formlabs | dental

DENTAL RESIN

Denture Base Resin V2

High-impact denture base material for lifelike, long-lasting prosthetics

Denture Base Resin V2 is a high-impact, Class II biocompatible material for producing durable, natural-looking dentures that exceed ISO standards. Three semi-translucent pink shades, broad workflow compatibility, and a streamlined post-processing protocol give dental professionals the confidence to guarantee their work for years of patient wear.

V2 **FLDBOP02** **FLDBDP02** **FLDBLP02**

Prepared 21/05/2026

Rev. 00 21/05/2026

Material Properties	METRIC	METHOD
	Post-Cured [1,2,3]	
Tensile Properties	METRIC	METHOD
Tensile Strength	57 MPa	ASTM D638-14
Tensile Modulus	2800 MPa	ASTM D638-14
Flexural Properties	METRIC	METHOD
Flexural Strength	67 MPa	ISO 20795-1
Flextural Modulus	2200 MPa	ISO 20795-1
Fracture Properties	METRIC	METHOD
Maximum Stress Intensity Factor (Kmax)	2.44 MPa-$m^{1/2}$	ISO 20795-1
Work of Fracture (W_f)	1000 J/m^2	ISO 20795-1
Other Properties	METRIC	METHOD
Shore D Hardness	85D	ASTM D2240
Bulk Density	1.15 g/mL	ASTM D792-20
Viscosity at 25 °C	5000 cPs	ASTM D792-20
Liquid Density	1.08 g/mL	ASTM D792-20
Water Solubility	0.16 µg/mm^3	ISO 20795-1
Water Absorption	27 µg/mm^3	ISO 20795-1

Denture Base Resin V2 has been evaluated in accordance with ISO 10993-1:2018, Biological evaluation of medical devices - Part 1: Evaluation and testing within a risk management process, and ISO 7405:2018, Dentistry - Evaluation of biocompatibility of medical devices used in dentistry, and passed the requirements for the following biocompatibility risks:

ISO Standard	Description
EN-ISO 10993-3:2014	Not mutagenic
EN-ISO 10993-5:2009	Not cytotoxic
EN-ISO 10993-23:2021	Not an irritant
EN-ISO 10993-10:2021	Not a sensitizer
EN-ISO 10993-11:2017	Non toxic

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

ISO Standard	Description
EN ISO 13485:2016	Medical Devices – Quality Management Systems – Requirements for Regulatory Purposes
EN ISO 14971:2012	Medical Devices – Application of Risk Management to Medical Devices

[1] Material properties may vary based on part geometry, print orientation, print settings, temperature, and disinfection or sterilization methods used.

[2] Data for post-cured samples were measured on Type I tensile bars printed on a Form 4 printer with 100 µm Denture Base Resin V2 settings, washed in a Form Wash for 10 minutes in ≥99% Isopropyl Alcohol, and post-cured at 80°C for 30 minutes in a Form Cure L v1.

[3] Denture Base Resin V2 was tested at NAMSA World Headquarters, OH, USA