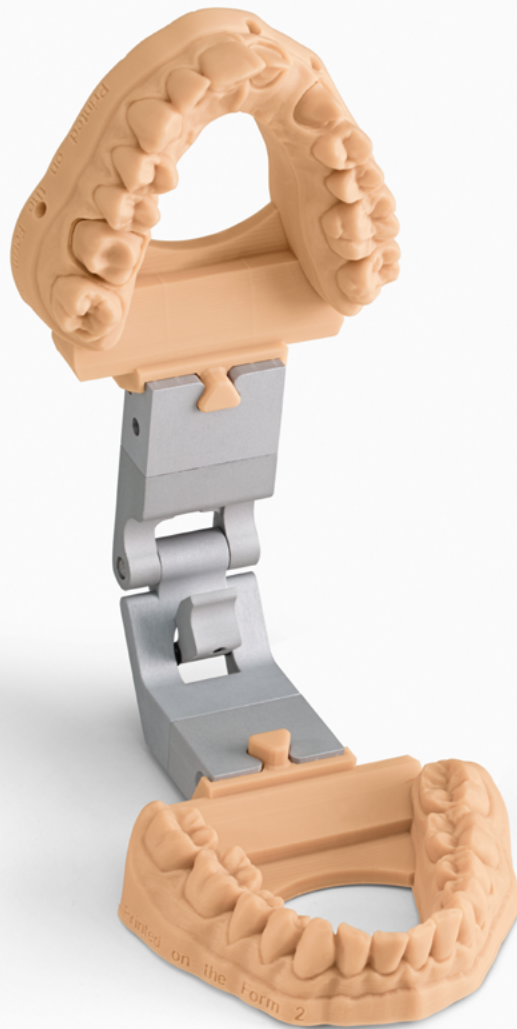


Dental Model

Dental Model for High-Precision, High-Accuracy

Designed for crown and bridge models with removable dies, Dental Model Resin is a high-precision, high-accuracy resin. Print crisp margins and contacts within +/- 35 microns, and removable dies with consistently tight fit. A smooth, matte surface finish and color similar to gypsum make it easy to switch from analog to digital model production.



FLDMBE02

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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 ¹ | | IMPERIAL ¹ | | METHOD |
|---------------------------------|---------------------|-------------------------|-----------------------|-------------------------|---------------|
| | Green ² | Post-Cured ³ | Green ² | Post-Cured ³ | |
| Mechanical Properties | | | | | |
| Tensile Strength at Yield | 33 MPa | 61 MPa | 4800 psi | 8820 psi | ASTM D 638-14 |
| Tensile Modulus | 1.6 GPa | 2.7 GPa | 230 ksi | 397 ksi | ASTM D 638-14 |
| Elongation at Failure | 25 % | 5 % | 25 % | 5 % | ASTM D 638-14 |
| Flexural Properties | | | | | |
| Flexural Modulus | 0.95 GPa | 2.5 GPa | 138 ksi | 365 ksi | ASTM D 790-15 |
| Flexural Strength at 5% Strain | 33.9 MPa | 95.8 MPa | 4910 psi | 13900 psi | ASTM D 790-15 |
| Impact Properties | | | | | |
| Notched IZOD | 27 J/m | 33 J/m | 0.5 ft-lbf/in | 0.6 ft-lbf/in | ASTM D256-10 |
| Thermal Properties | | | | | |
| Heat Deflection Temp. @ 264 psi | 32.8 °C | 45.9 °C | 91.1 °F | 114.6 °F | ASTM D 648-16 |
| Heat Deflection Temp. @ 66 psi | 40.4 °C | 48.5 °C | 104.7 °F | 119.3 °F | ASTM D 648-16 |

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

²Data was obtained from green parts, printed using Form 2, 100 µm, Dental Model settings, without additional treatments.

³Data was obtained from parts printed using Form 2, 100 µm, Dental Model settings and post-cured with 1.25 mW/cm² of 405 nm LED light for 60 minutes.

Solvent Compatibility

G = Good resistance.

Parts exposed to this solvent should not experience a decrease in mechanical properties. (≤ 1% weight gain, ≤ 1% width increase over 24 hours for a 1 x 1 x 1 cm cube)

A = Acceptable resistance.

Parts exposed to this solvent may experience a small decrease in mechanical properties. (1 – 2% weight gain, 1 – 2% width increase over 24 hours for a 1 x 1 x 1 cm cube)

X = Unacceptable resistance.

Parts exposed to this solvent will experience a significant decrease in mechanical properties as well as visible degradation. (> 2% weight gain, > 2% width increase over 24 hours for a 1 x 1 x 1 cm cube)

| Solvent | Green | Post-Cured | Solvent | Green | Post-Cured |
|---------------------------------|-------|------------|-------------------------------------|-------|------------|
| Acetic Acid, 5 % | G | G | Isooctane | G | G |
| Acetone | X | X | Isopropyl Alcohol | X | G |
| Bleach, ~5 % NaOCl | G | G | Sodium hydroxide (0.025 %, pH = 10) | G | G |
| Butyl Acetate | X | G | Salt Water (3.5 % NaCl) | G | G |
| Diethyl glycol monomethyl ether | X | G | Water | G | G |
| Hydrogen Peroxide (3 %) | G | G | Xylene | X | G |