

#### **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





## Daylight Magna Duramax



#### **KEY FEATURES**

Photocentric's Daylight Magna Duramax photopolymer formulation has been created for 3D-printing functional parts that are very durable and long-lasting, with high impact strength. Thick objects are stiff but can be made to flex under strain, while returning to their original shape. Duramax has a smooth surface finish, requiring only minimal post processing, even for end-user parts.

With excellent imaging in the LC Magna, this resin has fast exposure times and a wide exposure latitude. Allowing the parts to also hold the finest details possible from LC Magna. The finished material is tough, durable and long lasting provided it is stored in dry conditions away from strong UV light.

#### PRINTING (PROCESSING) INSTRUCTIONS

Follow the procedures laid out in the LC Magna user manual. Shake resin prior to use, recommended 2 minutes. Avoid direct sunlight while pouring. The resin is reusable after pouring through the supplied filter and funnel to remove any solids. Always keep door closed when not in use to avoid curing or contamination.

#### Post Processing guidelines:

- Do not leave the platform in the ambient light before washing and post exposing, this may lead to liquid resin curing.
- Wash in the Wash 99 or Air Wash L for a maximum of 15 minutes.
- Rinse with hot water to remove residue cleaner and resin
- Dry with air compressor to remove any remaining water.
- Post cure in a pre-heated Cure L2 for 2 hours at 60 degrees, for larger parts it can take up to 5 hours to post cure.

#### Recommended resin temperature (pre-printing)

• 30°C

#### ΠΔΤΔ

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Viscosity (At 25°C Brookfield spindle 3)	395 cPs
Hardness ASTM D2240 (After post exposure)	70 Shore D
<b>Tensile strength</b> ASTM D638 (After post exposure)	50 MPa
Elongation at break ASTM D638 (After post exposure)	19%
Tensile Modulus ASTM D638 (After post exposure)	1760 MPa
Impact strength (Notched Izod-ISO 180)	5.4 kJ/m2
Flexural strength ASTM D790 (After post exposure)	28 MPa

# Heat deflection temperature

ASTM D790 (After post exposure)

Flexural modulus

10<t>50°C Storage **Density** 1.11 g/cm3

#### **AVAILABLE COLOURS**

Black.

Available in 5kg bottles.







760 MPa

65°C