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## Ligcreate Elastomer-X

An extremely soft and elastic resin for Digital Light Processing (DLP), Liquid Crystal Display (LCD) and laser based 3D-printers. Liquid Elastomer-X is perfect for the manufacturing of elastic parts and soft digital lattice structures.

### Product description

Liqcreate Elastomer-X is a clear photopolymer resin and can be processed on most resin based 3D-printers. 3D-printed parts from this material are exceptionally soft with a Shore A of 43 and feature great flexibility. The product can be used as received, or colored with almost any commercial available 3D-resin colorant. Liqcreate Elastomer-X can be used on open DLP, LCD and SLA 3D-printers in the range of 385 - 420nm. Its properties simulate soft TPU and silicone which makes it perfect for the production digital lattice foams, soft end of arm tooling (EOAT) for robots, grommets, bellows and elastic industrial parts.

#### Key benefits

- Excellent elongation
- High elasticity
- Exceptionally soft material
- Ability to color / dye before printing

#### 3D-Printer compatibility

- Shining3D Accufab-L4K
- Elegoo & Anycubic series
- Phrozen & Peopoly series
- Open 385 420nm DLP, LCD and SLA 3D-printers

#### Order information

Order directly at the <u>Liqcreate store</u> or send your inquiry to <u>order@liqcreate.com</u> with the following order numbers.

Liqcreate Elastomer-X 250gram Order number LEX00250 Liqcreate Elastomer-X 1 kg Order number LEX01000



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# Liqcreate Elastomer-X Technical Data

Liquid properties				
Appearance	Clear liquid		Ec <sub>(405nm)</sub>	28.48 mJ/cm <sup>2</sup>
Viscosity	2000 cps at 25°C		D <sub>p (405nm)</sub>	0.28 mm
Density	1.18 g/cm <sup>3</sup>		Ec (385nm)	26.16 mJ/cm <sup>2</sup>
		•	D <sub>p (385nm)</sub>	0.11 mm

Polymer properties					
Description	ASTM Method	Metric <sup>1</sup>	Imperial <sup>1</sup>		
Tensile strength	D638M	1,5 MPa	0.22 ksi		
Elongation at break	D638M	140 - 180 %	140 - 180 %		
Shore A Hardness	D2240	43	43		
Tear Strength	D624	10 - 12 kN/m	10 - 12 kN/m		
Compression set 24 hours at 22°C	D395	1%	1%		
Water sorption	D570-98	1,5%	1,5%		
Degradation temperature	Internal method	> 250°C²	> 482°F <sup>2</sup>		
TG	D7028	-5°C	23°F		

<sup>&</sup>lt;sup>1</sup>Post-cured 5 minutes with LED curing at 20°C in glycerol or water. These values may vary and depend on individual machine processing and post-curing.

Visit www.liqcreate.com for more information about this product.

<sup>&</sup>lt;sup>2</sup>Discoloration at  $140^{\circ}$ C, increased rigidity at  $220^{\circ}$ C - Shore A 54. No cracking in part up to  $250^{\circ}$ C /  $482^{\circ}$ F.