

**Cubic Ink® Tough 1400 VP** Technical datasheet October 19<sup>th</sup>, 2023

## Cubic Ink<sup>®</sup> Tough 1400 VP

Affordable tough material with good balance between rigidity and flexibility

Liquid Properties	Value <sup>1</sup>	Unit
Viscosity @ 25 °C (DIN EN ISO 3219)	46	mPa∙s
Density (DIN EN ISO 15212-1)	1.10	g/mL
Critical Energy (E <sub>c</sub> ) @405 / 385 nm	4.8 / 6.3	mJ/cm²
Depth of Penetration (D <sub>p</sub> ) @405 / 385 nm	0.32 / 0.21	mm
Tensile Properties <sup>2</sup> (DIN EN ISO 527-5A)		
Ultimate Tensile Strength	39	MPa
Yield Strength	39	MPa
Tensile Modulus	2070	MPa
Elongation at Break	4.7	%
Flexural Properties <sup>3</sup> (DIN EN ISO 178) Flexural Strength		MPa
Flexural Modulus	53	MPa
Deflection at Fracture	2000 3.5	%
Impact Properties		
Izod notched (DIN EN ISO 180)	15	J/m
Charpy notched (DIN EN ISO 179-1)	1.1	kJ/m²
Hardness (DIN EN ISO 7619)		
Shore Hardness	82	D
Thermal Properties (DIN EN ISO 75)		



## **Print Appearance/ Color**

Natural color is translucent light yellow. Also available in cyan, magenta, yellow, black, white and grey. More colors on request.

## **Availability and Storage**

Batch sizes starting from 1 kg.

Store at room temperature and protect from light.

<sup>1</sup>Properties with post-processing – washed with IPA, 1 h UV-LED post-cure @405 nm. All material properties can vary with printer, print settings, object orientation, part geometry, post-processing and age of sample. <sup>2</sup>5 mm/min; <sup>3</sup>5 mm/min.

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