Technical Data Sheet

Engineering LCD Resin – Flex 82A

Print date: 20-10-2021 **Version:** 1.0

Product specifications

FormFutura Engineering LCD - Flex 82A resin is a soft-touch 3D printing resin with rubber-like properties. This engineering resin has material properties like TPU with a shore hardness of 82A. The combination of semi-flexibility with strength make Flex 82A resin a versatile material for various applications. Parts 3D printed with Flex 82A resin show a good resistance to repeated exposure to compression, bending and flexing.

Important key features

- Rubber-like resin with a shore hardness of 82A.
- Resilient to bending, flexing and compression.
- Good damping and shock absorption specs.
- Compatible with all open-source SLA, DLP, and LCD 3D printers in the range of 385 - 405nm.

Suitable applications

- Manufacturing seals and gaskets.
- Manufacturing handles and grips.
- Creating wearables.
- Soft-touch applications.
- Short-run manufacturing.

Physical properties after post curing

This data provided for those properties are typical values, and should not be construed as sales specifications.

Property	Typical value
Young's modulus (Pull)	80 MPa
Elongation at break	35 %
Tensile Strength	12 MPa
Charpy impact test	- kJ/m2
HDT B	<RT
Density ρ	1,17 g/cm3
Shore Hardness	82A

Printing parameters: Specimens are printed on a Phrozon Sonic Mini 4K 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 Engineering LCD - Flex 82A 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	European Union

Disclaimer

All other information supplied, including that herein, is considered accurate but is furnished upon the express condition that the customer shall make its own assessment to determine a product's suitability for a particular purpose. We make no warranty, express or implied, including regarding any information supplied or the data upon which it is based or the results to be obtained from the use of such products or information, or concerning product, whether of satisfactory quality, merchantability, fitness for any particular purpose or otherwise, or with respect to intellectual property infringement as a result of use of information or products, and none shall be implied.