MONOCURE 3D
Advanced 3D Printer Products

TENSILE™ CHEATSHEET

Industrial 3D Printer Resin: Quick Start Guide

TENSILE™ is a high-strength, low-flex, Industrial resin developed for desktop MSLA/DLP 3D printers. This unique bend of urethanes has a low odour & prints with ultra-high accuracy, making it a preferred choice where strength & precision is critical.

TENSILE™ QUICK START TIPS

- We recommend positioning the model at a tilt between 30-45°, a position found to aid in better separation from the curing interface. TENSILE™ allows parts to be printed hollow (3mm wall) and solid, using small to medium supports.
- To eliminate the 'elephant's foot' phenomenon, which occurs at the model's base from the longer curing to help the resin adhesion onto the build-plate. We recommend taking advantage of base layer compensatory settings that is available on most slicing software.
  (see TENSILE™ SLICER SETTINGS)
- Shake the bottle thoroughly before use and open it in a UV-protected environment. Pour into the printer's vat, allow bubbles to settle, and ensure the temperature is between 18°C and 35°C for optimal printing.
- To ensure proper cleaning of the model, we recommend the use of RESINAWAY®. A good cleaning procedure is critical when the model has been hollowed out, as it guarantees the effective removal of any trapped residual resin.
- TENSILE™ resin requires post-curing to reach its optimal mechanical properties for minimum of 30 minutes to enhance the material's tensile strength.
- For more detailed settings for popular 3D printer makes & models, please refer to official settings page at: **/monocure3d.com.au/printers/**

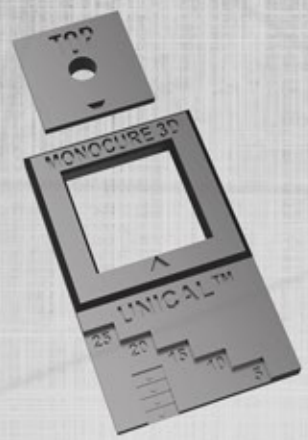
TENSILE™ SLICER SETTINGS

The following settings are an example for a typical monochrome LCD MSLA 3D printers employing a 405nm light source.

Layer Height/Thickness:	**50µm (0.05mm)**
Bottom (burn-in) layer Duration:	**30(sec)**
Bottom (burn-in) Layer Count:	**4**
Transition Layers:	**8**
Rest Time Before Lift:	**1(sec)**
Normal Layer Exposure:	**3(sec)**
Lift Speed:	**80-150mm/min**
Retract Speed:	**80-150mm/min**
Lift Distance:	**6mm (small vat) 12mm (large)**
Light Intensity:	**100%**
Advanced Settings:	**(Printer Specific)**
Light PWM:	**255 (Bottom & Normal)**
Anti-aliasing Grey Level:	**2**
Image Blur:	**4**
Burn in Compensation:	**-0.2mm (Pixel Removal)**
Bottom Tolerance Compensation:	**a: -0.200mm**
	b:-0.200mm

UNICAL™ CALIBRATION MODEL

Using a calibration model efficiently adjusts a 3D resin printer to work seamlessly with our TENSILE™ resin. Proper dialling-in ensures the harmonious operation between the printer and resin, yielding models of exceptional precision.



Download STL file and full instructions by scanning the QR code.

/product-category/3d-models/calibration-models/