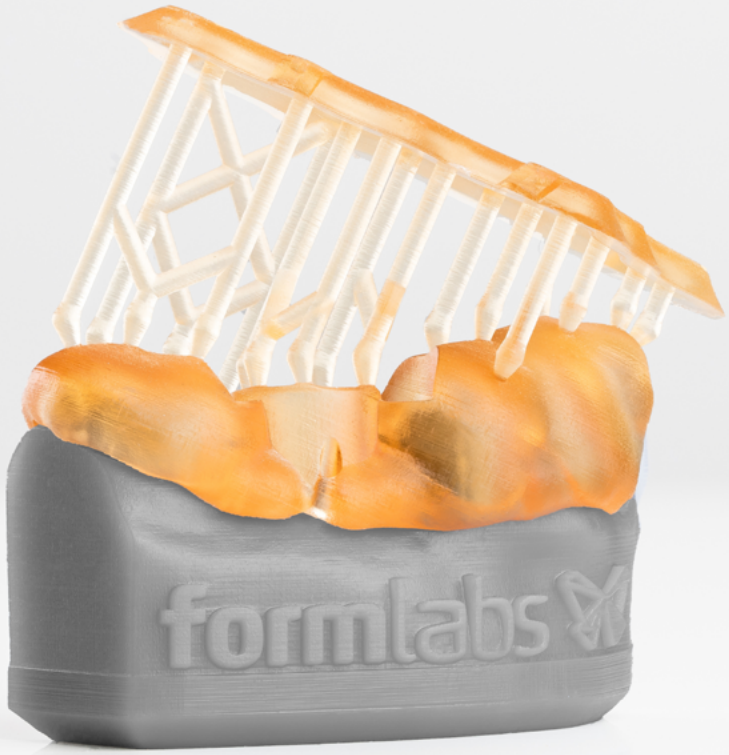
MATERIAL DATA SHEET

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.



FLDGOR01

formlabs

Prepared 04 . 15 . 2016
Rev 01 04 . 15 . 2016

Material Properties Data

	METRIC	METHOD
	Postcured	
Flexural Properties		
Flexural Strength	≥ 50 MPa	ISO 20795-1:2013
Flexural Modulus	≥ 1500 Mpa	ISO 20795-1:2013
Hardness Properties		
Hardness Shore D	≥ 80 D	per ISO 868:2003
Impact Properties		
Charpy Impact Strength Unnotched	12 - 14 kJ/m^2	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:

[1]Material properties can vary with part geometry, print orientation, print settings and temperature.

[2]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).