



Technical Datasheet

Magna Durable



Compatible Printers Inpact Strength (Low – High)

Compatible Printers
Colour

Liquid Crystal
Image: Colour

MadGNA
Black

Sig bottle
Sig bottle



Photocentric's Daylight Magna Durable formulation is ideal for 3D printing functional parts that are durable and long-lasting, with high impact strength that can also bend without breaking. Printed parts are able to flex under strain and return to their original form.

Optimised for:

Jigs and fixtures

Cover-plates and enclosures

Suitable for end-use parts

Unique features:



Smooth surface finish



Tough, durable, and long lasting



Magna Durable Properties

Tensile Properties		
Tensile Modulus *	1570 MPa	ASTM D638
Ultimate Tensile Strength *	42 MPa	ASTM D638
Elongation at break *	30%	ASTM D638
Flexural Properties		
Flexural Modulus *	1460 MPa	ASTM D790
Flexural Strength *	52 MPa	ASTM D790
Impact Properties		
Impact Strength Notched Izod *	91 J/m	ASTM D256
General Properties		
Shore Hardness *	60 Shore D	ASTM D2240
Heat Deflection Temperature	45°C	ASTM D648
Water Absorption (Short Term)	1%	ASTM D570
Viscosity	1200 cPs	At 25°C Brookfield spindle 3
Density	1.09 g/cm3	
Storage	10 <t>50°C</t>	
Biocompatibility		
Cytotoxicity*	Passed	ISO 10993-5

* Mechanical properties stated based on fully cured material.



We are constantly reviewing and improving our range of high-performance materials. For the very latest information, please visit the Photocentric website



- 1. To print with Photocentric Liquid Crystal Magna, choose 'Durable' and the desired layer thickness when preparing your print file in Photocentric Studio.
- 2. Heat the resin to 30°C in the bottle.
- 3. Shake the resin bottle for 2 minutes before pouring into the resin vat.



Post-Print Instructions

- 1. Parts can be washed in 15 minutes using Photocentric Resin Cleaner or alternatively, in 10 minutes using Photocentric Resin Cleaner 30.
- 2. Once washed, rinse with warm water for 2 minutes
- 3. Dry with compressed air to remove any remaining water. Or alternatively, leave to air-dry.
- 4. Place the platform into the Photocentric Cure L2 for a minimum of 4 hours at 60°C or until parts are fully cured. It can vary from 4-8 hours depending on dimensions of the parts.
- 5. Remove the platform from the Cure L2 and allow it cool to room temperature. Remove the printed parts with the supplied scraper or the soft spatula.



