

Cubic Ink® Rigid 300 VP Black

Functional prototyping material for industrial applications

Liquid Properties	Value ¹	Unit
Viscosity @25 °C (DIN EN ISO 3219)	185	mPa·s
Density (DIN EN ISO 15212-1)	1.05	g/mL
Critical Energy (E _c) @405 nm / 385 nm	4.5 / 5.7	mJ/cm ²
Depth of Penetration (D _p) @405 nm / 385 nm	0.14 / 0.11	mm
Tensile Properties² (DIN EN ISO 527-5A)		
Ultimate Tensile Strength	57	MPa
Tensile Modulus	2600	MPa
Elongation at Break	4.3	%
Flexural Properties² (DIN EN ISO 178)		
Flexural Strength	82	MPa
Flexural Modulus	2300	MPa
Deflection at Fracture	>3.5	%
Impact Properties (DIN EN ISO 180)		
Izod notched	15	J/m
Hardness (DIN EN ISO 7619)		
Shore Hardness	82	D
Thermal Properties (DIN EN ISO 75)		
HDT B	59	°C
Thermal Ageing³		
Performance after 80 °C for 3000 hours	98	%

Print Appearance/ Color

Standard color is black. More colors on request.

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.

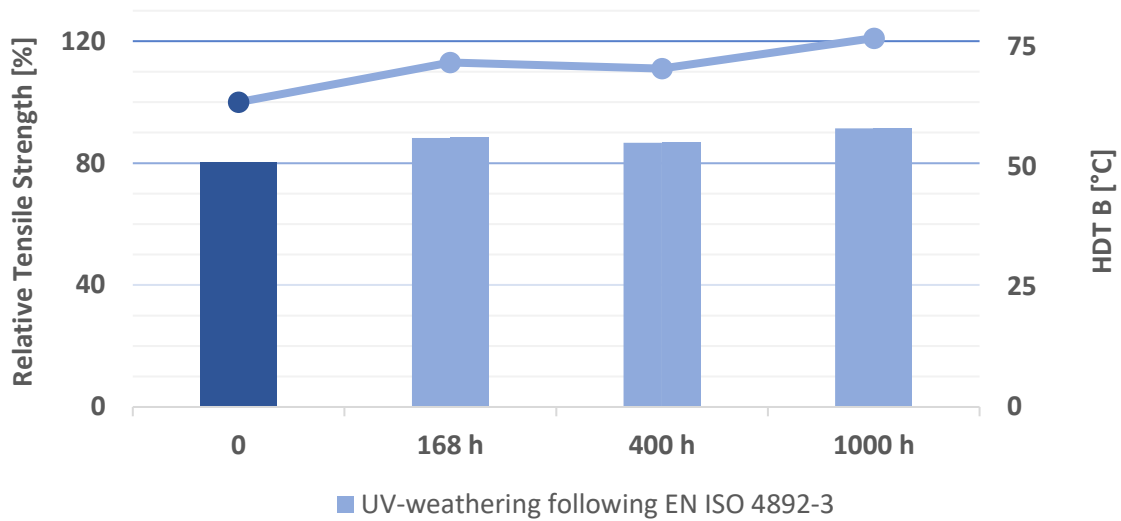
Chemical Resistance

Mass Gain [%]¹

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.

UV Ageing of Cubic Ink® Rigid 300 VP (points - rel. tensile strength & bars - HDT B)



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