



Physical Properties	Value	Standard
Density	1.00 g/cc	ISO 1183

Mechanical Properties

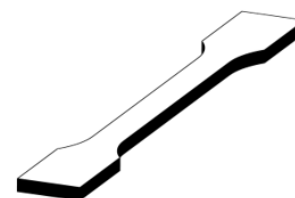
TENSILE TEST - STANDARD ISO 527

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

- Nozzle type: Olsson Ruby
- Nozzle Temperature: 260 °C
- Heat bed Temp: 70 °C
- Print speed: 40 mm/s
- Infill orientation: 45°



xz



xy

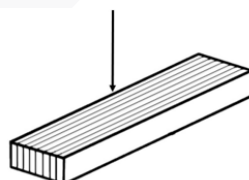
INFILL	15%	50%	100%	15%	50%	100%
Tensile Strength (Mpa)	12.5	14.46	12.64	33.7	36.6	66.3
Elastic Modulus (Mpa)	1292	1343	1513	1844	1875	2758
Elongation at break (%)	2.1	2.3	2.0	5.7	6.3	6.7
Energy at break (J)	0.63	0.78	0.64	5.45	7.02	12.2

FLEXURAL TEST - STANDARD ISO 178

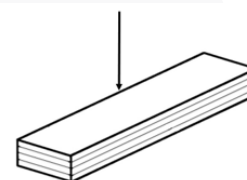
Test specimens printed on Ultimaker 2+ with the following setup:

- Nozzle type: Olsson Ruby
- Nozzle Temperature: 260 °C
- Heat bed Temp: 70 °C
- Print speed: 40 mm/s
- Infill orientation: 45°

zy - parallel



xy - normal



INFILL	50%	100%	50%	100%
Flexural Strength (Mpa)	108.9	117.9	79.5	113.8
Flexural Modulus (Mpa)	3368	3956	2427	3606
Deformation (%)	5.0	5.0	5.2	5.4

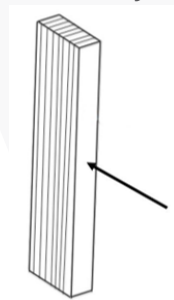


IMPACT TEST IZOD - STANDARD ISO 180

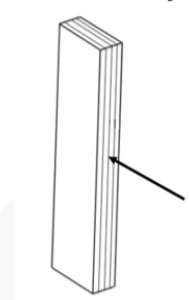
Test specimens printed on Ultimaker 2+ with the following setup:

- Nozzle type: Olsson Ruby
- Nozzle Temperature: 260 °C
- Heat bed Temp: 70 °C
- Print speed: 40 mm/s
- Infill orientation: 45°

zy - normal



xy - parallel



INFILL	15%	50%	100%	15%	50%	100%
Impact Strength (KJ/m ²)	36.5	37.47	42.15	29.0	29.8	41.1
Impact Energy (J)	1.46	1.50	1.68	1.16	1.19	1.64

Thermal Properties	Value	Standard
Melting Point	180 °C	ISO 11357
Heat Deflection Temp.	155 °C	ISO 75
Max Usage Temperature	Long Term 90 – 120 °C	ISO 2578
Max Usage Temperature	Short Term 150 °C	ISO 2578

Other Properties	Value	Standard
Flammability	HB	ISO 1210
Ball Indentation Hardness	110 Mpa	ISO 2039-1
Specific Volume Resistivity	10 ³ Ωm	IEC 60243

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	250 – 265 °C
Suggested Print Speed	40 mm/s
Suggested Bed Temperature	60 – 70 °C
Cooling Fan	20-60%