

Safety Guide | Form 3

⚠ Read and understand the manual and safety instructions before using the Form 3. Failure to do so can result in serious injury or death. Save this document.

⚠ WARNING

You shall independently verify the suitability of additive manufacturing, stereolithography, the Form 3, and any specific designs or materials employed for the application and intended purpose before use. In no event shall Formlabs be liable for any loss, death, or bodily injury that you suffer, or that you cause to any third party, in connection with your use of Formlabs products. To the fullest extent legally permitted Formlabs EXPRESSLY DISCLAIMS ANY IMPLIED OR EXPLICIT WARRANTY OF FITNESS for a particular usage, the particular nature and circumstances of said usage being unforeseen and unforeseeable to Formlabs.

⚠ WARNING

Formlabs is not a manufacturer of medical devices. Formlabs provides tools and materials that may be used in many applications, but makes no claims as to the safety or effectiveness of any specific devices made using Formlabs products. Certain Formlabs products, such as those commonly known in the industry as "biocompatible" resins, have been engineered to comply with relevant industry standards. The specific standards and most relevant technical specifications may be identified within the technical data sheets and have been tested according to relevant testing protocols for those standards and specifications. Biocompatible resins are a speciality product, developed for use by medical professionals, and should be used in accordance with the instructions for use.

⚠ WARNING

Do not modify – The Form 3 is intended for use as-is. Modifying the printer without explicit approval and directions from Formlabs will invalidate your warranty, and could potentially ruin the machine and cause you bodily harm.

Safety Warnings

⚠ WARNING

Read and understand this manual and its safety instructions before using the Form 3. Failure to do so can result in serious injury or death.

⚠ WARNING

Class 1 Laser Product. Only remove the shells of the printer with authorization from Formlabs or a certified reseller. Disconnect power before removing the shells.

⚠ WARNING

Never ingest resin in liquid or solid form. If swallowed, immediately call a poison center or medical professional.

⚠ WARNING

Always consult the Safety Data Sheet (SDS) as the primary source of information to understand safety and handling of Formlabs materials.

⚠ WARNING

Resin may cause skin irritation or an allergic skin reaction. Wear gloves when handling liquid resin or resin-coated surfaces. Wash skin with plenty of soap and water.

Safety Cautions

⚠ CAUTION

Cutting hazard. Using these tools on slippery surfaces (such as a resin-coated build platform) can result in sudden movement. Orient sharp tools away from yourself, especially when cutting or scraping.

⚠ CAUTION

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous laser radiation exposure.

⚠ CAUTION

Some methods of support removal may cause small pieces of supports to break away. Beware of flying debris and consider wearing eye protection and gloves to protect the skin and eyes.

Preparation

CAUTION

Consider the weight and dimension of the printer for installation.

CAUTION

Spill hazard. Resin may spill over the tank walls if the resin tank tilts more than 5-10°. Hold the resin tank level with two hands. To inspect and clean the underside of the tank, empty the resin tank and/or take care to avoid spilling resin outside the tank.

CAUTION

Spill hazard. Do not remove the rubber valve at the bottom of the cartridge. This bite valve controls the release of the resin. Removing the rubber bite valve allows resin to continuously flow and causes extreme damage to the machine. This damage is not covered by the warranty.

Usage

DANGER

IPA is flammable. Keep containers closed, and keep out of the reach of children.

CAUTION

Moving parts. Do not open the printer cover until the touchscreen indicates the print is complete.

CAUTION

In an emergency involving resin, always refer to the Safety Data Sheet (SDS) and/or seek help from a medical professional.

Maintenance Warnings

WARNING

Formlabs provides instructions to advise skilled and non-skilled persons in installing, operating, and maintaining the Form 3. The Form 3 shall only be maintained by a qualified and trained person.

WARNING

Do not open the Form 3 and/or investigate internal components unless under the guidance of Formlabs or an authorized reseller. Contact Formlabs or an authorized reseller for any additional guidance.

WARNING

Unauthorized disassembly or repair procedures may damage the printer and void the warranty.

WARNING

Wear personal protective equipment when performing maintenance tasks. Use tools only as described.

WARNING

Disconnect the power cable before maintenance. Moving parts and lead screws present crushing and tangling hazards.

WARNING

All steps that involve opening the Form 3 and/or investigating internal components should be done by skilled persons under the guidance of Formlabs or a certified distributor.

Maintenance Cautions

CAUTION

Refer to the SDS and local authorities for guidance on disposing of IPA.