

Technical Data

Precision



Cubicure's micro manufacturing material with an eye for detail pairs highest precision with outstanding strength. This photopolymer was developed to ensure precise production of minute details on a micro level.

Mechanical properties

Property	Standard	Print orientation	Experimental condition	Result
Tensile strength	ISO 527 (Type 5A)	XYZ	10 mm min ⁻¹	68 MPa
Young's Modulus	ISO 527 (Type 5A)	XYZ	1 mm min ⁻¹	2700 MPa
Elongation at break	ISO 527 (Type 5A)	XYZ	10 mm min ⁻¹	7 %
Flexural strength	ISO 178	XZY	10 mm min ⁻¹	105 MPa
Flexural modulus	ISO 178	XZY	2 mm min ⁻¹	2600 MPa
Charpy unnotched	ISO 179-1/1eU	XYZ	5 J	11 kJ m ⁻²
Izod notched	ASTM D 256	XYZ	5.5 J	26 J m ⁻¹
Shore hardness	ISO 868	XYZ	D	86
HDT A	ISO75	XZY	@ 1.8 MPa	66 °C
HDT B	ISO75	XZY	@ 0.46 MPa	90 °C

Physical data

Density	ISO 1183	XYZ	-	1.17 g cm ⁻³
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Fire resistance

Property	Standard	Print orientation	Experimental condition	Result
Flammability	UL 94	YZX	1.00 mm	HB


Electrical data



Dielectric constant (ϵ_r)	IEC 60250	YZX	50 Hz	2.99
			1 kHz	2.93
			1 MHz	3.25
Dissipation factor ($\tan\delta$)	IEC 60250	YZX	50 Hz	0.0138
			1 kHz	0.0113
			1 MHz	0.0343

Print orientation according to ASTM/ISO 52921.

The results presented in this technical data sheet were achieved on a Cubicure Caligma 200 printer (405 nm laser) after being processed and postprocessed according to Cubicure protocols. This information is based on our present state of knowledge, is provided in good faith, and is intended to provide general notes on our products and their uses. This information does not represent a warranty and Cubicure excludes any liability and responsibility for the product or any damages or loss of profit derived from the product. The assessment, testing, and selection of a product for a purpose or application as well as the compliance with third party and industrial property rights lie solely within the responsibility of the customer. Cubicure reserves the right to change any information in the technical data sheet as well as underlying protocols, processes, and formulations at any time without further notice.

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