

# Technical Data Sheet

# Splint Soft

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	31-35	MPa
	Tensile Modulus	1100-1350	MPa
	Elongation at Break	53-61	%
Flexural Properties	Flexural Strength	40-45	MPa
	Flexural Modulus	800-1000	MPa
Impact Properties	Notched IZOD	47-66	J/m
Ultimate Flexural Strength		32-36	MPa
Flexural Modulus		400-600	MPa
Fracture Toughness	Total Fracture Work	8500-9300	J/m²
	Maximum Stress Intensity Factor	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

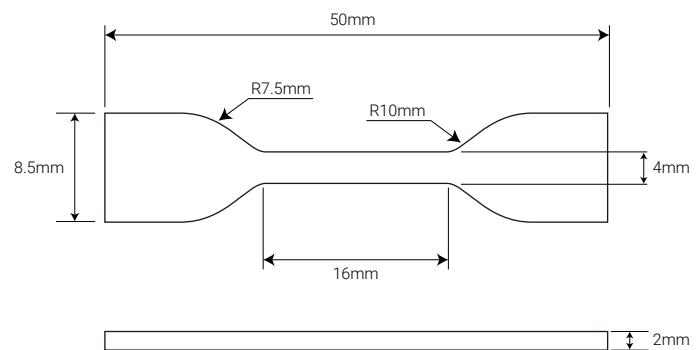
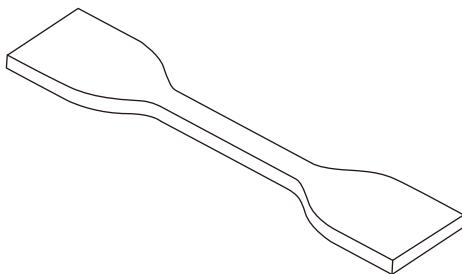


Fig 2. Impact testing specimen

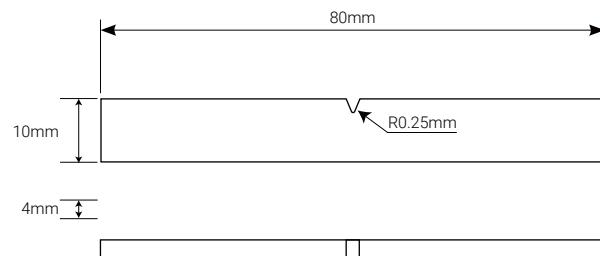
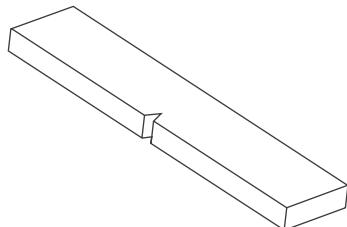
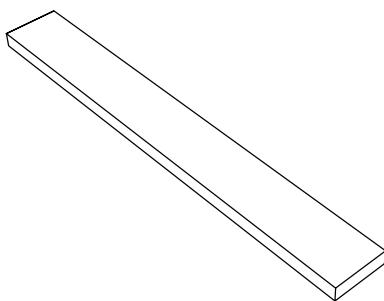
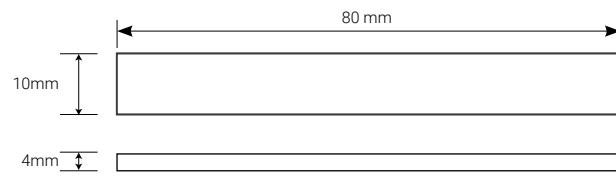


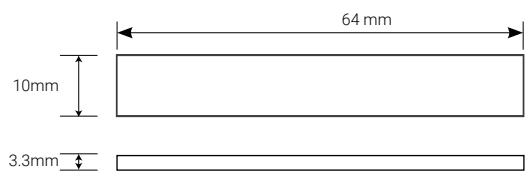
Fig 3. Flexural testing specimen



ISO 178: 2001

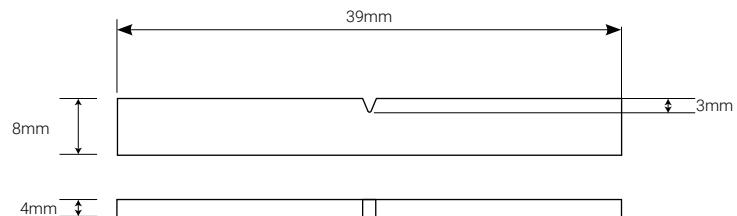
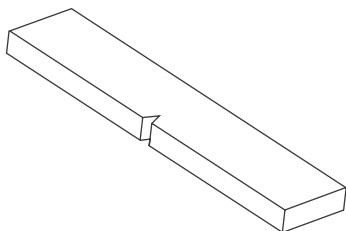


ISO 20795-1:2013



## 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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