## Denture Base and Teeth

Long-lasting materials for truly lifelike permanent prosthetics

Formlabs is expanding access to digital dentures with an efficient, cost-effective manufacturing solution. Class IIa long-term biocompatible Digital Denture Resins enable dental professionals to produce 3D printed full dentures accurately and reliably.

**Dentures** 

Try-ins





FLDTA101 FLDTA201 FLDTA301 FLDTAS01 FLDTB101 FLDTB201

\* May not be available in all regions

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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

## **Denture Base and Teeth Resins**

Denture Base	METRIC <sup>1</sup>	METHOD
	Post-Cured <sup>2</sup>	
Mechanical Properties		
Flexural Strength	> 50 MPa	ISO 10477
Density	1.15 g/cm <sup>3</sup> < X <1.25 g/cm <sup>3</sup>	ASTM D792-00
Denture Teeth	METRIC 1	METHOD
	Post-Cured <sup>2</sup>	
Mechanical Properties		
Flexural Strength	> 65 MPa	ISO 20795-1
Density	1.15 g/cm <sup>3</sup> < X <1.25 g/cm <sup>3</sup>	ASTM D792-00

Denture Base and Teeth resins were tested for biological evaluation of medical devices at WuXi Apptec, 2540 Executive Drive, St. Paul, MN, and is certified biocompatible per EN-ISO 10993-1:2009/ AC:2010:

ISO Standard	Description
EN-ISO 10993-3:2014	Not mutagenic
EN-ISO 10993-5:2009	Not cytotoxic
EN-ISO 10993-10:2010	Not an irritant
EN-ISO 10993-10:2010	Not a sensitizer
EN-ISO 10993-11:2006	Non toxic

The product was developed and is in compliance with the following ISO Standards:

Denture Base ISO Standards	Description	
EN-ISO 22112:2017	Dentistry - Artificial teeth for dental prostheses	
EN-ISO 10477	Dentistry - Polymer-based crown and veneering materials (Type 2 and Class 2)	

Denture Theeth ISO Standards	Description
EN-ISO 20795-1:2013	Dentistry - Base Polymers - Part 1: Denture Base Polymers

<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), in a heated environment at 80 °C (140 °F) and 1hr, with six (6) 18W/78 lamps (Dulux blue UV-A)