



Bilby 3D

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



UV DLP Castable



SPECS

FEATURES

UV DLP Cast has been precisely formulated to work with your UV DLP Printer for creating castable jewellery parts displaying the highest level of detail. Printed parts are exceptionally accurate, displaying the highest level of detail and are suitable for use in direct investment casting, making them perfect for the modern jewellery market. During the casting process, parts will burn evenly, with virtually no ash, expansion or residues leaving you with an ideal mould for casting metals. Final cast parts are extremely accurate, displaying a smooth surface finish. Please refer to our casting guidelines for optimal casting results.

Key Benefits:

- Virtually no ash, expansion or residue during burnout
- Highly accurate printed and cast parts with a good, smooth surface finish.

Applications: Jewellery, Dental Casts, Models

PROCESSING INSTRUCTIONS

Follow the procedures laid out in your printer user manual. Polymer should be poured into the tray away from direct sunlight and after being shaken for two minutes. It is important to mix well the resin in the tray with the card provided before starting the print. Polymer can be reused but should be poured through a filter to remove solid lumps. Keep hood on at all times. First rinse with warm water, then spray with Photocentric Resin Cleaner (recommended), alternatively IPA or acetone can be used. Then rinse with warm water again. Drying your parts with an air gun will help ensure all holes and slots are open, if present. Place the parts in an oven at 120 °C for 4 hours: surfaces should be tack free. If still tacky, return items to the oven. UV DLP Cast contains a concentration of wax. In colder climates, there is a chance that the wax within the resin may separate. To solve this issue, we recommend heating the resin to around 50 °C and shaking thoroughly to re-incorporate the solid layer.

DATA

Viscosity (At 25°C Brookfield spindle 3)	630 cPs
Hardness (ASTM D2240 After post exposure)	75 Shore D
Tensile strength (ASTM D638 After Post Exposure)	19.5 MPa
Tensile Modulus (ASTM D638 After post exposure, 1h UV)	1380 MPa
Impact strength notched Izod ASTM D256 (After post exposure)	1.2 kJ/m ²
Flexural strength ASTM D792 (After post exposure)	22 MPa
Flexural modulus ASTM D792 (After post exposure)	632 MPa
Water absorption (24 h)	0.6 wt%
Elongation at break (ASTM D638 After post exposure, 1h UV)	2-3%
Storage	10<t>50°C
Density	1.20 g/cm ³

AVAILABLE COLOURS

Violet

Available in 1 kg bottles.