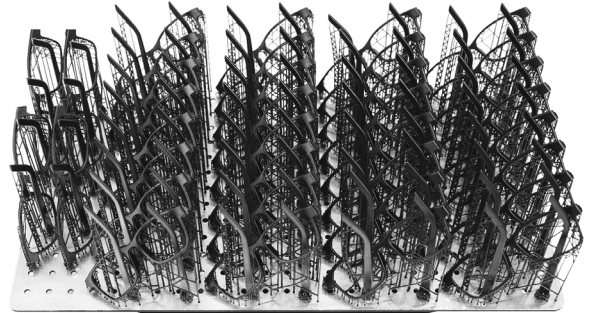




## Daylight Magna Hard



# SPECS

## FEATURES

Photocentric's Magna Hard daylight polymers are ideal for making large scale objects where you want a very hard object with no compressive ability under high force. Scale is now possible with Magna Hard as the resin exhibits minimal shrinkage over large or small areas. Pieces printed also exhibit plastic deformation as it has a yield strength before breaking. Objects will bend and deflect slightly when under duress. They exhibit very high tensile shear properties and reasonable elongation. Magna Hard provides excellent imaging in Magna Liquid Crystal printer. You will experience the benefits of fast exposure times and a wide exposure latitude, allowing you to hold the finest details your machine can provide. The solid material is tough, durable and long lasting provided it is stored in dry conditions away from UV light. Key benefits include large hard and durable parts with excellent accuracy. These parts are easy to use and finish.

## PROCESSING INSTRUCTIONS

Follow the procedures laid out in your 3D Liquid Crystal's user manual. Polymer should be poured into the vat away from direct sunlight. Polymer can be reused but should be poured through a filter to remove solid lumps. Keep the Magna door closed to prevent accidentally curing resin. Liquid polymer is soluble in water and soap however we recommend Photocentric's Resin Cleaner, or IPA, followed by water. The cleaned objects should be post exposed at 70°C under UV for a minimum of 1 hour to obtain the maximum properties. Alternatively, the parts can be post exposed in clean warm water under UV for 1 hour.

## DATA

<b>Viscosity</b> (At 25°C Brookfield spindle 3)	450 cPs
<b>Hardness</b> ASTM D2240 (After post exposure)	86 Shore D
<b>Tensile strength</b> ASTM D638 (After post exposure, 1h UV)	52 MPa
<b>Impact strength notched Izod</b> ASTM D256 (After post exposure)	2.01 kJ/m2
<b>Flexural strength</b> ASTM D792 (After post exposure)	65 MPa
<b>Young's modulus</b> ASTM D638 (After post exposure Poscured 120 mins UV and heat 60°C water)	2600 MPa
<b>Flexural modulus</b> ASTM D792 (After post exposure)	1550 MPa
<b>Elongation at break</b> 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.