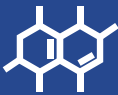




Technical Datasheet

LCD

Dental Model



UV Resin



UV LCD Dental Model

Accuracy (Low – High)



Shore Hardness (Soft – Hard)



Compatible Printers

UV LCD & DLP 3D Printers



Liquid Crystal
OPUS

Colour

 Beige

 White

 Grey

Available in
1kg bottles



Dental Model photopolymer resins have been formulated to create detailed, high resolution dental models on the LC Dental 3d printer. The resins have been developed in conjunction with Dental Technologists to ensure an optimal colour, feel, and working characteristics. Ideal for orthodontic, study and working models. The prints show minimal shrinkage with a tolerance of 50µm max deviation on a full arch. Printed dental parts exhibit extremely high tensile properties and hardness, allowing for their use as a working or a vacuum forming model.

Optimised for:

- Clear aligner manufacture
- Thermoforming

- Study opposing and denture base models



UV LCD Dental Model Properties

Tensile Properties

Young's Modulus *	2800 MPa	ASTM D638
Ultimate Tensile Strength *	70 MPa	ASTM D638
Elongation at break *	4%	ASTM D638

Flexural Properties

Flexural Modulus *	1700 MPa	ASTM D790
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Impact Properties

Impact Strength Notched Izod *	3.9 kJ/m ²	ISO 180
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General Properties

Hardness *	90 Shore D	ASTM D2240
Water absorption after 24 hrs	< 0.3%	wt%
Viscosity	250 cPs	At 25°C Brookfield spindle 3
Density	1.10 g/cm ³	
Storage	10<T>50°C	

* Mechanical properties stated based on fully cured material.



We are constantly reviewing and improving our range of high-performance materials. For the very latest information, please visit the Photocentric website



Pre-Print Instructions

1. To print with Photocentric Liquid Crystal Opus, choose Dental Model Resin and the desired layer thickness when preparing your print file in Photocentric Studio.
2. Heat the resin to 30°C in the bottle.
3. Shake the resin bottle for 2 minutes before pouring into the resin vat.



Post-Print Instructions

1. Parts can be washed in 15 minutes using Photocentric Resin Cleaner or alternatively, in 10 minutes using Photocentric Resin Cleaner 30.
2. Once washed, rinse with warm water for 2 minutes
3. Dry with compressed air to remove any remaining water. Or alternatively, leave to air-dry.
4. Place the platform into the Photocentric Cure M+ for a minimum of 90 minutes at 60°C or until parts are fully cured.
5. Remove the platform from the Cure M+ and immediately submerge in cold water for thermal shocking. Parts can be removed from the platform with minimal effort.
6. It is recommended to clean the resin vat after each print job as pigments may settle.