

# DMR III

## Dental Model Resin

DMR III is a dental model resin that can be printed quickly. It has the characteristics of high toughness, high detail expression, high wear resistance, and good long-term stability of dental models. It is recommended for dental models such as prosthodontics.



Strength



Tough



Anti-scratch



Accurate



Orange

US:

940 Old County Rd, Belmont, CA, 94002, USA

MAT #DMR112101-01 Rev1.0

## DMR III Technical Data Sheet:

Tensile Properties, ASTM D638	Metric	U.S.
Tensile Modulus	1821 MPa	264.05 ksi
Ultimate Tensile Strength	41 MPa	5.95 ksi
Elongation at Break	6.76 %	6.76 %
Tensile Strength at Yield	43.7 MPa	6.34 ksi
Elongation at Yield	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 <sup>2</sup>	0.93 ft-lb/in <sup>2</sup>
Flexural Properties, ASTM D790	Metric	U.S.
Flexural Strength	70 MPa	10 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 <sup>3</sup>	
Density (liquid resin), ASTM D4052	1.10 g/cm <sup>3</sup>	
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 value of DMR III is tested and verified in LuxCreo's 3D printing system.

The mechanical properties of the material may be different due to the placement direction of the 3D printing model on the forming table, the optical power of the 3D printing system and other parameters, and the selection of the post-process technology of the 3D printed parts. Please refer to LuxCreo's "Product Design and Printing Guide" or consult after-sales to choose a suitable process. Improper use of materials or non-compliance with "Product Design and Printing Guidelines" may result in changes in mechanical properties and colors.

LuxCreo reserves the right to change material properties and formulations without notice.