

Technical data sheet

Product name: Bio-Flex® F 1130

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Version: 4.0

Designation of product, preparation and manufacturer

Trade name: Bio-Flex® F 1130

Use of product: Biodegradable and compostable compound for blown film extrusion. Certified (according to EN 13432) with a maximum thickness of 110 µm. Used in applications such as waste bags, shopping bags or mulch films.

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Mechanical properties

Modulus of elasticity	390	[MPa]	ISO 527
Tensile strength	17	[MPa]	ISO 527
Tensile strain at tensile strength	> 300	[%]	ISO 527
Flexural modulus	370	[MPa]	ISO 178
Flexural strain at break	no break	[%]	ISO 178
Flexural stress at 3.5 % strain	9	[MPa]	ISO 178

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	425 / 220	[MPa]	ISO 527-3
Tensile strength (yield stress) MD/TD	24 / 19	[MPa]	ISO 527-3
Tensile strain at tensile strength MD/TD	320 / 480	[%]	ISO 527-3
Tensile stress at break MD/TD	23 / 19	[MPa]	ISO 527-3
Tensile strain at break MD/TD	320 / 485	[%]	ISO 527-3
Elmendorf tear resistance MD/TD	120 / 80	[N/mm]	ASTM D 1922
Impact strength (Spencer Impact Test)	300	[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)	2.0 - 4.0	[g/10 min]	ISO 1133
Melt volume rate (190 °C/2.16 kg)	1.5 - 3.0	[cm³/10 min]	ISO 1133
Melting temperature	> 155	[°C]	ISO 3146-C
Vicat A softening temperature	89	[°C]	ISO 306
Density	1.4	[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.

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