

Technical data sheet

Product name: Bio-Flex® GF30
Date of issue: 30 September 2019

Version: 1.0

Designation of product, preparation and manufacturer

Trade name: Bio-Flex® GF30

Use of product: Polymer compound based on PLA and other copolyesters, reinforced with glassfiber. The biobased carbon content (BCC) is > 70 % (calculated). Suitable for injection moulding applications.

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Mechanical properties

Modulus of elasticity	7,250	[MPa]	ISO 527
Tensile strength	57	[MPa]	ISO 527
Tensile strain at tensile strength	1	[%]	ISO 527
Tensile stress at break	56	[MPa]	ISO 527
Tensile strain at break	2	[%]	ISO 527
Notched impact strength (Charpy), RT	6	[kJ/m²]	ISO 179-1/1 eA
Impact Strength (Charpy), RT	21	[kJ/m²]	ISO 179-1/1 eU

The values listed have been established on standardized test specimens (DIN EN ISO 3167, type A) at standard temperature and humidity conditions.

Physical properties

Melt volume rate (190 °C/2.16 kg)	7	[cm³/10 min]	ISO 1133
Melting temperature	> 155	[°C]	ISO 3146-C
Vicat A softening temperature	74	[°C]	ISO 306
Density	1.46	[g/cm³]	ISO 1183

The figures should be regarded as guide values only. Under certain conditions the properties can be influenced to a significant extent by the processing conditions.

Processing and Handling Information

General

Bio-Flex® is a biodegradable plastic based on PLA and other biopolymers. Moisture content can lead to hydrolysis. Residual moisture content of more than 0.2 % can result in fish eyes and/or pin holes during processing.

Drying

We recommend drying Bio-Flex® at 60°C for a period of 2 - 4 hours.

Storage

If not specified otherwise product life is 6 month after shipment from Sellers warehouse if product is in its original packaging, stored under dry (max. 70% relative humidity) and dark conditions (not exposed to sunlight at a temperature of 5 °C to max. 30°C (ambient temperature)). It is important to observe that a major drop in external air temperature (e.g. during transportation) can result in a development of water condensate. Prior to the processing of the material, it should be ensured that there is no condensate on the packaged product.

Finished products made from Bio-Flex® must be stored dry and cold. It is recommended to wrap goods in black PE liners to protect them against moisture and UV radiation. Storage time depends on processing parameters and of climate conditions in the respective area. Because of these essential and complex interacting parameters, FKUR Kunststoff GmbH cannot give any shelf life guarantees for finished products. Please notice that the conditions mentioned above depend on experience of our customers. Each customer should execute individual storage tests according to product specifications and storage requirements.

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