



Quick guide Liqcreate® resins

This Quick Guide provides useful information to get the best experience from our resins. This includes handling of the materials, safety and parameters for several 3D-printers. Send us an e-mail at info@liqcreate.com if you have questions.



1. General information

This User's Guide contains useful information to get started with this resin. The table below explains all signs on the label.

Label Signs	Definition
	Liquid waste and contaminated towels should be treated as chemical waste
	Keep bottles and resin out of direct (sun) light
	Resin and packaging should not be stored below 5°C or above 30°C for a longer period
	This bottle contains 1000 grams or 250 grams of resin when un-used
	This resin is designed to be printed at 25 to 100 micron layer thickness. More information on printing parameters is mentioned in chapter 5
	Shake bottles properly before use.
	This sign indicates if a resin is designed to be printed on LCD/MSLA (Liquid Crystal Display), and DLP (projection based) or laser-based 3D-printers. Ideally within the range of 385-420 nm

2. Resin Handling

Shake the bottle for at least 1 minute before use and for filled resins like Liqcreate Composite-X and Hazard Glow for at least 3 minutes. After shaking leave the resin to rest for 10 minutes to let air bubbles escape. The resin can be poured back into the bottle after use. Check the resin for residual pieces of polymer before pouring back the resin in the bottle. Always use protective measures when handling Liqcreate resins. Extended safety instructions can be found in the safety data sheet.

3. Compatibility 3D-printers

Most of our are resins categorized as either LCD and DLP, or SLA and DLP. The resins in the LCD category have a higher reactivity to generate higher print speed on low power 3D-printers. A wide range of 3D-printers are already compatible with Liqcreate Premium White, these include the Atum3D, Shining3D, UnionTech, Asiga, Anycubic Photon, Kudo3D Bean, Phrozen and many more. The latest settings are available on our [website](#). Contact our experts at info@liqcreate.com for settings on other 3D-printers.

4. Support settings

Rigid polymers like Deep Blue, Strong-X, Premium White/Black/Model are easy to print and usually need medium supports. For Tough and Flexible resins we advise to use predominantly heavy support structures. Detailed information about supporting rigid, tough and flexible materials is available [here](#).

5. Post-processing

Proper post-processing is necessary to get the optimal properties out of your prints. More detailed information to work with Liqcreate resin cleaner can be found [here](#). Post-processing includes rinsing a maximum of 6 minutes in Liqcreate resin cleaner, IPA or (bio)ethanol, preferably ultrasonic or under agitation. Make sure the parts are dry before post-curing, this could be done by placing the parts in a well ventilated area for at least 30 minutes or use pressurized air for 2 minutes for Ethanol and IPA. The last step includes curing in a high-power UV curing chamber. The latest post-curing instructions are available [here](#).

-  **Caution:** Green parts could break or crack if they are exposed to solvents, Liqcreate resin cleaner, (bio)ethanol, IPA for longer than 20 minutes. Flexible and tough resins could crack even after soaking 10 minutes of Ethanol/IPA.
- Caution:** Green parts need to be completely dry before post-curing. Curing wet and or sticky parts can lead to parts with surface defects.
- Caution:** Using a low-power curing unit can lead to inferior part properties
- Caution:** Always use protective measures when handling Liqcreate resins or green parts (Chapter 5). Parts are safe to touch without gloves after proper post-processing.
- Caution:** UV Post-curing of flexible resins are best to be executed in glycerin, water or nitrogen atmosphere to prevent sticky surface after curing.

6. Safety

Liqcreate resins and green parts should always be handled with care using the advised precautions such as gloves, glasses and protective clothing. Discard all disposables that have been in contact with resin as chemical waste. Inform the Safety Data Sheet for more information.

6.1. Spill cleaning protocol

Spilled resin can be cleaned with standard rinsing solvents like (bio)ethanol or IPA. Treat paper towels with resin as chemical waste.

7. Storage and transport

Liqcreate resins should be stored in the original package in a dark and dry area between 5 and 30 degrees Celsius. Close the packaging after every use. For transport the resins should not be exposed to temperatures above 60 degrees Celsius to ensure useability within the expiry date.

8. Plastic and Packaging Waste

Fully polymerized Liqcreate products can be treated as plastic waste and are not harmful for the environment. Liquid residue (washing solvent and contaminated papers included) should be treated as chemical waste and disposed as such.

Aluminum packaging can be cleaned by rinsing it with IPA or (bio)ethanol and disposed for recycling. Cardboard packaging should be disposed at a recycling point.