## Technical Data





## Daylight Magna High Tensile





#### **KEY FEATURES**

Photocentric's Daylight Magna High Tensile formulation has been created for producing objects exhibiting exceptional tensile strength and elongation comparable to acrylic and polyimide. These rigid parts cannot be bent or compressed easily, while having minimal shrinkage and high accuracy. 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. We would recommend that build heights do not exceed 150mm. 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 0.8mm tips / 2mm pole diameter / 2mm widening factor

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

• 30°C

#### **DATA**

Viscosity	980 cPs
(At 25°C Brookfield spindle 3)	

Hardness	92 Shore D
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ASTM D2240 (After post exposure)	
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## **Tensile strength**ASTM D638 (After post exposure

Postcured 120 mins UV and heat 60°C water)

Impact strength	3.2 kJ/m2
notched Izod	

ASTM D256 (After post exposure)

Flexural	strength	95 MPa

ASTM D792 (After post exposure)

#### Young's modulus 3060 MPa

ASTM D638 (After post exposure Poscured 120 mins UV and heat 60°C water)

## Flexural modulus ASTM D792 (After post exposure) 2200 MPa

### Elongation at break 4.8%

ASTM D638 (Postcured 120 mins UV and heat 60°C water)

# $\begin{array}{lll} \textbf{Heat deflection temperature} & 95 ^{\circ} \text{C} \\ \textbf{Storage} & 10 < t > 50 ^{\circ} \text{C} \\ \end{array}$

 Storage
 10<t>50°C

 Density
 1.16 g/cm3

#### **AVAILABLE COLOURS**

White.

Available in 5kg bottles.





