



## Daylight Magna Duramax

# SPECS



Bike Saddle

### 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

### DATA

<b>Viscosity</b> (At 25°C Brookfield spindle 3)	395 cPs
<b>Hardness</b> ASTM D2240 (After post exposure)	70 Shore D
<b>Tensile strength</b> ASTM D638 (After post exposure)	50 MPa
<b>Elongation at break</b> ASTM D638 (After post exposure)	19%
<b>Tensile Modulus</b> ASTM D638 (After post exposure)	1760 MPa
<b>Impact strength</b> (Notched Izod-ISO 180)	5.4 kJ/m <sup>2</sup>
<b>Flexural strength</b> ASTM D790 (After post exposure)	28 MPa
<b>Flexural modulus</b> ASTM D790 (After post exposure)	760 MPa
<b>Heat deflection temperature</b>	65°C
<b>Storage</b>	10<math>\lt; \gt;50^{\circ}\text{C}</math>
<b>Density</b>	1.11 g/cm <sup>3</sup>

### AVAILABLE COLOURS

Black.

Available in 5kg bottles.