

PEGDA Soft

STOCK SOLUTION USAGE GUIDE

The CELLINK lineup of photoink components, tailored for light-based 3D bioprinting, provide room for customization based on the application. Users new to ink formulation may follow this usage guide to create a printable material. This guide covers an example formulation for a photoink based on the PEGDA Soft Stock Solution.

PHOTOINK RECIPE —

COMPONENT	VOLUME*
PEGDA Soft Stock Solution	10 mL
Xcite	2.5 mL
Xsorb	0.25 mL
PBS	7.25 mL

^{*}Produces 20 mL of photoink solution

PARAMETERS —

LAYER THICKNESS	EXPOSURE	BUILD PLATFORM ADHESION	POWER
100 µm	7 s	14 s	20 mW/cm²

NOTES -

This formulation can be tailored to impart property changes. Note that subsequent parameter changes will also be necessary.

- Faster Reactivity: Increase the proportion of Xcite.
- Finer Spatial Resolution: Increase the proportion of Xsorb.
- **Softer Mechanical Properties**: Decrease proportion of stock polymer and/or replace some stock with a solution of long-chain polymer.
- **Stiffer Mechanical Properties**: Increase proportion of stock solution and/or replace some stock with a solution of short-chain polymer.
- Other Properties (polymers, growth factors, etc.): Replace stock solution or PBS with a solution of the target substance and/or add additional powders to the photoink solution.