




The Bioplastic Specialist

Product Portfolio – Customized Solutions in Bioplastics



FKUR

plastics - made by nature![®]

A photograph of two hands reaching towards each other in a field of tall grass under a blue sky. The hands are positioned in the center of the frame, with the fingers almost touching. The background is a clear blue sky with some light clouds, and the foreground is filled with tall, golden-brown grasses. The lighting is warm, suggesting a sunset or sunrise.

The expulsion from paradise commissioned „Subdue the Earth!“ It should have read: „Live in Peace with Nature!“

Deranged and without thought, mankind continually accelerates the exhaustion of the earth and ruins the natural balance of resources along with life processes.

Against local wounds the earth seems powerless, but its global counteraction is mighty and continues the expulsion from paradise until the final inescapable suicide of mankind.

Dr. Edmund Dolfen,
CEO and Founder

Our mission

The awareness of the uniqueness of our earth and the world population living on it, motivated the members of FKUR to incorporate a company that is conscious of this appreciation and lives this philosophy in a responsible way.

We would like to create effective materials by means of efficient research and development that benefits from its commercial opportunities in a universally fair way. Our profits shall be used to contribute to preserve and improve the natural conditions of life through resource conservation and an ecological balance.

FKuR benefits especially from the cooperation with all of its employees and worldwide partners. We see ourselves as a “family business”, that combines “joie de vivre” and enthusiasm with discipline and sense of responsibility in an operational team with due respect to an individual’s freedom.

Full service supplier – products and customer service

Using nature as our guideline along with a passion for plastics, we have developed a broad range of bioplastic resins for you to select from. You may choose from our comprehensive portfolio of plastics based on renewable resources which are designed for a variety of processes and applications.

Biodegradable or biobased along with recyclable resins – just as you wish.

We see our customers as our partners. Our cooperation is based on trust and driven by common win-win solutions. As our customer you will be given all the necessary support to enable you to process and sell your products successfully.



Cellulose Compounds



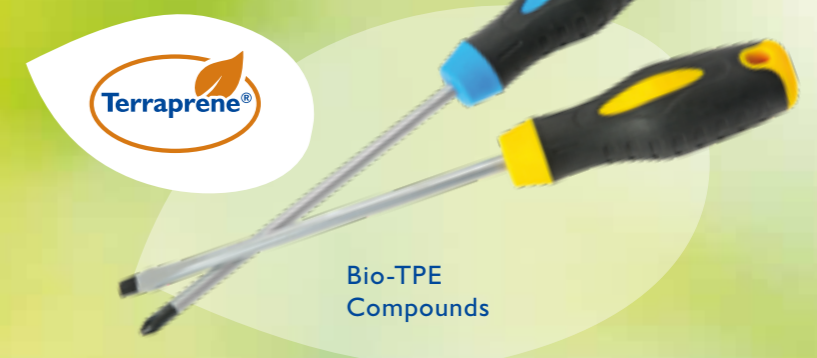
PLA Blends



Natural Fibre Compounds



Green PE Compounds



Bio-TPE Compounds

Applications, markets and brands

Various manufacturing processes, different shapes & design possibilities

A range of applications produced with FKUR bioplastics

Bio-Flex® – full flexibility

Products for a variety of flexible applications

Bio-Flex® is a bioplastic family of products suitable for flexible applications which can be converted using a wide variety of processing methods. All Bio-Flex® products are completely biodegradable and are based entirely or partially on natural raw materials. The main applications for Bio-Flex® include a wide selection of flexible film applications, such as agricultural, household and hygiene films.

Advantages of Bio-Flex® at a glance:

- Based on renewable resources
- Certified biodegradable and compostable according to EN 13432 and ASTM D 6400 (depending on grade)
- Processable on existing equipment without adjustments (drop-in solution)
- Recyclable (in-house, e.g. production waste)
- Food approved to EC Directives and FDA (depending on grade)

Bio-Flex

Biograde

Biograde® – as strong as wood

Products for a variety of durable applications

Biograde® is a family of bioplastic products based on cellulose acetate for injection molding, sheet and profile extrusion. Plant-based cellulose, the base for the production of cellulose acetate, is the most easily accessible and renewable resource on the planet.

Advantages of Biograde® at a glance:

- Based on renewable raw materials
- Certified biodegradable and compostable according to EN 13432 and ASTM D 6400 (depending on grade)
- Properties similar to standard thermoplastics (e.g. ABS, PS)
- High heat resistance
- Processable on standard production equipment
- Recyclable (in-house, e.g. sprues or scrap)
- Food Approved to EC Directives and FDA (depending on grade)
- Suitable for toys according to EN 71 – 3

Fibrolon® – perfect symbiosis between wood and plastics

Wood Plastic Composites for injection molding and extrusion

If you like the convenience and freedom of the design and processing of plastics, but are looking for a natural wood appearance, then Fibrolon® is the ideal solution. It looks like wood, but can be processed like plastic on existing equipment. Fibrolon® is a fantastic combination of plastic and wood, which are two very commonly used materials.

Advantages of Fibrolon® at a glance:

- High percentage of renewable raw materials
- Biodegradable types available
- High strength and stiffness
- Processable on existing equipment
- Attractive wood surface
- Sustainability made visible
- Food Approved to EC Directives and FDA (depending on grade)
- Suitable for toys according to EN 71 – 3

Fibrolon

Terralene

Terralene® – sugar cane at its finest

Biobased polyethylene compounds for extrusion and injection molding

Terralene® is a tailor-made family of polyethylene compounds based on renewable raw materials. All Terralene® grades are based on sugar cane as a raw material source thus making a valuable contribution to the reduction of fossil consumption. The uniqueness of our tailored formulations provides you with advantages to stay ahead of the competition and to bring you into a technical and innovative pole position:

Advantages of Terralene® at a glance:

- Tailor made formulations upon customer requests to meet a wide range of possible applications
- Diversified portfolio of extrusion, blow molding and injection molding grades
- High percentage of renewable raw materials
- Processable on existing equipment
- Good barrier properties
- Recyclable
- Conservation of fossil resources

I'm
green

TM

Terralene® PP – partially bio-based co-polymer including PP

Products for extrusion and injection molding applications

Terralene® PP Compounds are partially biobased compounds with a renewable resource content of approximately 35 %. Depending on the market and the application, a virgin PP or a recycled PP could be used in the compound. Where a recycled PP and a biobased polymer are combined, oil-based PP polymers are eliminated from the formulation.

The processing conditions are comparable to standard PP materials. Also the mechanical properties are similar to corresponding PP materials already available in the market. As a result Terralene® PP can be considered as a drop-in solution. Terralene® PP resins demonstrate a high impact strength and toughness. Applications range from profile extrusion to injection moulding and thermoforming. In addition, adjustment of the properties to your requirements using tailor made solutions are always possible.

Advantages of Terralene® PP at a glance:

- Can use PP virgin and PP recycled material
- Biobased content of up to 35 % BCC
- Possible to process material on existing PP tools
- Mechanical properties comparable to PP
- Huge variation of market applications possible
- Innovative material to stay ahead of the competition

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green

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Terralene PP

Terraprene® – bio-based TPE

For products with smooth surfaces and haptics

Terraprene® grades are particular TPE compounds containing renewable resources. They offer the same mechanical properties and performance as regular TPE. Terraprene® compounds are especially designed for extrusion and injection molding processes. To produce products with smooth surfaces and pleasant haptics it can also be used in 2C injection molding processes for complex multi-functional parts. Terraprene® blends offer a wide spectrum of shore hardness which can be individually adjusted according to customers' requirements.

Advantages of Terraprene® at a glance:

- Contains renewable resources
- Offers same properties and performance as regular TPE
- Pleasant touch and feel
- Shore Hardness from A20 to D 40
- Individual adjustments of properties possible

Terraprene



FKuR – The Bioplastic Specialist

We are happy to assist you in selecting the bioplastic that will best meet your requirements or provide you with a tailor-made formulation. As a full service provider, FKuR will give you all the necessary technical support to enable you to process your products optimally. We will be pleased to give you marketing advice on how to complement your marketing message in order to successfully position your product on the market.

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

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