



MPU 100

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



CarbonResin MPU 100

DOC #108269-01 REV A
TECHNICAL DATA SHEET, LAST UPDATED 09/05/2018

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	



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