

## FKuR Kunststoff Terralene® HD 3505 Biobased Polyethylene

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

## **Material Notes:**

With the brand name Terralene® 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 Terralene® 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 Terralene® to help meet sustainability goals affordably. Furthermore, Terralene® 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. Terralene® - for Flexible Applications and Extrusion Coating Green LLDPE and HDPE can have a limited range of applications. Terralene® can provide a perfect answer as these grades produce high quality films with a well-designed and full additive package. Terralene® is FKuR's solution to complete their current Green PE portfolio achieving LDPE like properties and behaviour. Due to the excellent homogeneity and blend of polymers, Terralene® provides simple gel-free production. For extrusion coating, Terralene® has a low neck-in with a good draw down ratio. Terralene® - for Injection Molding With good flow properties and melt strength, Terralene® provides the desirable characteristics required for the moulding of complex structures. The performance of Green PE is often limited to pure HDPE applications, however Terralene® extends the range of applications and is FKuR's solution for optimizing the processing and product performance while still catering to individual requirements.TERRALENE® HD 3505 is predominantly composed of renewable resource raw materials. Especially designed for injection moulding applications, this high rigidity grade is intended for thick-walled parts such as caps & closures, household articles as well as all kinds of boxes and containers. Furthermore TERRALENE® HD 3505 can be easily printed as well as coloured using conventional polyethylene-based masterbatches. Information Provided by FKuR Kunststoff GmbH

## Order this product through the following link:

 $http://www.lookpolymers.com/polymer\_FKuR-Kunststoff-Terralene-HD-3505-Biobased-Polyethylene.php with the properties of the properties of$ 

Physical Properties	Metric	English	Comments	
Density	0.959 g/cc	0.0346 lb/in³	ISO 1183	
Melt Flow	6.0 - 7.0 g/10 min	6.0 - 7.0 g/10 min		
	@Load 2.16 kg, Temperature 190 °C	@Load 4.76 lb, Temperature 374 °F	ISO 1133	

Mechanical Properties	Metric	English	Comments	
Tensile Strength, Yield	25.0 MPa	3630 psi	ISO 527	
Elongation at Break	>= 450 %	>= 450 %	ISO 527	
Elongation at Yield	12.5 %	12.5 %	ISO 527	
Tensile Modulus	1.04 GPa	150 ksi	ISO 527	
	18.5 MPa	2680 psi		
Flexural Yield Strength			ISO 178	



Mechanical Properties	@Strain 3.5 % Metric	@Strain 3.5 % English	Comments	
Flexural Modulus	0.945 GPa	137 ksi	ISO 178	
Charpy Impact, Notched	0.520 J/cm²	2.47 ft-lb/in²		
	@Temperature 23.0 °C	@Temperature 73.4 °F	ISO 179-1/1eA	

Thermal Properties	Metric	English	Comments
Melting Point	130 - 145 °C	266 - 293 °F	ISO 3146-C
Vicat Softening Point	125 °C	257 °F	A; ISO 306

Descriptive Properties	Value	Comments
Flexural strain at break (%)	No break	ISO 178
Tensile stress at break (MPa)	No break	ISO 527

## **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