FKuR Kunststoff TerraleneÂ® LL 1303 Biobased Polyethylene

Category : Polymer , Renewable/Recycled Polymer , Thermoplastic , Polyethylene (PE)

Material Notes:

With the brand name TerraleneÂ® FKuR offers biobased polyethylene compounds made using Braskem's Green PE. When compared to conventional polyethylene (PE), the main difference is that the ethanol used for Green PE is not produced using crude oil, but instead is derived from sugarcane. Therefore each ton of Green PE captures up to 2.5 tons of CO2 thus helping to reduce harmful greenhouse gas emissions. As TerraleneÂ® offers the same characteristics and processability as fossil polyethylene it is a drop-in replacement and can be run on conventional PE production equipment. This allows TerraleneÂ® to help meet sustainability goals affordably. Furthermore, TerraleneÂ® is 100% recyclable using standard Polyethylene recycling streams. With its unique technology FKuR increases the range of applications for Green PE particularly for injection moulded components and film. TerraleneÂ® - for Flexible Applications and Extrusion Coating Green LLDPE and HDPE can have a limited range of applications. TerraleneÂ® can provide a perfect answer as these grades produce high quality films with a well-designed and full additive package. TerraleneÂ® is FKuRâ€™s solution to complete their current Green PE portfolio achieving LDPE like properties and behaviour. Due to the excellent homogeneity and blend of polymers, TerraleneÂ® provides simple gel-free production. For extrusion coating, TerraleneÂ® has a low neck-in with a good draw down ratio.TerraleneÂ® - for Injection Molding With good flow properties and melt strength, TerraleneÂ® provides the desirable characteristics required for the moulding of complex structures. The performance of Green PE is often limited to pure HDPE applications, however TerraleneÂ® extends the range of applications and is FKuRâ€™s solution for optimizing the processing and product performance while still catering to individual requirements.TERRALENEÂ® LL 1303 is ideal for extrusion coating and lamination. Using a unique combination of additives, TERRALENEÂ® LL 1303 offers excellent procesability along with a reduction of the neck-in when compared to pure Green PE. Furthermore, TERRALENEÂ® LL 1303 stands out as it has a high natural resource content and mechanical properties which are similar to LDPE.
Information Provided by FKuR Kunststoff GmbH

Order this product through the following link:
http://www.lookpolymers.com/polymer_FKuR-Kunststoff-Terralene-LL-1303-Biobased-Polyethylene.php

Physical Properties	Metric	English	Comments
Density	0.919 g/cc	0.0332 lb/inÂ³	ISO 1183
Melt Flow	2.4 - 3.0 g/10 min @Load 2.16 kg, Temperature 190 Â°C	2.4 - 3.0 g/10 min @Load 4.76 lb, Temperature 374 Â°F	ISO 1133

Mechanical Properties	Metric	English	Comments
Tensile Stress	14.0 MPa	2030 psi	At break; ISO 527
Tensile Strength, Yield	15.0 MPa	2180 psi	ISO 527
Elongation at Break	480 %	480 %	ISO 527
Elongation at Yield	475 %	475 %	ISO 527
Tensile Modulus	0.200 GPa	29.0 ksi	ISO 527

Mechanical Properties	Metric	English	Comments
Flexural Yield Strength	5.70 MPa @Strain 3.5 %	827 psi @Strain 3.5 %	ISO 178
Flexural Modulus	0.180 GPa	26.1 ksi	ISO 178
Charpy Impact Unnotched	NB @Temperature 23.0 Â°C	NB @Temperature 73.4 Â°F	No break; ISO 179-1/1eU
Charpy Impact, Notched	6.80 J/cmÂ² @Temperature 23.0 Â°C	32.4 ft-lb/inÂ² @Temperature 73.4 Â°F	ISO 179-1/1eA

Thermal Properties	Metric	English	Comments
Melting Point	130 - 145 Â°C	266 - 293 Â°F	ISO 3146-C
Vicat Softening Point	95.0 Â°C	203 Â°F	A; ISO 306

Descriptive Properties	Value	Comments
Flexural strain at break (%)	No break	ISO 178
Melt Volume Flow (cm3/10 min)	3.2-4.0	ISO 1133; 190Â°C, 2.16kg

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com
Email : sales@lookpolymers.com
Tel : +86 021-51131842
Mobile : +86 13061808058
Skype : lookpolymers
Address : United North Road 215,Fengxian District, Shanghai City,China