

Testing Items		Testing Method	Typical Value	Unit
Viscosity		ASTM D445	1100	mPa:s (25°C)
Density		ASTM D792	0.90-1.10	g/cm³
Color		-	Translucent	-
Temperature Properties		ASTM D648	46.5	°C ( 0.45 MPa )
Shore Hardness		ASTM D2240	80	Shore D
Tensile Properties	Ultimate Tensile Strength	ISO 37: 2005	31-35	MPa
	Tensile Modulus	ISO 37: 2005	1100-1350	MPa
	Elongation at Break	ISO 37: 2005	53-61	%
Flexural Properties	Flexural Strength	ISO 178: 2001	40-45	MPa
	Flexual Modulus	ISO 178: 2001	800-1000	MPa
Impact Properties	Notched IZOD	ISO 180: 2000	47-66	J/m
Ultimate Flexural Strength		ISO 20795-1: 2013	32-36	MPa
Flexural Modulus		ISO 20795-1: 2013	400-600	MPa
Fracture Toughness	Total Fracture Work	ISO 20795-1: 2013	8500-9300	J/m²
	Maximum Stress Intensity Factor	ISO 20795-1: 2013	2.3-2.6	MPa m <sup>1/2</sup>

Notes:

- 1.It was tested with 3D printed specimen.
- 2.All test pieces were printed with a Rayshape Edge E2 3D printer.

Specimens

Fig 1. Tensile testing specimen

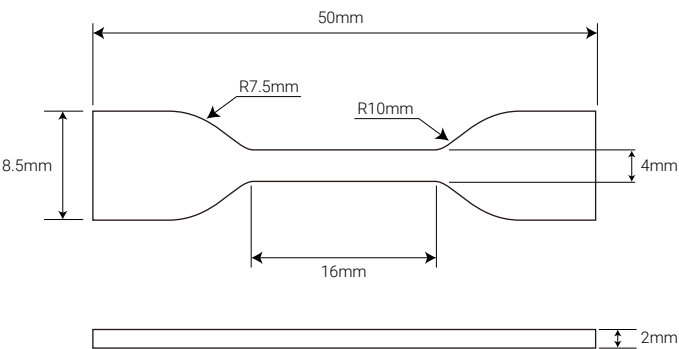
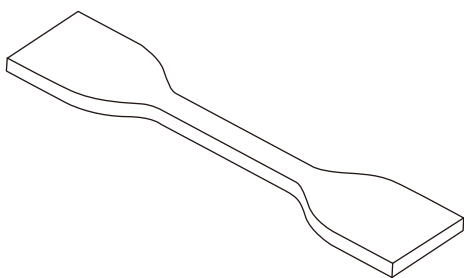


Fig 2. Impact testing specimen

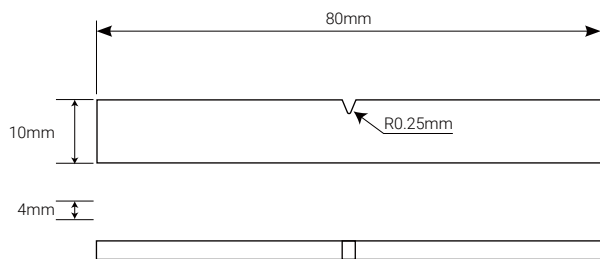
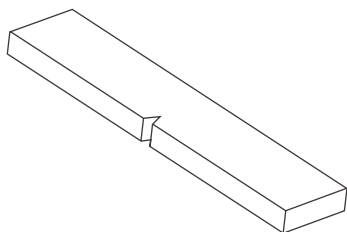
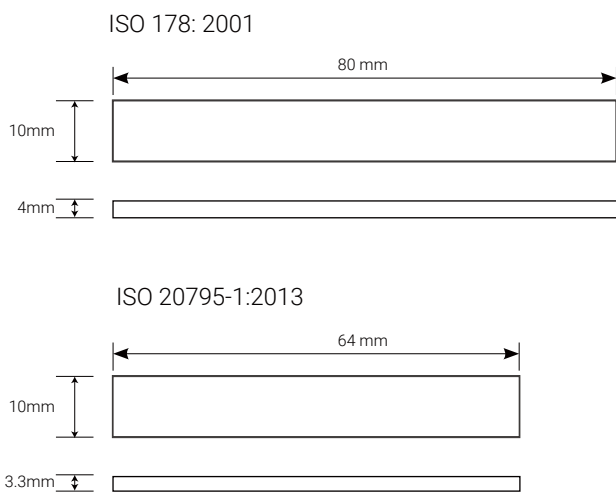
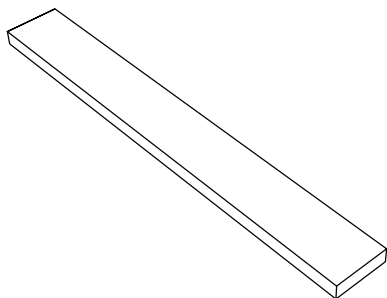
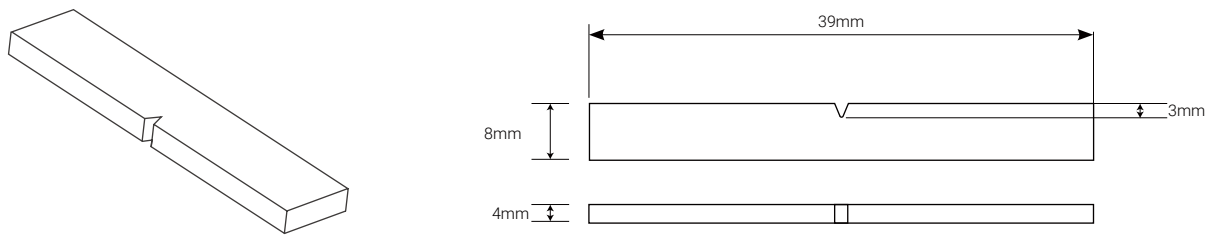


Fig 3. Flexural testing specimen



## Specimens

Fig 4. Fracture Toughness 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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# RAYSHAPE

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