



## Liqcreate Tough-X

An extremely tough and impact resistant resin for Digital Light Processing (DLP), Liquid Crystal Display (LCD) and laser based 3D-printers. Liqcreate Tough-X is perfect for manufacturing spare parts that require tough and robust specifications. This product is ideal for industrial use.

### Product description

Liqcreate Tough-X is an opaque black photopolymer. 3D-printed parts from this material have exceptional impact strength. Liqcreate Tough-X is easy to use on all open source DLP, LCD and SLA 3D-printers in the range of 385 - 420nm. This material has excellent properties like high impact strength and up to 150% elongation, making it perfect for the production of industrial spare parts and functional ABS type products.

### Key benefits

- Exceptional impact strength
- High elongation
- Heavy duty

### 3D-Printer compatibility

- Atum3D Station 5
- Asiga
- Most open source 385 - 420nm DLP, LCD and SLA 3D-printers

### Order information

Order directly at the [Liqcreate store](https://www.liqcreate.com) or send your inquiry to [order@liqcreate.com](mailto:order@liqcreate.com) with the following order numbers.

Liqcreate Tough-X  
Liqcreate Tough-X

250gram  
1 kg

Order number LTX00250  
Order number LTX01000





## Liqcreate Tough-X Technical Data

Liquid properties			
Appearance	Black liquid	$E_c$	24.20 mJ/cm <sup>2</sup>
Viscosity	900 cps at 25°C	$D_p$ metric	0.27 mm
Density	1.18 g/cm <sup>2</sup>	$D_p$ imperial	10.81 mils

Polymer properties			
Mechanical properties		30 minutes high power LED curing	
Description	ASTM Method	Metric	Imperial
Tensile Strength	D638M	15 MPa	2.2 ksi
Yield Strength	D638M	8 MPa	1.2 ksi
Elongation at break	D638M	100 - 150 %	
IZOD Impact (notched)	D256A	72 J/m	1.35 ft-lb/in
Shore D Hardness	D2240	60	
Shore A Hardness	D2240	95	
Water sorption	D570-98	2.1 %	

*These values may vary and depend on individual machine processing and post-curing.*

Visit [www.liqcreate.com](http://www.liqcreate.com) for more information about this product.