

## **MATERIAL DATA SAFETY SHEET**

Issued in Australia by Bilby 3D Pty Ltd.

The attached Material Data Safety Sheet has been prepared by the manufacturer outside Australia.

In accordance with Australia WHS regulations the following Australian contact details apply

# Section 1: AUSTRALIAN COMPANY DETAILS

In Australia the product is imported and distributed by: Bilby 3D Pty Ltd Mailing Address : Kingsgrove Business Centre, 7/192 Kingsgrove Rd, Kingsgrove NSW 2208 Head Office Address : Kingsgrove Business Centre, 7/192 Kingsgrove Rd, Kingsgrove NSW 2208 Contact Phone: 1800 847 333

# Section 2: AUSTRALIAN EMERGENCY CONTACT

## **Emergency Contact**

In the event of an emergency please contact: Poisons Information Centre 24 hour Telephone Advice Line on 13 11 26

# Section 3: AUSTRALIAN ISSUE DATA

Date of Issue : 1 March 2020

# Technical Data

# Phot Centric



UV LCD Dental Model

# SPECS

## **FEATURES**

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. Dental model resins will provide excellent print performance on the LC Precision printer range, allowing you to print crisp and clean dental models.

## **PROCESSING INSTRUCTIONS**

Follow the procedures laid out in your 3D Liquid Crystal user manual. Polymer should be poured into the tray away from direct sunlight. Polymer can be reused but should be poured through a filter to remove solid lumps. Keep hood on at all times. Liquid polymer is soluble in water and soap. We recommend the use of Photocentric Resin Cleaner for cleaning 3d printed objects. Objects should be post cured under UV in 60°C warm water to obtain the appropriate tensile properties and give a great surface finish.

## IDEAL APPLICATIONS

- Orthodontic moulds
- Die models
- Study Models



## DATA

| <b>Viscosity</b><br>(At 25°C Brookfield spindle 3)                                   | 250 cPs                          |
|--|----------------------------------|
| Hardness<br>ASTM D2240 (After post exposure)   | 90 Shore D                       |
| <b>Tensile strength</b><br>ASTM D638 (After post exposure Postcu<br>heat 60°C water) | 70 MPa<br>ured 120 mins UV and   |
| <b>Young's modulus</b><br>ASTM D638 (After post exposure Postcu<br>heat 60°C water)  | 2800 MPa<br>ured 120 mins UV and |
| <b>Elongation at break</b><br>ASTM D638 (Postcured 120 mins UV ar                    | 4.0%<br>nd heat 60°C water)      |
| <b>Impact strength<br/>notched Izod</b><br>ASTM D256 (After post exposure)           | 3.9 kJ/m2                        |
| Flexural strength<br>ASTM D792 (After post exposure)                                 | 85 MPa                           |
| <b>Flexural modulus</b><br>ASTM D792 (After post exposure)                           | 1700 MPa                         |
| Water absorption (24 h)  | < 0.3 wt%                        |
| Storage  | 10 <t>50°C</t>                   |
| Density  | 1.10 g/cm3                       |

## AVAILABLE COLOURS

Beige, Grey, White Available in 1kg bottles.

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www.photocentricgroup.com