Technical Datasheet

DLP Hard

UV Resin

Photocentric

UV DLP Hard

Tensile Modulus (Low – High)

Impact Strength (Soft – Hard)

Compatible Printers

UV LCD & DLP 3D Printers

Liquid Crystal OPUS

Colour

Black

Grey

White

Available in
1kg bottles

Photocentric's range of hard UV DLP photopolymers are ideal for making objects where you want a very hard object. Objects cannot be bent or compressed.

They exhibit very high tensile shear properties and very low elongation. Objects cannot be bent and compressed. UV DLP Hard provides excellent imaging in your desktop DLP 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 strong UV light.

Optimised for:

- Functional Parts
- Prototypes
- Compression-resisting end-use parts

Revision 1
18/01/2023

UV DLP Hard Properties

Tensile Properties		
Tensile Modulus	2060 MPa	ASTM D638
Initical Tensile Strength *	15 MPa	ASTM D638
Ultimate Tensile Strength *	35 MPa	ASTM D638
Elongation at break *	4%	ASTM D638
General Properties		
Hardness *	77 Shore D	ASTM D2240
Heat Deflection Temperature	60°C	ASTM D638
Density	1.19 g/cm3	
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

Processing Instructions

Follow the procedures laid out in your 3D DLP printer user manual. Polymer should be poured into the tray away from direct sunlight. Polymer can be reused but should be poured through a filter to remove solid lumps. Keep hood on at all times. Liquid polymer is soluble in water and soap. After making cleaned objects surface tack can be removed by leaving under water in UV for 20 minutes or longer. If any surface tack persists you can remove it by wiping the parts with IPA.

Photocentric

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Impact Strength (Soft – Hard)

Compatible Printers

UV LCD 3D Printers

Colour

Black

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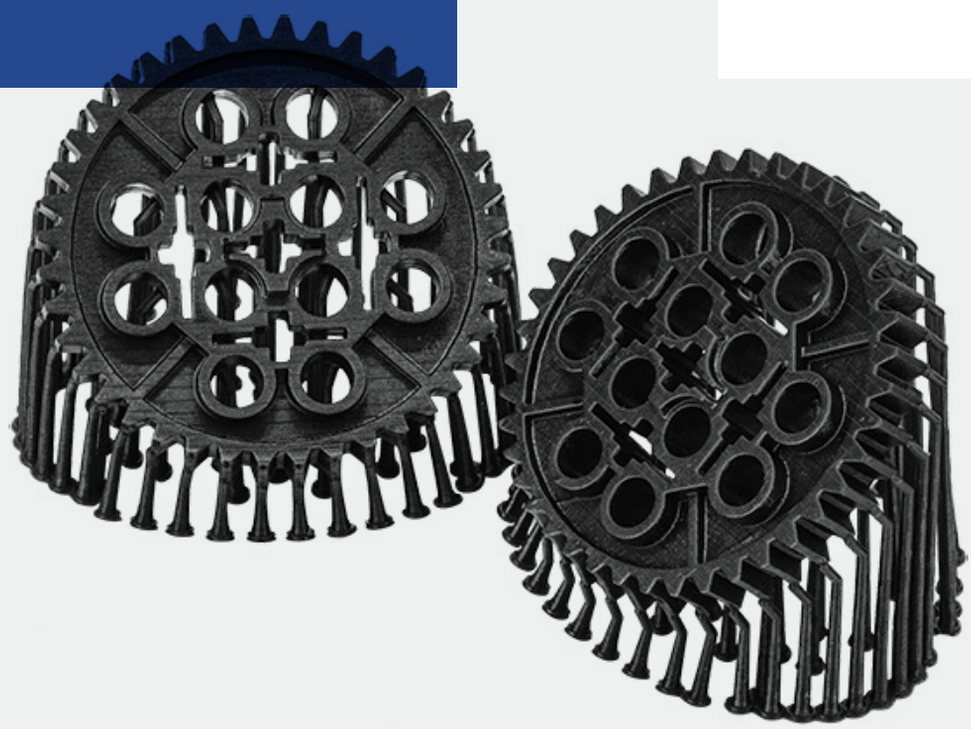

Photocentric's UV-LCD range puts creation in your hands. Obtain prints in short times on UV LCD backlit prints like the Wanhao D7 and Anycubic Photon where these resins have been optimised to give the shortest layer times.

Photocentric's range of UV LCD Hard photopolymers are ideal for creating objects that are very hard and show no signs of flexibility. Thin objects won't deflect or compress under stress and will retain their shape.

They exhibit high tensile shear properties and very limited elongation. UV LCD Hard provides excellent imaging in your back lit UV LCD printer where we you also benefit from fast exposure times and hold the finest detail your machine can provide. The solid material is tough, durable and long lasting provided it is stored in dry conditions away from strong UV light.

Optimised for:

- Functional Parts
- Prototypes
- Compression-resisting end-use parts

Revision 1
18/01/2023

UV LCD Hard Properties

Tensile Properties		
Tensile Modulus	2000 MPa	ASTM D638
Initical Tensile Strength *	15 MPa	ASTM D638
Ultimate Tensile Strength *	35 MPa	ASTM D638
Elongation at break *	<1.5%	ASTM D638
General Properties		
Hardness *	77 Shore D	ASTM D2240
Density	1.19 g/cm3	
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

Processing Instructions

Follow the procedures laid out in your UV LCD printer user manual. For cure times, please refer to our UV support page. Resin should be poured into the tray away from direct sunlight. Polymer can be reused but should be poured through a filter to remove solid lumps. Liquid polymer is soluble in water and soap. After cleaning objects, surface tack can be removed by leaving under water in UV light for 20 minutes. Total post cure should be at least 1 hour in UV light.

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