

MPU 100

MPU 100 offers a unique combination of mechanical strength, biocompatibility, and sterilizability.

Tensile Properties ASTM D638, Type V, 10 mm/min	Metric	U.S.
Tensile Modulus	1200 MPa	170 ksi
0.2 % Offset Yield Strength	14 MPa	2.0 ksi
Ultimate Tensile Strength	38 MPa	5.5 ksi
Elongation at Break	25 %	

Flexural Properties ASTM D790	Metric	U.S.
Flexural Strength	44 MPa	6.4 ksi
Flexural Modulus	1000 MPa	150 ksi

Impact Properties	Metric	U.S.
Notched Izod (Machined), 23 °C, ASTM D256	29 J/m	0.54 ft-lb/in
Unnotched Izod, ASTM D4812	650 J/m	12 ft-lb/in
Notched Charpy, ISO 179-1/1eA	2.2 kJ/m ²	1.0 ft-lb/in ²
Unnotched Charpy, ISO 179-1/1eU	36 kJ/m ²	17 ft-lb/in ²

Thermal Properties	Metric	U.S.
Heat Deflection Temperature @ 0.455 MPa/66 psi, ASTM D648	48 °C	118 °F
Heat Deflection Temperature @ 1.82 MPa/264 psi, ASTM D648	38 °C	100 °F

Electrical Properties	Metric
Dielectric Strength, ASTM D149	14.2 kV/mm
Dielectric Constant, 1 kHz, ASTM D150	3.69
Dissipation Factor, 1 kHz, ASTM D150	0.0222

General Properties	Metric
Density (liquid resin)	1.05 g/cm ³

NOTES—Results in this data sheet represent typical values from specific sample generation and testing processes and may vary if the established protocols are not followed. Contact Carbon for the specific process used to generate the test samples to determine each of these values. The U.S. values are converted from Metric measurements and are for reference only.

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