



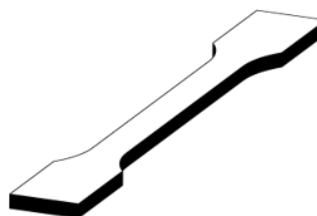
Physical Properties	Value	Standard
Density	1.03 g/cc	ISO 1183
Ball Indentation Hardness	74 MPa	ISO 2039-1

Mechanical Properties

TENSILE TEST - STANDARD ISO 527

Test specimens printed on Ultimaker 2+ with the following setup:

- Nozzle type: Standard Brass 0.4
- Nozzle Temperature: 230 °C
- Heat bed Temp: 85 °C
- Print speed: 30 mm/s
- Infill orientation: 45°
- Cooling fan: 20%



xy

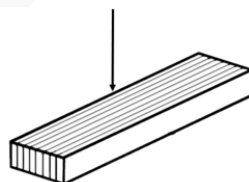
INFILL	15%	50%	100%
Tensile Strength (Mpa)	14.6	17.4	27.4
Elastic Modulus (Mpa)	964.5	1095.5	1651
Elongation at break (%)	3.39	5.14	4.52
Energy at break (J)	1.45	3.06	3.82

FLEXURAL TEST - STANDARD ISO 178

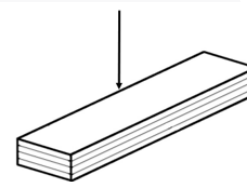
Test specimens printed on Ultimaker 2+ with the following setup:

- Nozzle type: Standard Brass 0.4
- Nozzle Temperature: 230 °C
- Heat bed Temp: 85 °C
- Print speed: 30 mm/s
- Infill orientation: 45°
- Cooling fan: 20%

zy - parallel



xy - normal



INFILL	50%	100%	50%	100%
Flexural Strength (Mpa)	48.5	55.5	44.76	56.4
Flexural Modulus (Mpa)	1534	1697	1363	1622
Deformation (%)	3.34	4.5	4.6	4.9

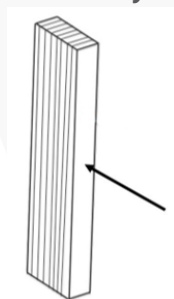


IMPACT TEST IZOD - STANDARD ISO 180

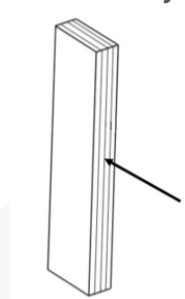
Test specimens printed on Ultimaker 2+ with the following setup:

- Nozzle type: Standard Brass 0.4
- Nozzle Temperature: 230 °C
- Heat bed Temp: 85 °C
- Print speed: 30 mm/s
- Infill orientation: 45°
- Cooling fan: 20%

zy - normal



xy - parallel



INFILL	50%	100%	50%	100%
Impact Strength (KJ/m ²)	32.28	34.21	22.84	33.69
Impact Energy (J)	1.29	1.37	0.91	1.35

Thermal Properties	Value	Standard
Vicat Softening Temp.	103 °C	ISO 306/A50
Heat Deflection Temp.	97 °C	ISO 75-2/B

Electrical Properties	Value	Standard
Dielectric Constant _1 mm, 1 MHz	2.8 kV/mm	ASTM D150
Volume resistivity	1.0E+15 ohm*cm	IEC 60093

Filament specifications and print settings

Diameter 1.75mm	1.75 ± 0.05 mm
Diameter 2.85mm	2.85 ± 0.05 mm
Roundness Deviation	max 2%
Suggested Print Temperature	230 – 240 °C
Suggested Print Speed	30 – 50 mm/s
Suggested Bed Temperature	85 °C
Cooling Fan	20-30%