DATA SHEET

BMF
BOSTON MICRO FABRICATION

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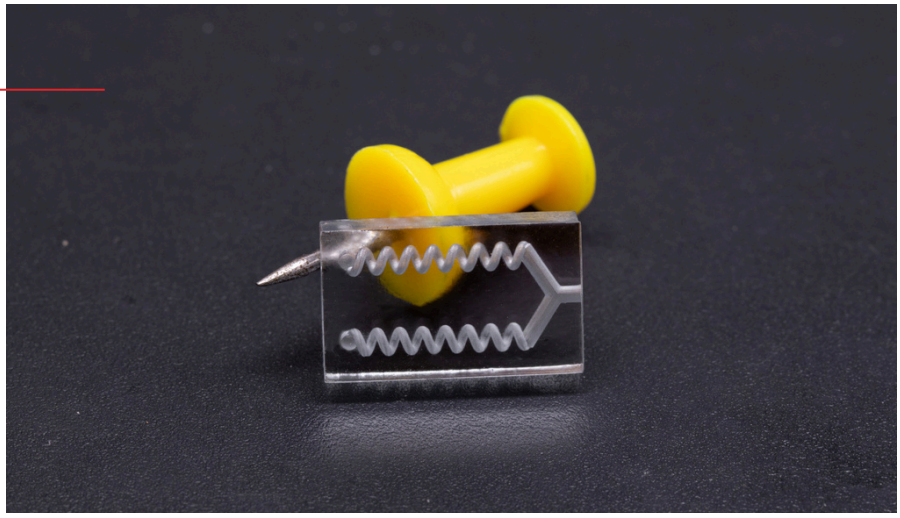
RESOLUTION × ACCURACY × PRECISION

CLEAR Resin



Clear is an optically transparent resin with greater than 90% light transmittance, purpose-built for applications demanding exceptional optical clarity. BMF Clear can print as small as 10 micron layer heights, enabling finer feature resolution and greater design flexibility. Some geometries require no polishing or sanding after printing, which is particularly valuable when working with microfluidics, small & delicate features where traditional finishing methods would be difficult or impossible. Clear is well-suited for optical imaging, light transmission, microfluidics, signal sensing, and visualization of internal structures, and has passed biocompatibility testing for skin irritation, sensitization, and in vitro cytotoxicity.

ISO Standard	Test Description
GBT 16886	In Vitro Cytotoxicity Test
GBT 16886	Irritation Test
GBT 16886	Sensitization Study

		Cured Parts	Standard
Tensile Properties	TENSILE STRENGTH	23 MPa	ASTM D638
	ELASTIC MODULUS	526 MPa	ASTM D638
	ELONGATION AT BREAK	18%	ASTM D638
Flexural Properties	FLEXURAL STRENGTH	29 MPa	ASTM D790
	FLEXURAL MODULUS	838 MPa	ASTM D790
Thermal Properties	CTE @ 60C	163	ASTM E831
	HDT @ 0.45 MPA	41 °C	ISO 75
General Properties	WATER ABSORPTION (24h)	0.53%	ASTM D570
	HARDNESS	55 Shore D	ASTM D2240
	DIELECTRIC CONSTANT (1 MHz)	60	ASTM D7334
	VISCOSITY @ 25°C	230 cP	Cone/Plate Rheometer
	LIGHT TRANSMITTANCE	>90%	-
	CULTURE SURVIVAL RATE INVITRO	87.5%	GBT 16886
	COMPATIBLE BMF SYSTEMS	S140, S240, D1025, S350, S150 Series	-

[1] Final properties are dependent on print conditions, post-processing operations, and part geometr y.

[2] Test samples were UV cured and heat cured.

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