

**Cubic Ink® Flexible 1400 VP** Technical datasheet October 4<sup>th</sup>, 2023

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

Very soft functional prototyping material with a Shore hardness of A 30

Liquid Properties	<b>Value</b> <sup>1</sup>	Unit
Viscosity @ 25 °C (DIN EN ISO 3219)	120	mPa∙s
Density (DIN EN ISO 15212-1)	1.05	g/mL
Critical Energy (E <sub>c</sub> ) @405 nm	3.1	mJ/cm <sup>2</sup>
Depth of Penetration $(D_p)$ @405 nm	0.18	mm

### Tensile Properties<sup>2</sup> (DIN EN ISO 527-5A)

Ultimate Tensile Strength	2.6	MPa
Elongation at Break	160	%
Tensile Strength at 50% elongation	0.5	MPa
Tensile Strength at 100% elongation	1.0	MPa
Tear Strength (DIN EN ISO 34-1 B) <sup>3</sup>	32	kN/m

## Compression Properties (DIN EN ISO 815-1)<sup>4</sup>

Compression Set-B after 22h @23 °C	< 5	%
Compression Set-B after 22h @70 °C	< 5	%

# Rebound Properties<sup>4</sup> (DIN 53512)

Schob-Pendulum @23 °C	4	%

## Hardness (DIN EN ISO 7619)

Shore Hardness	30	А
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#### **Print Appearance/ Color**

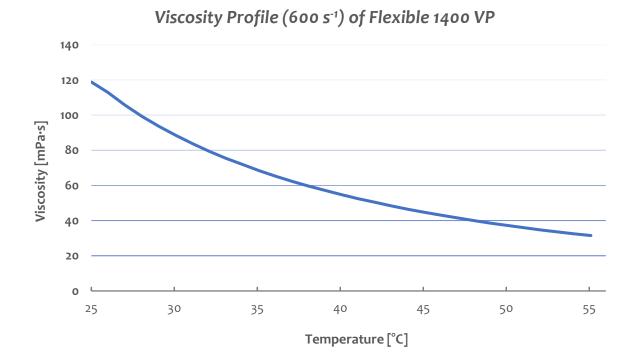
Natural color is translucent light yellow. Also available in cyan, magenta, yellow, black, white and grey. More colors on request.

#### **Availability and Storage**

Batch sizes starting from 1 kg.

Store at room temperature and protect from light.

<sup>1</sup>Properties with post-processing – 2 x 3000 light flashes under N<sub>2</sub> atmosphere. All material properties can vary with printer, print settings, object orientation, part geometry, post-processing and age of sample. <sup>2</sup>50 mm/min; <sup>3</sup>500 mm/min, notched specimen method B; <sup>4</sup>Specimen with 12.5 mm height.





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