

# Dental SG

## Biocompatible Photopolymer Resin for Form 2

Formlabs Dental SG Resin produces strong, accurate, biocompatible parts ideal for a dental surgical guide and similar applications, and is specifically designed to work with your Form 2 3D Printer. After being post-cured, this material can be steam sterilized in an autoclave, or by gamma-ray sterilization.



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**formlabs** 

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To the best of our knowledge the information contained herein is accurate. However, Formlabs, Inc. makes no warranty, expressed or implied, regarding the accuracy of these results to be obtained from the use thereof.

# Material Properties Data

	METRIC	METHOD
	Post-Cured	
<b>Flexural Properties</b>		
Flexural Strength	≥ 50 MPa	ISO 20795-1:2013
Flexural Modulus	≥ 1500 Mpa	ISO 20795-1:2013
<b>Hardness Properties</b>		
Hardness Shore D	≥ 80 D	per ISO 868:2003
<b>Impact Properties</b>		
Charpy Impact Strength Unnotched	12 - 14 kJ/m <sup>2</sup>	ISO 179:2010

**Dental SG is tested at NAMSA, Chasse sur Rhône in France, and is certified biocompatible per EN-ISO 10993-1:2009/AC:2010:**

- Non-mutagenic.
- Non-cytotoxic.
- Not induce any erythema or edema reactions.
- Not a sensitizer.
- Not cause systemic toxicity.

**The product is in compliance with ISO Standards:**

- EN-ISO 20795-1:2013 (Dentistry – Base Polymers – Part 1: Denture Base Polymers)
- EN-ISO 7405:2009/A1:2013 (Dentistry – Evaluation of biocompatibility of medical devices used in dentistry)
- EN-ISO 10993-1:2009/AC:2010 (Biological evaluation of medical devices – Part 1 – Evaluation and testing)

## NOTES:

<sup>1</sup>Material properties can vary with part geometry, print orientation, print settings, and temperature.

<sup>2</sup>Data refers to post-cured properties obtained after exposing green parts to 108 watts each of Blue UV-A (315 – 400 nm) and UV-Blue (400 – 550 nm) light, in a heated environment at 60 °C (140 °F), with six (6) 18W/71 lamps (Dulux L Blue) and six (6) 18W/78 lamps (Dulux blue UV-A).