

## Technical data sheet

**Product name:** Terralene® LL 1101  
**Date of issue:** 15 July 2019

Version: 5.0

### Designation of product, preparation and manufacturer

**Trade name:** Terralene® LL 1101

**Use of product:** Biobased linear low density polyethylene, butene copolymer blended with biobased high density polyethylene, contains processing additives. The biobased carbon content (BCC) is >85% (determined according to ASTM D6866). Suitable for blown film applications.

**Manufacturer:** FKUR Kunststoff GmbH  
 Siemensring 79  
 D - 47 877 Willich  
 Phone: + 49 (0) 2154 / 92 51-0  
 Fax: + 49 (0) 2154 / 92 51-51  
 Mail: info@fkur.com  
 Web: www.fkur.com

### Mechanical properties

Modulus of elasticity	330	[MPa]	ISO 527
Tensile strength	11	[MPa]	ISO 527
Tensile strain at tensile strength	23	[%]	ISO 527
Tensile stress at break	0	[MPa]	ISO 527
Tensile strain at break	> 300	[%]	ISO 527

The values listed have been established on standardized test specimens (DIN EN ISO 3167, type A) at standard temperature and humidity conditions.

### Film properties (thickness 20 µm, BUR 2.3)

Tensile modulus MD/TD	290 / 310	[MPa]	ISO 527-5
Tensile strength (yield stress) MD/TD	37 / 32	[MPa]	ISO 527-5
Tensile strain at tensile strength MD/TD	675 / 685	[%]	ISO 527-5
Tensile stress at break MD/TD	36 / 31	[MPa]	ISO 527-5
Tensile strain at break MD/TD	375 / 385	[%]	ISO 527-5
Elmendorf tear resistance MD/TD	50 / 150	[N/mm]	ASTM D 1922
Impact strength (Spencer Impact Test)	130	[N/mm]	ASTM D 3420

MD= machine direction, TD = transverse direction

The values listed have been established on films at standard temperature and humidity conditions.

### Physical properties

Melt flow rate (190 °C/2.16 kg)	0.9 - 1.1	[g/10 min]	ISO 1133
Melt volume rate (190 °C/2.16 kg)	0.70 - 0.85	[cm³/10 min]	ISO 1133
Melting temperature	130 - 145	[°C]	ISO 3146-C
Vicat A softening temperature	107	[°C]	ISO 306
Density	0.92	[g/cm³]	ISO 1183

### Legal notice

The figures should be regarded as guide values only. Under certain conditions the properties can be influenced to a significant extent by the processing conditions.

Neither FKUR Kunststoff GmbH nor its marketing affiliates shall be responsible for the use of this information or of any product, method or equipment mentioned. Customers must undertake their own determination of this product's suitability and completeness for their own use, for the protection of the environment, for the health and safety of their employees and purchasers of their products. No warranty is made of the merchantability or fitness of any product, and nothing herein waives any of the seller's conditions of sale.

The current version of General Conditions of Sale of FKUR Kunststoff GmbH is valid.

The brands „FKuR – Plastics made by nature“ and "TERRALENE" are registered trademarks of FKUR Kunststoff GmbH, according to the international 'Nice-Classifications' (NCL9).