



Technical Datasheet

Magna High Tensile

 Daylight Resin



Magna High Tensile

Tensile Modulus (Low – High)



Shore Hardness (Low – High)



Compatible Printers



Liquid Crystal
MAGNA

Colour



White

Available in
5kg bottle



Phone Case

Photocentric's Daylight Magna High Tensile formulation has been created for producing parts exhibiting exceptional tensile strength and elongation comparable to acrylics and polyimides. Printed parts cannot be deformed or compressed easily, while having minimal shrinkage and high accuracy.

Optimised for:

Engineering

Prototyping

Tooling and moulds

Unique features:



High tensile modulus



High accuracy



Smooth surface finish



Minimal shrinkage



Heat deflection temperature of 95°C



Magna High Tensile Properties

Tensile Properties

Tensile Modulus *	3060 MPa	ASTM D638
Ultimate Tensile Strength *	81 MPa	ASTM D638
Elongation at break *	4.8%	ASTM D638

Flexural Properties

Flexural Modulus *	2200 MPa	ASTM D790
Flexural Strength *	95 MPa	ASTM D790

Impact Properties

Impact Strength Notched Izod *	22.7 J/m	ASTM D256
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General Properties

Shore Hardness *	92 Shore D	ASTM D2240
Heat Deflection Temperature	95°C	ASTM D648
Viscosity	980 cPs	At 25°C Brookfield spindle 3
Density	1.16 g/cm ³	
Storage	10<T>50°C	

* 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



Pre-Print Instructions

1. To print with Photocentric Liquid Crystal Magna, choose 'High Tensile White' and the desired layer thickness when preparing your print file in Photocentric Studio.
2. It is recommended to print models which do not take longer than 12hrs to print at 100 µm layer thickness or build height no greater than 150mm at any desired layer thickness.
3. Heat the resin to 30°C in the bottle.
4. 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 2 hours at 60°C or until parts are fully cured.
5. Remove the platform from the Cure L2 and immediately submerge in cold water for thermal shocking. Parts can be removed from the platform with minimal effort.
6. It is recommended to clean the resin vat after each print job as pigments may settle.