



Bio-Flex[®]

Bio-based – Biodegradable – Multifaceted



Bio-Flex[®]

for home compostable films

Bio-Flex[®] home compost grades offer an alternative waste disposal route for organic waste bags and thin film applications, such as fruit and vegetable bags. These materials already biodegrade completely in garden compost and have been awarded the OK Compost HOME certificate. Based on renewable resource raw materials, Bio-Flex[®] is considered to have uncompromising quality regarding mechanical properties and moisture barrier. The following materials are available:

Type	BCC	Tear resistance (MD/TD)	Spencer impact test	Optics
Bio-Flex [®]	[%]	[N/mm]	[N/mm]	
	ASTM D 6664	ASTM D 1922	ASTM D 3420	
F 1804	43	170/60	550	translucent
F 1814	44	215/120	340	translucent
FX 1803	33	160/40	430	translucent
FX 1821	10	100/180	240	opaque
FX 1823	32	110/320	240	opaque
FX 1824	43	140/300	160	opaque



Bio Flex®

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FKUR

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Bio-Flex[®] for industrial compostable film applications

FKuR offers resins for thin film applications which can be safely biodegraded in industrial composting facilities. These resins are certified according to EN 13432. As a result, thin films for applications such as waste bags, T-shirt bags, mulch films and even magazine wrapping are feasible.

FKuR manufactures the following grades:

Type	BCC	Tear resistance (MD/TD)	Spencer impact test	Optics
Bio-Flex [®]	[%]	[N/mm]	[N/mm]	
	ASTM D 6664	ASTM D 1922	ASTM D 3420	
F 1130	10	120/80	300	opaque
F 2110	28	11/30	680	translucent
FX 1120	50	12.5/73	240	opaque
FX 1130	10	110/110	420	opaque
FX 1137	10	95/150	260	opaque



Bio-Flex[®] for thermoforming applications

When manufacturing thermoformed parts, high processing stability is required.

In addition, the finished goods should typically be heat resistant. Bio-Flex[®] thermoformable grades are bio-based, biodegradable and feature excellent heat resistance properties combined with outstanding processing conditions.

The portfolio contains the following resins:

Type	BCC	Tensile strength	Notched impact strength (Charpy)	Vicat A
Bio-Flex [®]	[%]	[N/mm]	[kJ/m ²]	[°C]
	ASTM D 6664	ISO 527	ISO 179/eA	ISO 306
F 6611	70	47	7.2	130
F 6711	70	44	14	n.a.
S 5630	60	32	3	105
S 7711	75	49	5.2	112



Bio-Flex[®] for injection moulding

The Bio-Flex[®] product range offers bio-based resins for durable products, complex parts and thin wall packaging applications. Products made from Bio-Flex[®] materials are ductile with a pleasant gloss and pearlescent appearance.

A further substantial advantage is its excellent processing conditions.

FKuR offers the following materials:

Type	BCC	Tensile strength	Notched impact strength (Charpy)	Vicat A	MFR (190 °C/ 2.16 kg)
Bio-Flex [®]	[%]	[N/mm]	[kJ/m ²]	[°C]	[g/10 min]
	ASTM D 6664	ISO 527	ISO 179/eA	ISO 306	ISO 1133
F 6513	70	46	7.6	130	3.5–5.5
F 6514	70	43	4	60	17.0–22.0
F 7510	85	55	4.2	58	2.0–4.0
F 9533	85	50	2.6	63	22–28
S 7513	75	48	4.7	110	2.5–7.0



Bio-Flex® are sophisticated and innovative resins that comprise renewability, biodegradability and compostability. Their natural source is e.g. corn, sugar cane or castor oil. Bio-Flex® resins are suitable for numerous flexible applications and can be converted using a wide variety of processing methods. Bio-Flex® resins are drop-in, ready-to-use compounds.

As a full service provider FKUR will give you all the necessary technical and marketing support to enable you to process and sell your products successfully. We will be happy to assist you in selecting the material that will best meet your requirements or provide you with a tailor-made formulation.

Get in touch with us to find the perfect solution for your application.

FKuR

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FKuR Kunststoff GmbH

Siemensring 79 | 47877 Willich

Phone: +49 2154 9251 - 0 | Fax: - 51

E-Mail: info@fkur.com

Visit www.fkur.com for more information.