

PLA/BF – UD tape

Material data sheet

Description

Unidirectional continuous fiber-reinforced tape (UD tape) based on polylactide and basalt fibers.

Properties¹

Physical properties	Value	Unit	Measurement method
Density	1.83	g/cm ³	DIN EN ISO 1183
Thickness	0.27	mm	
Width	50	mm	
Fiber mass fraction	63	wt	Internal method
Fiber volume fraction	44	vol	Internal method
Weight per unit area	497	g/m ²	
Mechanical properties			
Tensile strength 0°	690	MPa	DIN EN ISO 527 [*]
Tensile modulus of elasticity 0°	34	GPa	DIN EN ISO 527 [*]
Elongation at break 0°	3.7		DIN EN ISO 527 [*]
¹ Measured properties that are not considered specifications			
[*] Measured on tape material [UD50_291]			

The material is a research product and is not commercially available. All information is provided without guarantee.

Fraunhofer IMWS | Walter-Hülse-Straße 1 | 06120 Halle (Saale) | <https://www.imws.fraunhofer.de> | E-mail: ivonne.jahn@imws.fraunhofer.de