

Cubic Ink[®] High Performance 4-1203 Technical datasheet October 24th, 2023

Cubic Ink[®] High Performance 4-1203

Material with a good balance between temperature form-stability and toughness for final part production

Liquid Properties	Value ¹	Unit
Viscosity @ 50 °C (DIN EN ISO 3219)	15	mPa∙s
Density (DIN EN ISO 15212-1)	1.08	g/mL
Surface Tension (Dynamic Bubble Pressure)	32	mN/m
Tensile Properties ² (DIN EN ISO 527-5A)		
Ultimate Tensile Strength	66	MPa
Yield Strength	66	MPa
Tensile Modulus	3000	MPa
Elongation at Break	6.0	%
Flexural Properties ³ (DIN EN ISO 178) Flexural Strength	118	MPa
Flexural Modulus	2700	MPa
Deflection at Fracture	>3.5	%
Impact Properties (DIN EN ISO 180)		
Izod unnotched	224	J/m
Hardness (DIN EN ISO 7619)		
Shore Hardness	84	D
Thermal Properties (DIN EN ISO 75)		
HDT A	78	°C
HDT B	100	°C



Electrical Properties⁴

Dielectric strength (IEC60243-1)	22	kV/mm
Dielectric strength after 24 h/RT H ₂ O (IEC60243-1)	22	kV/mm
Relative Permittivity (Dielectric Constant, 24 °C, 1 MHz, IEC60250)	6.5	-
Dissipation Factor (24 °C, 1 MHz, IEC60250)	0.027	-
Volume Resistivity (IEC60093)	5.6 x 10 ¹⁴	Ω∙cm
Volume Resistivity after 7 d/RT H2O (IEC60093)	2.1 X 10 ¹⁴	Ω∙cm
Comparative Tracking Index (IEC60112)	>600	V

Flame (UL94)

Flammability, horizontal (at 3.2 mm)	НВ	-
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Print Appearance/ Color

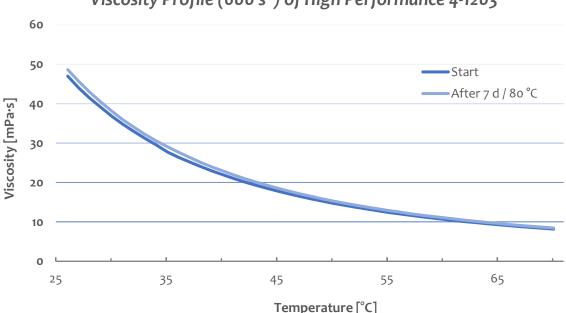
Natural color is translucent light yellow. Also available in cyan, magenta, yellow, black, and grey. More colors on request.

Availability and Storage

Batch sizes starting from 1 kg.

Store between 21 and 28 °C and protect from light. Stir prior to use.

¹Properties with post-processing – washed with water, UV and thermal post-cure. All material properties can vary with printer, print settings, object orientation, part geometry, post-processing and age of sample. ²5 mm/min; ³10 mm/min; ⁴Properties correspond to related product High Performance 4-300 VP.



Viscosity Profile (600 s⁻¹) of High Performance 4-1203



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