

# WOOD

## MATERIAL PROPERTIES

Density	1.15 gcm <sup>3</sup>	ISO 1183
Melt flow rate (190°C/2.16kg)	2.5-5.0 g/10 min	ISO 1133
Melting temperature	> 155°C	ISO 3146-C

## Mechanical Properties

Modulus of elasticity	2900 MPa	ISO 527
Tensile strength	47 MPa	ISO 527
Tensile strain at tensile strength	5,00%	ISO 527
Tensile stress at break	38MPa	ISO 527
Tensile strain at break	6,50%	ISO 527
Notched impact strength (Charpy), RT	4.4 kJ/m2	ISO 179-1/1 eA
Impact Strength (Charpy), RT	21 kJ/m2	ISO 179-1/1 eU

## GUIDELINE FOR PRINT SETTINGS\*

Nozzle temperature	190-220°C
Bed temperature	0-45°C
Active cooling fan	YES (up to 100%)
Layer height**	0.05 - 0.30 mm
Shell thickness**	0.40 - 2.70 mm
Print speed**	20-50 mm/s
Closed chamber	not necessary
Dry box	not necessary
Ruby or hardened nozzle	not necessary
Recommended nozzle	≥ 0.4 mm

\* settings are based on a 0.4 mm nozzle.

\*\* depending on the geometrical complexity

## DESCRIPTION

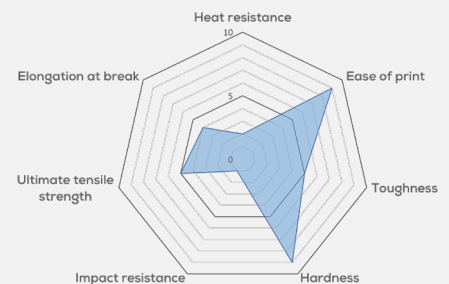
Spectrum WOOD is a material designed for 3D printing based on pure PLA blended with natural wood particles. Spectrum WOOD filament is a 100% organic and biodegradable product. Besides the visual aspects which imitate the appearance of wood, items manufactured of this material have a structure resembling the one of chipboards. The material has a unique quality: not only does it look like wood, but it also feels like genuine wood, because of natural wood content in the composition.

## FEAURES

- made of biodegradable raw materials
- natural wood content
- perfect side surface of prints
- very good thermal insulation properties
- allows for grinding and varnishing
- typical smell and appearance of wooden chipboards

## STORAGE AND SHELF LIFE

Filament should be stored in a dry room at room temperature. Recommended storage temperature is ca. 18-25°C (64.4 -77.0°F). Keep out of moisture, sunlight and direct heat. When stored properly, product has a shelf life of 24 months.



## SUPPORT

If you have any questions or experience any issues, please do not hesitate to contact us at [support@spectrumfilaments.com](mailto:support@spectrumfilaments.com)