# **Technical Data Sheet**

# **Engineering LCD Resin – Ultimate 2TW**



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#### **Product specifications**

FormFutura Engineering LCD Resin - Ultimate 2TW is a very versatile 3D printing resin. This resin is tough and temperature resistant. Next to this, it exhibits excellent UV and weathering stability.

Ultimate 2TW is an impact resistant material with a modulus comparable to PP. It has memory shape capabilities and bends back when heated over 70C. A perfect match for many end-use part applications.

#### Important key features

- High toughness and temperature resistance.
- Modulus similar to Polypropylene (PP).
- Excellent UV and weathering stability specs.
- · Memory shape capabilities.
- · Low skin irritation characteristics.
- Compatible with all open-source SLA, DLP, and LCD 3D printers in the range of 385 - 405nm.

#### Suitable applications

- 3D printing functional end-use parts
- · Short-run manufacturing.
- 3D printing outdoor parts.
- · Manufacturing custom braces and splints.

# Physical properties after post curing

This data provided for those properties are typical values, and should not be construed as sales specifications. Specimen printed in ZXY Orientation (ISO 52921) and examined according to ISO 17296-3.

Property	Typical value	Test Method	
Young's modulus (Pull)	1700 MPa	ISO 527	
Elongation at break	90%	ISO 527	-
Tensile strength	51 MPa	ISO 527	OTUR:
Glass transition temperature (Tg)	109 °C		PACINEER IN 6 I CO RE INTIMATE 2TW
Shore hardness	80A		N.A. real resistance of A.
Density ρ	1,18 g/cm <sup>3</sup>		



**Printing parameters:** Specimens are printed on an Elegoo Mars 2 Pro at 23°C and 50% humidity with a

0,05mm layer height and 5 seconds exposure time per layer.

Post curing parameters: Specimens are 30min post cured with 200W 405nm UV LED conditioned for 72h at

23°C and 50% humidity.

### Storage and handling

Provided proper storage and handling precautions are taken we would expect Economy LCD Resin to be technically stable for at least 12 months. For detailed advice on Storage and Handling please refer to the Safety Data Sheet on formfutura.com/downloads.

#### **Product export information**

HS Code	Description	Country of origin
29161400	Resin for 3D Printing	<b>European Union</b>

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