

FKUR KUNSTSTOFF GMBH

Foundation

- 2003

Branches

- Compounds
- Biodegradable & compostable resins
- Bio-based resins

Key materials

- PLA-blends for extrusion and injection moulding
- Cellulose blends for injection moulding
- Natural fibre reinforced plastics
- Green-PE Compounds based on Braskems Green-PE

Key bio-based products

- Bio-Flex®
- Biograde®
- Fibrolon®
- Green PE and Terralene®



FKuR Kunststoff GmbH (Kurzportrait)

With the slogan "Plastics – made by nature!" FKUR Kunststoff GmbH was incorporated in 2003. In cooperation with the Fraunhofer Institute UMSICHT, Oberhausen, FKUR has developed a wide range of biodegradable plastics primarily made from renewable resource materials.

Generally, raw bioplastics (starch, PLA, PHA, PBS and others) are not easy to use on conventional plastics processing machinery. Only by smooth compounding processes and special additives mixtures it is possible to process the resulting blends as standard plastics.

Besides their well-established product lines Bio-Flex®, Biograde® and Fibrolon®, FKUR provides now new custom-made green polyethylene compounds with the brand name Terralene® which are based on Braskem's Green PE.

Biomaterials

Bio-Flex®

Biopolymers from the Bio-Flex® family create outstanding opportunities for your products. They provide you with the freedom to design a sustainable product for the applications that your customers require. Within the Bio-Flex® product line we provide different solutions for blown- or cast film, injection moulding, thermoforming as well as blow moulding applications. Bio-Flex® resins have the following strengths and properties:

- 100% drop in solution and ready to use resin
- Processable on standard plastics processing machinery
- Wide window of processing temperatures
- Certified as compostable to EN 13432 and ASTM D 6400 (depending upon blend)
- Food Approved to EC Directives and FDA (depending upon blend)
- High content of renewable resource materials – up to 90% (depending upon blend)

Biograde®

Biograde® are cellulose based blends particularly applicable for injection moulding. Biograde® resins generate added value as they offer sustainable solutions of outstanding quality for your applications. Biograde® resins have the following strengths and properties:

- 100% drop in solution and ready to use resin
- Processable via injection moulding, sheet extrusion as well as thermoforming
- Good heat resistance (> 100°C Vicat A)
- Characteristics similar to PS/ABS (depending on grade)
- High surface gloss and smoothness
- Certified as compostable to EN 13432 and ASTM D 6400 (depending upon blend)
- Food Approved to EC Directives and FDA (depending upon blend)





Fibrolon® (natural fibre reinforced compounds - WPC)

With the brand name Fibrolon® FKUR develops natural fibre reinforced compounds (wood – plastics – composites, WPC), which unlike many other WPC can be injection moulded without problems. It is possible to convert Fibrolon® into complex profiles, panels and hollow profiles and/or into components for automotive interior. Fibrolon® compounds are characterised by a high strength and stiffness comparable to wood. Whereas the F and S series is made exclusively from biodegradable components, the P series uses a conventional polypropylene as matrix.

Terralene®

Under the brandname Terralene® FKUR provides tailor-made Green PE compounds following the customer wishes. In contrast to traditional polyethylene the ethanol used for Green PE and Terralene® is derived from brazilian sugar cane rather than from crude oil. Through the use of this renewable raw material, each ton of Green PE is able to capture up to 2.5 tons of CO₂ from the atmosphere, thus helping to reduce greenhouse gas emissions. Furthermore Green PE and Terralene® are 100% compatible with conventional polyethylene having identical properties. Therefore it is also possible to recycle both materials in the same recycling stream.



Contact

FKuR Kunststoff GmbH
Siemensring 79
47877 Willich
Germany
Phone: +49 (0) 2154 92 510
Fax: +49 (0) 2154 92 51 51
sales@fkur.com
www.fkur.com

Contact person



Patrick Zimmermann
patrick.zimmermann@fkur.com

