BioDoloMer®

Beyond plastics

Product Information

Version 1.4 *October 2020*
B--900370

Biodolomer® F (pla-free)

Product Description

Biodolomer® F is a biodegradable biomaterial without PLA.

It is basically a compound of a biodegradable aliphatic-aromatic copolyester, calcium carbonate and plant based oils.

Biodolomer® F offers a great down gauging potential needed for very thin film applications like T-shirt bags, organic waste bags, and carry bags etc.

Biodolomer® is manufactured in Helsingborg, Sweden

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Biodolomer® F exhibits the following properties:

- Processing temperature between 160 - 180 Celsius
- Excellent process-ability on conventional blown film lines
- Down gauging to 10 µm possible, typical thicknesses: 15 -120 µm
- Good mechanical properties
- Good bag manufacturing process
- Wet strength (e. g. Organic waste bag applications)
- Excellent welding properties
- Ready to use grade
- Decor printable by water based flexo printing
- No corona treatment needed
- Contains mostly of renewable resources
- PLA-free grade for quick biodegration in low temp environments.

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.

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

Applications

Biodolomer® F has been developed for the conversion to flexible films using a blown film 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/cm³	ISO 1183	1.36
Bulk Density	kg / m³	DIN EN ISO 60	800
MFI190 °C, 2.16 kg	g/10min.	ISO 1133	2 - 3
Melting Temp	°C	DSC	118
Heat Distortion Temp (HDT)	°C	DSC	88

Typical Properties of Biodolomer® Blown Film, 20 µm

***not to be construed as specifications**

Property	Unit	Test Method	Biodolomer® F
Tensile Modulus MD/TD	MPa	ISO 527	330 /280
Yield Stress MD/TD	MPa	ISO 527	20 / 18
Tensile Strength MD/TD	MPa	ISO 527	34 / 28
Strain at break MD/TD	%	ISO 527	620 / 800
Dart Drop	g	ASTM D 1709-04 Method A	250
Tear Resistance	mN	DIN EN ISO 6383-2	1980 / 600

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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