

DMR III

Dental Model Resin

DMR III is a fast-printing resin with vertical printing capability for production of dental models of superb toughness, excellent wear resistance, detailed and higher resolution, and long-term stability. It is recommended to be used in the orthodontic, restoration and implant applications.



Orange



Fast



Tough



Anti-scratch



Accurate

DMR III Technical Data Sheet:

Tensile Properties, ASTM D638, Type IV	Metric	U.S.
Tensile Modulus, 1 mm/min	1821 MPa	264.05 ksi
Ultimate Tensile Strength, 10 mm/min	41 MPa	5.95 ksi
Elongation at Break, 10 mm/min	6.76 %	6.76 %
Tensile Strength at Yield, 10 mm/min	43.7 MPa	6.34 ksi
Elongation at Yield, 10 mm/min	4.4 %	4.4 %
Impact Properties	Metric	U.S.
Notched Izod (Machined), 23 °C, ASTM D256	26.9 J/m	0.504 ft-lb/in
Notched Izod (Machined), 23 °C, ISO 180/A	1.95 KJ/m ²	0.93 ft-lb/in ²
Flexural Properties, ASTM D790, 1 %/min	Metric	U.S.
Flexural Strength	70 MPa	10.15 ksi
Flexural Modulus	1948 MPa	282.46 ksi
Thermal Properties, ASTM D648	Metric	U.S.
Heat Deflection Temperature@ 0.455 MPa/66 psi, ASTM D648	55.9 °C	132.6 °F
General Properties	Metric	
Hardness, Shore D, ASTM D2240	88D	
Density (cured resin), ASTM D792	1.18 g/cm ³	
Density (liquid resin), ASTM D4052	1.10 g/cm ³	
Viscosity, 25 °C, ASTM D2196	932 cps	
Water Absorption, 24 hours, 23 °C, ASTM D570	0.70 %	
Water Absorption, Long Term (14 Days), ASTM D570	1.95 %	

The above TDS data is tested and verified in LuxCreo's 3D printing system. The mechanical properties of the material may vary based on print orientation, print settings and the choice of post-process technology. Please refer to LuxCreo's material "Application Guide" or consult after-sales to select suitable parameters for best performance of the material. Improper use of materials or non-compliance with material "Application Guide" may result in changes in mechanical properties and colors. LuxCreo reserves the right to change material properties and formulations without notice.