



Technical data sheet

Product name: AzureFilm 3D Wood Pine
Date of issue: 06 March 2017

Version: 1.0

Designation of product, preparation and manufacturer

Trade name: AzureFilm Wood Pine 1.75mm or 2.85mm diameter
Use of product: Biodegradable polymer compound suitable for 3D printing. The biobased carbon content is > 75 % (calculated). Contains wood fibers.
Manufacturer: AzureFilm d.o.o.
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6210 Sežana
Phone: + 386 (0)31 718 800
Mail: info@azurefilm.com
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Mechanical properties

| | | | |
|--------------------------------------|----------|----------------------|----------------|
| Modulus of elasticity | 2,900 | [MPa] | ISO 527 |
| Tensile strength | 47 | [MPa] | ISO 527 |
| Tensile strain at tensile strength | 5 | [%] | ISO 527 |
| Tensile stress at break | 38 | [MPa] | ISO 527 |
| Tensile strain at break | 6.5 | [%] | ISO 527 |
| Flexural modulus | 2,950 | [MPa] | ISO 178 |
| Flexural strain at break | no break | [%] | ISO 178 |
| Flexural stress at 3.5 % strain | 64 | [MPa] | ISO 178 |
| Notched impact strength (Charpy), RT | 4.4 | [kJ/m ²] | ISO 179-1/1 eA |
| Impact Strength (Charpy), RT | 21 | [kJ/m ²] | ISO 179-1/1 eU |

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

Physical properties

| | | | |
|-----------------------------------|-----------|---------------------------|------------|
| Melt flow rate (190 °C/2.16 kg) | 2.5 - 4.5 | [g/10 min] | ISO 1133 |
| Melt volume rate (190 °C/2.16 kg) | 2.2 - 4.0 | [cm ³ /10 min] | ISO 1133 |
| Melting temperature | > 155 | [°C] | ISO 3146-C |
| Density | n/a | [g/cm ³] | ISO 1183 |

Printing Recommendations:

Nozzle temperature: 200 – 230 °C
Heated bed: recommended 0-60 °C
Print speed: 30 – 100 mm/s
Build platform: Blue tape, Kapton tape. Recommended: Glass bed + spray 3D Lac 400ml
We recommended also to use nozzle 0,6mm and 0,15 to 0,20mm layer height

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