



Beyond plastics

Product Information

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## *Biodolomer® F*

Biodegradable Compound for film

® = Biodolomer is a registered trademark of GAIA

Product Description

Biodolomer® F is a biodegradable biomaterial developed for the filmblowing process.

Biodolomer® F is based on renewable and recycled resources.

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Biodolomer® F exhibits the following properties:

- Processing temperature between 155 - 170 Celsius
- Good process-ability on conventional blown film lines
- Film qualities from thin to thick possible
- Good mechanical properties
- Wet strength (e. g. Organic waste bag applications)
- Good welding properties within Biodolomer family of materials
- Ready to use grade
- Decor printable by flexo printing, no corona treatment needed

#### **Certification of Compostability and Biodegradability**

Biodolomer® F fulfills the requirements of the existing standards for compostable and biodegradable polymers, because it is degraded by microorganisms. Biodolomer® create no micro plastics. The biodegradation process in soil depends on the specific environment (climate, soil quality, population of microorganisms).

#### **Food Regulatory Status**

Biodolomer® F 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 2019/1338 and US food contact notification for the main components: FCN 907.

#### **Form Supplied and Storage**

Biodolomer® F is supplied as lenticular pellets in 1 t big bags. any time. Storage time of unopened bags at least 12 month at room temperature (23 °C).

#### **Applications**

Biodolomer® F has been developed for the conversion to flexible films using a film blow or cast process. In view of numerous factors influencing functionality and shelf life of Biodolomer® films and finished articles made thereof the production parameters have to be tested by the converters before utilization. Additionally sufficient field tests are required to ensure the right functionality of the articles made from Biodolomer® F.

## Typical Basic Material Properties of Biodolomer® F

\* see Quality Control

Property	Unit	Test Method	Biodolomer® F
Mass Density	g/cm <sup>3</sup>	ISO 1183	1.45
Bulk Density	kg / m <sup>3</sup>	DIN EN ISO 60	800
MFI190 °C, 2.16 kg	g/10min.	ISO 1133	3-4
Melting Temp	°C	DSC	115~120
Heat Distortion Temp (HDT)	°C	DSC	88

## Typical Properties of Biodolomer® Blown Film, 25 µm

\*not to be construed as specifications



Property	Unit	Test Method	Biodolomer® F
Tensile Modulus MD/TD	MPa	ISO 527	280 /120
Tensile Strength MD/TD	MPa	ISO 527	19 / 18
Ultimate Elongation MD/TD	%	ISO 527	150 / 166
Dart Drop	g	ASTM D 1709-04 Method A	200
Tear Resistance	mN	DIN EN ISO 6383-2	1780 / 400

## 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.

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