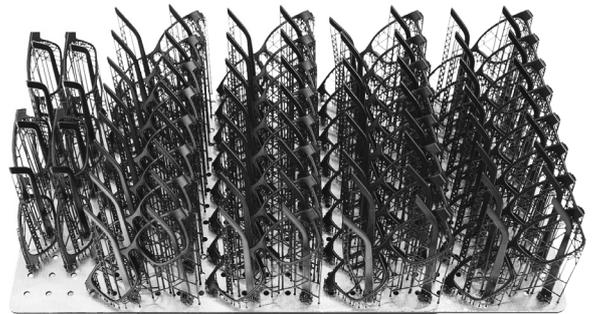




## Daylight Magna Hard

# SPECS



### KEY FEATURES

Photocentric's Daylight Magna Hard formulation is ideal for making large scale objects displaying extreme hardness with no compression under high force, plastic deformation due to yield strength before breaking, and minimal shrinkage over varied areas. This minimal shrinkage now allows scale to be possible. Parts printed also exhibit exceptionally high tensile shear properties, with reasonable elongation. 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 could lead to liquid resin curing prematurely.
- Wash in the wash 99L for approximately 15 minutes (as a maximum)
- Rinse with hot water to remove residue cleaner and resin
- Dry with air compressor to remove any remaining water from the part
- Post cure in a pre-heated Cure L for 2 hours at 60 degrees, for larger parts it can take up to 4 hours to post cure.

#### Support guidelines:

- Support profile for small parts – 0.6mm tips / 1.5mm pole diameter / 2mm widening factor
- Support profile for large parts – 0.6mm tips / 2mm pole diameter / 2mm widening factor

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

- 30°C

### DATA

|  |            |
|--|------------|
| <b>Viscosity</b><br>(At 25°C Brookfield spindle 3)   | 450 cPs    |
| <b>Hardness</b><br>ASTM D2240 (After post exposure)  | 86 Shore D |
| <b>Tensile strength</b><br>ASTM D638 (After post exposure, 1h UV)                                      | 52 MPa     |
| <b>Impact strength notched Izod</b><br>ASTM D256 (After post exposure)                                 | 2.01 kJ/m2 |
| <b>Flexural strength</b><br>ASTM D792 (After post exposure)  | 65 MPa     |
| <b>Young's modulus</b><br>ASTM D638 (After post exposure)<br>Poscured 120 mins UV and heat 60°C water) | 2600 MPa   |
| <b>Flexural modulus</b><br>ASTM D792 (After post exposure)   | 1550 MPa   |
| <b>Elongation at break</b><br>ASTM D638 (After post exposure, 1h UV)                                   | 8-10%      |
| <b>Heat deflection temperature</b>   | 65°C       |
| <b>Water absorption (24 h)</b>   | <0.2 wt%   |
| <b>Storage</b>   | 10<t>50°C  |
| <b>Density</b>   | 1.1 g/cm3  |

### AVAILABLE COLOURS

#### Black

Available in 5kg bottles.