

POLYMER DESIGN

Light Link™ SLA Resin with Kynar® PVDF

Intellectual Polymer Design

Light Link[™] is a UV crosslinking 3D print resin with Kynar[®] PVDF. It is a novel photopolymer resin for use with SLA 3D printers. This resin is the first commercially available Kynar[®] PVDF 3D printable resin. Light Link[™] combines the high resolution of the SLA 3D printing method with the material properties of PVDF to create a unique resin compatible with most DLP, LED, SLA, MSLA, and light-based 3D printers at 405 nm wavelength.

Light Link[™] is a specially formulated engineered resin that produces low odor prints with ease. The unique formulation requires short exposure times and convenient post-processing methods. Light Link[™] was formulated to produce low shrinkage parts that are easily removed from the build plate. No matter the printing task at hand, Light Link[™] excels at making precision prints.

Light Link[™] resin creates beautiful, glossy white prints. Printed parts have good scratch resistant properties. Easy printing and standard post processing procedures. Wash with IPA and post cure with UV light, like all other 3D printed resins. No special printer settings or accessories are required to print Light Link[™] 3D print resin with Kynar[®] PVDF

How to Use

- » Shake the bottle vigorously for 60 120 seconds before use.
- » Allow the resin to rest for a few minutes after shaking to allow air bubbles to dissipate before adding to the vat.
- » Begin printing.
- » Resin can be poured back into bottle for reuse. Always use appropriate filtration methods when returning used resin to the bottle to restrict cross contamination and to exclude polymerized pieces of resin. For more information on handling the resin, see SDS.

General Print Settings

- » Temperature of Resin Vat: Heated vats are not required. Light Link[™] resin prints using any vat. Print between 15 - 30 °C
- » Normal Layer Exposure Time: 5.0 9.5 seconds (7.0 seconds is generally recommended)
- » Bottom Layer Exposure Time: 30.0 55.0 seconds (45.0 seconds is generally recommended)
- » For Improved Bottom Layer Adhesion: Gently sand the build plate of the printer. Please consult the specific printer's guide or user manual before attempting printer alterations.

Post-Processing

- » Wash prints using 99% Isopropyl alcohol for 5 10 minutes. Let air dry. UV cure for 2-10 minutes (depending on size of printed object).
- » For superior prints, wash prints with Isopropyl alcohol for 5 10 minutes. let air dry. One may carry out any physical post-processing techniques at this time, such as sanding with a fine grit sandpaper. next, place prints in a bag or container with clean Isopropyl alcohol and ultrasonicate for 5 minutes at 20 °C. Place on a microfiber cloth and let air dry. Finally, UV cure for 2-10 minutes (depending on size of printed object).

Resin Advantages

- » White Photopolymer Resin
- » PVDF-like Properties
- » High Resolution
- » High Performance
- » Moderate Tensile Strength

- » Moderate Impact Strength
- » Moderate Elongation
- » Scratch Resistant Prints
- » Compatible with Most 3D Printers
- » Patent Pending formulation

Material Properties

material Properties			
Ultimate Tensile Strength	40.0 MPa	5802 psi	ASTM D638
Young's Modulus	17.5 MPa	2538 psi	ASTM D638
Elongation at Failure	3.00%	3.00%	ASTM D638
Dynamic Viscosity	530 mPa•s @ 25 °C	0.0111 lbf•s/ft ² @ 25 °C	ASTM D4402

Product Specifications

- » Container: Plastic bottle with taper-proof aluminum seal
- » Net Weight: 1 kg
- » UV Wavelength: 385 405nm
- » 1 year shelf life from date of manufacture



Contact us at **(801) 203-3756** or **sales@nilepolymers.com** for additional information

PURCHASE THE RESIN AT

https://www.tetragrowth.solutions/products/light-link-kynar-3d-printing-resin

The statements, technical information and recommendations are believed to be accurate. Since the conditions and methods of use of the product and of the information referred to are beyond our control, Intellectual Polymer Design expressly disclaims any and all liability as to any results obtained or arising from any use of the product or reliance on such information; NO WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSE, WARRANTY OF MERCHANTABILITY OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, IS MADE CONCERNING THE GOODS DESCRIBED OR THE INFORMATION PROVIDED HEREIN. The information provided herein relates only to the specific product designated and may not be applicable when such product is used in combination with other materials or in any process. The user should thoroughly test any application before commercialization.

Kynar[®] is a registered trademark of Arkema, Inc.

Light Link[™] is manufactured in the USA by Intellectual Polymer Design Intellectual Polymer Design is a joint venture between Tetra Growth Solutions and Nile Polymers Intellectual Polymer Design manufactures and licenses UV cross-linking resins.