

Technical data sheet

Product name: Bio-Flex® V 135001 (trial grade)
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Version: 4.0

Designation of product, preparation and manufacturer

Trade name: Bio-Flex® V 135001 (trial grade)
Use of product: Polymer blend based on poly lactid acid, suitable for the production of 3D printing filaments.
Manufacturer: FKUR Kunststoff GmbH
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Mechanical properties

Modulus of elasticity	2,960	[MPa]	ISO 527
Tensile strength	61.5	[MPa]	ISO 527
Tensile strain at tensile strength	5.3	[%]	ISO 527
Tensile stress at break	38	[MPa]	ISO 527
Tensile strain at break	10.5	[%]	ISO 527
Flexural modulus	3,295	[MPa]	ISO 178
Flexural strain at break	no break	[%]	ISO 178
Flexural stress at 3.5 % strain	88.8	[MPa]	ISO 178
Notched impact strength (Charpy), RT	2.8	[kJ/m ²]	ISO 179-1/1 eA
Impact Strength (Charpy), RT	30.8	[kJ/m ²]	ISO 179-1/1 eU
Shore D hardness	n/a	[-]	DIN 53505
Density	1.24	[g/cm ³]	ISO 1183
Bulk density	n/a	[kg/m ³]	ISO 60

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

Thermal properties

Melting temperature	> 155	[°C]	ISO 3146-C
Vicat A softening temperature	n/a	[°C]	ISO 306
Heat distortion temperature HDT B	n/a	[°C]	ISO 75
Melt volume rate (190 °C/2.16 kg)	n/a	[cm ³ /10 min]	ISO 1133
Melt flow rate (190 °C/2.16 kg)	3.0 - 5.0	[g/10 min]	ISO 1133

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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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