Cubic Ink High Performance 4-600 VP

Material with a good balance between toughness and impact resistance for final part production

Liquid Properties	Value[1]	Unit
Viscosity @ 25 °C (DIN EN ISO 3219)	40	mPa·s
Density (DIN EN ISO 15212-1)	1.11	g/mL
Tensile Properties[2] (DIN EN ISO 527-5A)		
Ultimate Tensile Strength	51	MPa
Yield Strength	51	MPa
Tensile Modulus	2300	MPa
Elongation at Break	13	%
Flexural Properties (DIN EN ISO 14125)		
Flexural Strength	62	MPa
Flexural Modulus	2000	MPa
Impact Properties		
IZOD notched (DIN EN ISO 180)	37	J/m
Charpy notched (DIN EN ISO 179-1)	8.4	kJ/m²
IZOD unnotched (DIN EN ISO 180)	330	J/m
Hardness (DIN EN ISO 7619)		
Shore Hardness	80	D
Thermal Properties (DIN EN ISO 75)		
HDT A	52	°C
HDT B	71	°C

Chemical Resistance

Water Uptake, 24 h, 23 °C	1.3	%

Print Appearance/ Color

Available in yellow, cyan, magenta, black and grey. More colors on request.

Availability and Storage

Batch sizes starting from 1 kg.

Store at room temperature and protect from light.

[1]Properties with post-processing – UV and thermal post-cure. All material properties can vary with printer, print settings, object orientation, part geometry, post-processing and age of sample. [2]5 mm/min.

Chemical Resistance	Mass Gain [%][1]
Water	1.3
Acetic Acid (5%)	1.5
Hydrochloric Acid (1%)	1.2
Nitric Acid (5%)	1.8
Sodium Hypochlorite (10%)	0.6
Hydrogen Peroxide (3%)	1.6
Sodium Hydroxide (1%)	1.0
Isopropyl Alcohol	<0.1
Methanol	6.4
Butyl Glycol Acetate	<0.1
Super Gasoline	0.7
Acetone	6.7
Methyl Ethyl Ketone	4.1

[1]Percent weight gained after 24 h submersion of printed and post-cured (UV and thermal post-cure) 1 x 1 x 1 cm cubes.