

# DSG 07

## Dental Surgical Guide Resin

DSG 07 is a transparent and tough resin ideal for implant applications. DSG 07 is an FDA Class I certified material with excellent mechanical properties and good biocompatibility.

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



Translucent light blue



Tough



Transparent



Biocompatible

## DSG 07 Technical Data Sheet:

Tensile Properties, ASTM D638, Type IV	Metric	U.S.
Tensile Modulus, 1 mm/min	1897 MPa	275.06 ksi
Ultimate Tensile Strength, 10 mm/min	46 MPa	6.67 ksi
Elongation at Break, 10 mm/min	6.12 %	6.12 %
Impact Properties	Metric	U.S.
Notched Izod (Machined), 23 °C, ISO 180/A	1.53 kJ/m <sup>2</sup>	0.73 ft-lb/in <sup>2</sup>
Flexural Properties, ASTM D790, 1 %/min	Metric	U.S.
Flexural Strength	71 MPa	10.30 ksi
Flexural Modulus	1978 MPa	286.8 ksi
Thermal Properties, ASTM D648	Metric	U.S.
Heat Deflection Temperature@ 0.455 MPa/66 psi, ASTM D648	81.5 °C	178.7 °F
General Properties	Metric	
Hardness, Shore D, ASTM D2240	84D	
Density (cured resin), ASTM D792	1.16 g/cm <sup>3</sup>	
Density (liquid resin), ASTM D4052	1.08 g/cm <sup>3</sup>	
Viscosity, 25 °C, ASTM D2196	749 cps	
Water Absorption, 24 hours, 23 °C, ASTM D570	0.96 %	
Water Absorption, Long Term (14 Days), ASTM D570	2.92 %	

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.