

# TOUGH UV RESIN

Tough UV resin is specially developed in-house by MCPP. The resin works perfectly on LCD/MSLA printers (395-405nm). The material adheres well to the build plate and is printed very fast with low shrinkage, resulting in an easy printing experience. The resin displays top-of-the-line impact performance while uniquely maintaining its stiffness and accuracy, making it a great material for a wide range of engineering applications.

## Material features:

- Easy & fast to print
- Excellent build plate adhesion
- Very high impact performance
- Post-cure (15-20min)
- Tough & rigid
- Excellent layer time\*
- Low odor
- Good viscosity – easy to clean and handle
- Excellent color dispersion
- Accurate information on our Safety Data Sheets

\*Depending on the printer and colour



**Monochrome printer** = expected layer time 2-6sec. Layer thickness = 0,05.

**Low powered RGB printer** = expected layer time 6-14sec. Layer thickness = 0,05.

## Colours:

Tough UV Resin is available from stock in 8 colours. Other colours on request

**BK01** WH1 **BU01** GY01 GY02 **RD01** BG01 CL01

## Packaging:

Tough UV Resin is available in nearly any type of packaging and labelling.

Ask our team to help you customize your product.

## Material properties

Description	Testmethod	Typical value
Specific gravity	ISO 1183	1,18 g/cc
Viscosity	ISO 2555	670 MPa*s
Tensile strength at break	ISO 527	44 MPa
Elongation strain at break	ISO 527	28%
Tensile (E) modulus	ISO 527	1300 MPa
Impact Strength	ISO 179	46 kJ/m <sup>2</sup>
Heat deflection temp. A (1,8MPa)	ISO 75	38°C
Hardness	ISO 868	77D

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**Additional info:**

Shake closed bottle for at least a minute before use. Wait for bubbles to disappear.

Ensure adequate ventilation when handling this product. Use the necessary personal protection equipment. For details, please refer to the safety datasheet. Optimal handling temperature is 20-25°C.

Recommended layer exposure times: 2-6 sec for monochrome, 6-14 sec for low power RGB at layer thickness 0,05 mm. After printing, wash with Isopropyl alcohol. Immediately dry the print before post-curing for 15-20 minutes (in a standard post cure device).

Avoid direct UV-radiation sources during handling as this can impact print performance. Tough resin works on desktop LCD/MSLA technology, using 395-405 nm light.

Storage: Cool and dry (15-25°C) and away from UV light. Ensure safe storage.

Disposal: Resins are considered hazardous substances. Dispose according to the local regulations. Do not dispose liquid resin through drainage or sewage systems.

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