

Physical Properties	Testing Method	Typical Value
Density	ASTM D792 (ISO 1183, GB/T 1033)	1.17 - 1.24 g/cm ³ at 21.5 ° C
Glass Transition Temperature	DSC, 10 ° C/min	50-60 ° C
Softening Temperature	Custom method	146 - 150 ° C
Melt Index	190 ° C, 2.16 kg	5 - 8 g/10 min
Moisture Content ¹	Thermogravimetric	≤ 0.1%
Odor	/	Almost odorless
Solubility	/	Insoluble in water

Mechanical Properties ²	Testing Method	Typical Value
Young's Modulus	ASTM D638 (ISO 527, GB/T 1040)	1879 ± 109 MPa
Tensile Strength	ASTM D638 (ISO527, GB/T 1040)	28.1 ± 1.3 MPa
Elongation at Break	ASTM D638 (ISO527, GB/T 1040)	1.36 ± 0.30%
Bending Modulus	ASTM D790 (ISO 178, GB/T 9341)	2119 ± 60 MPa
Bending Strength	ASTM D790 (ISO 178, GB/T 9341)	48.0 ± 1.9 MPa
Impact Strength	ASTM D256 (ISO 179, GB/T 1043)	12.15 ± 1.03 kJ/m ²

Notes:

1. It was tested with newly opened materials. Materials may absorb more moisture during usage.
2. All test pieces were printed with a Mankati E180 3D printer under the following conditions: nozzle temperature at 215 ° C, printing speed at 60 mm/s, 2 shells, and 100% infill.

Specimens

Fig 1. Tensile testing specimen

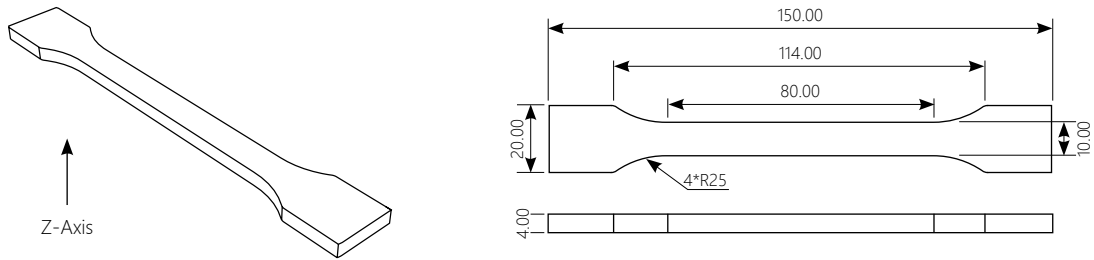


Fig 2. Impact testing specimen

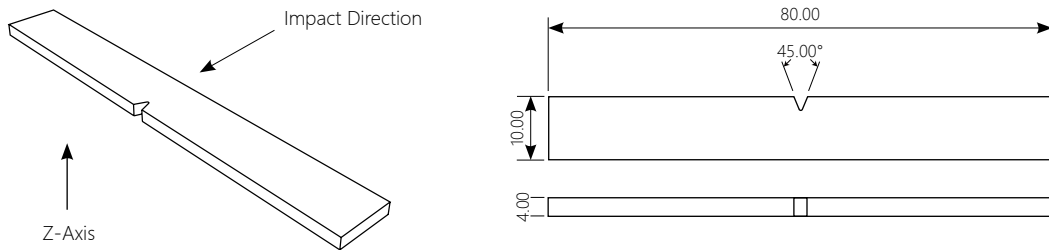
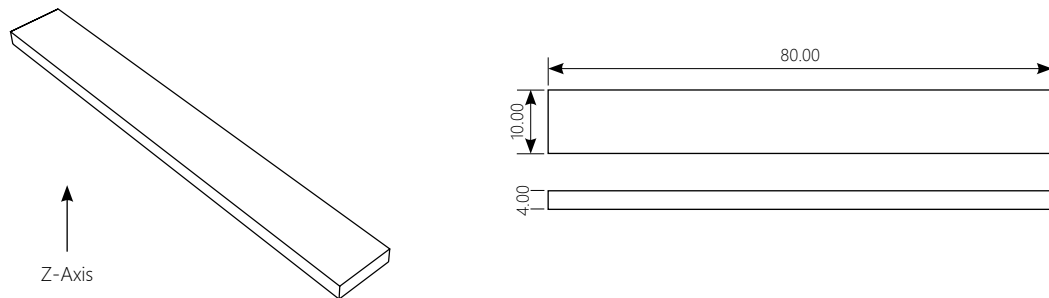


Fig 3. Flexural testing specimen



Disclaimer

The typical values presented in this data sheet are intended for reference and comparison purposes only. They should not be used for design specifications or quality control purposes. Actual values may vary significantly with printing conditions. Enduse performance of printed parts depends not only on materials, but also on part design, environmental conditions, printing conditions, test conditions, etc. Product specifications are subject to change without notice.

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