

## Technical data sheet

**Product name:** Bio-Flex® F 1137

Date of issue: 06 January 2017

Version: 2.0

### Designation of product, preparation and manufacturer

Trade name: Bio-Flex® F 1137

Use of product: Biodegradable and compostable compound for film extrusion, certified according to EN 13432 with a maximum thickness of 60 µm. Used in applications such as waste bags.

Manufacturer: FKUR Kunststoff GmbH  
Siemensring 79  
D - 47 877 Willich  
Phone: + 49 (0) 2154 / 92 51-0  
Fax: + 49 (0) 2154 / 92 51-51  
Mail: info@fkur.com  
Web: www.fkur.com

### Mechanical properties

Modulus of elasticity	310	[MPa]	ISO 527
Tensile strength	16	[MPa]	ISO 527
Tensile strain at tensile strength	415	[%]	ISO 527
Tensile stress at break	14	[MPa]	ISO 527
Tensile strain at break	425	[%]	ISO 527
Flexural modulus	305	[MPa]	ISO 178
Flexural strain at break	no break	[%]	ISO 178
Flexural stress at 3.5 % strain	11.5	[MPa]	ISO 178
Notched impact strength (Charpy), RT	no break	[kJ/m²]	ISO 179-1/1 eA
Impact Strength (Charpy), RT	no break	[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.

### Film properties (thickness 20 µm, BUR 2.3)

Tensile modulus MD/TD	340 / 250	[MPa]	ISO 527-3
Tensile strength (yield stress) MD/TD	19 / 16	[MPa]	ISO 527-3
Tensile strain at tensile strength MD/TD	360 / 470	[%]	ISO 527-3
Tensile stress at break MD/TD	19 / 16	[MPa]	ISO 527-3
Tensile strain at break MD/TD	360 / 470	[%]	ISO 527-3

MD= machine direction, TD = transverse direction

The values listed have been established on films at standard temperature and humidity conditions.

### Physical properties

Melt flow rate (190 °C/2.16 kg)	3.0 - 6.0	[g/10 min]	ISO 1133
Melt volume rate (190 °C/2.16 kg)	2.0 - 4.5	[cm³/10 min]	ISO 1133
Melting temperature	> 155	[°C]	ISO 3146-C
Density	1.47	[g/cm³]	ISO 1183

### Legal notice

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.

Neither FKUR Kunststoff GmbH nor its marketing affiliates shall be responsible for the use of this information or of any product, method or equipment mentioned. Customers must undertake their own determination of this product's suitability and completeness for their own use, for the protection of the environment, for the health and safety of their employees and purchasers of their products. No warranty is made of the merchantability or fitness of any product, and nothing herein waives any of the seller's conditions of sale.

The current version of General Conditions of Sale of FKUR Kunststoff GmbH is valid.

The brands „FKuR – Plastics made by nature“ and “BIO-FLEX” are registered trademarks of FKUR Kunststoff GmbH, according to the international 'Nice-Classifications' (NCL9), no. 01, 02 and 17.