packer has to check the suitability of the article for the application.

**Form Supplied and Storage**

Biodolomer® B is supplied as pellets. Temperatures during transportation and storage may not exceed 60 °C at any time. Storage time of unopened bags may not surpass 12 month at room temperature (23 °C).

**Basic Material Properties of Biodolomer® B**

\* see Quality Control

Property	Unit	Test Method	Biodolomer® B
Mass Density	g/cm <sup>3</sup>	ISO 1183	1.28
MFI 190 °C, 2.16 kg	g/10min	ISO 1133	3 - 4
Melting Points	°C	DSC	110 - 120
Vicat VST B/50	°C	ISO 306	57

**Typical Material Properties of Biodolomer® B**

\*not to be construed as specifications



Property	Unit	Test Method	Biodolomer® B
Transmission	%	ASTM D 1003	Opaque
Tensile Strength	MPa	ISO 527	60 / 45
Ultimate Elongation	%	ISO 527	65 / 40
Permeation rates:			
Oxygen	cm <sup>3</sup> / (m <sup>2</sup> · d · bar)	ASTM D 3985	28
Water vaport	g / (m <sup>2</sup> · d)	ASTM F 1249	3.5

**Note**

The information submitted in this document is based on our current knowledge and experience. In view of the many factors that may affect processing and application, these data do not relieve processors of the responsibility of carrying out their own tests and experiments; neither do they imply any legally binding assurance for a special purpose. It is the responsibility of those to whom we supply our products to ensure that any proprietary rights and existing laws and legislation are observed. (march 2018).