

Matrix HTL

A high performance engineering material used for
Micro 3D printing

Matrix HTL is a high performance engineering material with high strength, rigidity, and heat resistance, able to withstand temperatures up to 140C. Matrix HTL enables high resolution features, making it suitable for a broad range of engineering and medical applications including those which require autoclave sterilisation.

		Cured parts	Standard
Tensile Properties	Tensile Strength	71.5 MPa	ASTM D638
	Elastic Modulus	2397 MPa	ASTM D638
	Elongation at Break	7.8%	ASTM D638
Flexural Properties	Flexural Strength	112.9 MPa	ASTM D790
	Flexural Modulus	2.8 GPa	ASTM D790
Impact Properties	Impact Strength	30 J/m	ASTM D256
Thermal Properties	CTE @ 60C	169.0 µm/m/°C	-
	HDT @ 0.45 MPa	114.2 °C	ASTM D648 - 07
General properties	Contact Angle	45-60°	ASTM D7334
	Water Absorption (24h)	1.05%	ASTM D570
	Dialectic Constant (10 GHz)	3.45	-
	DF	0.0245	-
	Hardness	81 Shore D	ASTM D785
	Viscosity	85 cP	-
	Standard Colour	Black / Carbon black / Yellow	-

¹ Final properties are dependent on print conditions, post-processing operations, and part geometry.

² Test samples were UV cured and heat cured.



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