

## Press Release

### **Sustainable and Compostable: Bioplastics for deep freeze packaging**

In cooperation with a number of converters, FKUR has developed the world's first sustainable deep freeze packaging made from renewable resources. The basis of this unique film structure is FKUR's Bio-Flex range of certified compostable biofilms.

To highlight their sustainable and ecological image, an increasing number of converters are looking for packaging made from renewable resources which are biodegradable and certified to the ASTM D 6400 standard. "The high content of renewable resources together with the excellent mechanical properties of film made from Bio-Flex have convinced our customers", says Patrick Zimmermann, President of FKUR Plastics Corp.

When considering the performance of deep freeze packaging the material's mechanical properties at low temperatures are particularly crucial. High impact strength and dart drop strength at these temperatures are a must in order to succeed. Low glass-transition temperatures as well as a homogeneous material with excellent distribution of functional additives are the keys to meeting these requirements.

To obtain the film properties required for deep freeze packaging, a three-layer system made from Bio-Flex<sup>®</sup> F 2110 / Bio-Flex<sup>®</sup> A 4100 CL / Bio-Flex<sup>®</sup> F 2110 can be used. This film has a very appealing gloss surface together with great strength and chemical resistance along with demonstrating good barrier properties for a bioplastics.

Both resins are based on a blend of PLA and other biodegradable materials. Bio-Flex<sup>®</sup> F 2110 as well as Bio-Flex<sup>®</sup> A 4100 CL are compostable according to ASTM D 6400 and are food contact approved.

Bio-Flex<sup>®</sup> F 2110 is a translucent film with very good impact resistance at low temperatures and is especially useful in co-extrusions with other Bio-Flex<sup>®</sup> grades. Its mechanical characteristics are very similar to HDPE .

Bio-Flex<sup>®</sup> A 4100 CL represents a specialty amongst bioplastics. It is the first transparent PLA-based blend which can be converted into an excellent blown film. Additionally, the content of material from renewable resources in this grade is outstandingly high. Bio-Flex<sup>®</sup> A 4100 CL is a rather rigid grade and the mechanical characteristics are comparable to those of PP. This material is often used in the packaging of fruit, vegetables and flowers, as well as part of a co-extruded film.

Bioplastics are a class of polymers, which have properties comparable to conventional polymers, but are made from renewable resources or enable biodegradability of the products made from this material.

**FKuR Plastics Corp.** produces and markets special, customized biopolymers under the brand names Bio-Flex® (polylactic acid/copolyester compound), Biograde® (cellulose ester compound) and Fibrolon® (natural fibre reinforced polymers). The close cooperation of the company with the German Fraunhofer Institute UMSICHT assures outstanding know-how and quality standards.

**Number of characters: 2.935 (including blanks)**

**Photo:**



**More Information:**

**FKuR Plastics Corp.**  
921 W New Hope Drive, Bldg 605,  
Cedar Park, TX 78613  
United States of America  
Phone: +1 512 986 8478  
Fax: +1 512 986 5346  
Julia.Dolfen@fkur.com  
www.fkur.com