

# DNG 06

## Splint & Night Guard Resin

DNG 06 is a fast-printing transparent and easy-fit splint and nightguard resin with superb abrasion resistance, mechanical properties and biocompatibility. DNG 06 is FDA Class I certified.

ISO Standard	Tested Property	Test Result
ISO 10993-10:2010	Oral Mucosa Irritation and Skin Sensitization	Pass
ISO 10993-5:2009	In Vitro Cytotoxicity	Pass



Transparent



Accurate



Transparent



Fast



Biocompatible

## DNG 06 Technical Data Sheet:

Tensile Properties, ASTM D638	Metric	U.S.
Tensile Modulus	1351 Mpa	195.93 ksi
Ultimate Tensile Strength	38.12 MPa	5.53 ksi
Elongation at Break	19.65 %	19.65 %
Tensile Strength at Yield	34.29 MPa	4.97 ksi
Elongation at Yield	5.5 %	5.5 %
Impact Properties	Metric	U.S.
Notched Izod (Machined), 23 °C, ISO 180/A	0.96 KJ/m <sup>2</sup>	0.46 ft-lb/in <sup>2</sup>
Flexural Properties, ASTM D790	Metric	U.S.
Flexural Strength	45.74 MPa	6.63 ksi
Flexural Modulus	1187.8 MPa	172.3 ksi
Thermal Properties, ASTM D648	Metric	U.S.
Heat Deflection Temperature@ 0.455 MPa/66 psi, ASTM D648	58.9 °C	138 °F
General Properties	Metric	
Hardness, Shore D, ASTM D2240	71D	
Density (cured resin), ASTM D792	1.17 g/cm <sup>3</sup>	
Density (liquid resin), ASTM D4052	1.10 g/cm <sup>3</sup>	
Viscosity, 25 °C, ASTM D2196	2290 cps	
Water Absorption, 24 hours, 23 °C, ASTM D570	0.80 %	

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.