

Cubic Ink® Rigid 300 VP High Res

Rigid material with outstanding printing resolution

Liquid Properties	Value ¹	Unit
Viscosity @25 °C (DIN EN ISO 3219)	171	mPa·s
Density (DIN EN ISO 15212-1)	1.05	g/mL
Critical Energy (E _c) @405 nm / 385 nm	4.3 / 5.3	mJ/cm ²
Depth of Penetration (D _p) @405 nm / 385 nm	0.08 / 0.10	mm
Tensile Properties² (DIN EN ISO 527-5A)		
Ultimate Tensile Strength	37	MPa
Tensile Modulus	1900	MPa
Elongation at Break	8	%
Impact Properties (DIN EN ISO 180)		
Izod notched	17	J/m
Hardness (DIN EN ISO 7619)		
Shore Hardness	80	D
Thermal Properties (DIN EN ISO 75)		
HDT B	52	°C
Chemical Resistance		
Water Uptake, 24 h, 23 °C	0.3	%
Performance after Water Uptake ³	98	%
Print Appearance/ Color		
Natural color is yellow.		

Availability and Storage

Batch sizes starting from 1 kg.

Store between 21 and 28 °C and protect from light.

¹Properties with post-processing – 60 min low-intensity UV-post-cure at 405 nm (LED). All material properties can vary with printer, print settings, object orientation, part geometry, post-processing and age of sample; ²5 mm/min; ³Relative tensile strength compared to reference, DIN EN ISO 527-5A, 5 mm/min.

Chemical Resistance	Mass Gain ¹ [%]
Water	< 0.1
Acetic Acid (5 %)	< 0.1
Hydrochloric Acid (1 %)	< 0.1
Nitric Acid (5 %)	< 0.1
Sodium Hypochlorite (10 %)	< 0.1
Hydrogen Peroxide (3 %)	< 0.1
Sodium Hydroxide (1 %)	< 0.1
Isopropyl Alcohol	0.5
Methanol	2.6
Butyl Glycol Acetate	0.4
Super Gasoline	2.0
Acetone	7.1
Methyl Ethyl Ketone	7.2

¹Percental weight gained after 24 h submersion of printed and post-cured (60 min low-intensity UV-post-cure at 405 nm) 1 x 1 x 1 cm³ cubes.

Cubic Ink®
ALTANA New Technologies GmbH

located at

ACTEGA Terra GmbH
Mielestraße 13
31275 Lehrte
GERMANY

Tel +49 (0)5132 5009-600

cubic.ink@altana.com
www.altana.com

Learn more about Cubic Ink® materials

www.altana.com/cubic-ink
www.altana.de/cubic-ink

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