



## RESINIFY — INSTRUCTIONS FOR USE (IFU)

### CarbonTough (RT-CP1100) — Toughened Composite Resin For Functional Prototyping & Engineering Applications

#### 1. Product Overview

CarbonTough is a reinforced engineering resin designed for strong, impact-resistant functional parts requiring durability, dimensional accuracy, and stiffness.

#### 2. Printer Compatibility

- LCD / mSLA / DLP printers
- 385–405 nm wavelength
- Works with open-material systems

#### 3. Printing Instructions

Parameter	Recommended
Layer Height	50 µm (25–100 µm compatible)
Normal Exposure	3.0–4.0 sec
Bottom Exposure	40–55 sec
Bottom Layers	6–8
Lift Speed	Medium
Light-Off Delay	Enabled

#### Support Tips:

- Use medium-to-heavy supports for mechanical parts.



- Angle large models 20–30° to reduce suction forces.
- Add reinforcement supports on long or flat surfaces.

#### 4. Cleaning Instructions

- Wash **2–3 minutes total** using clean IPA or approved resin cleaner.
- Do not over-wash (may soften edges).
- Air dry or blow dry before curing.

#### 5. Post-Curing Instructions

- UV cure for **20–30 minutes**.
- Optional heat cure: **50–60°C** for 10–15 minutes to maximize strength.

#### 6. Usage Guidelines

- Ideal for housings, brackets, fixtures, jigs.
- Avoid excessive over-curing to maintain toughness.
- Drill, sand, and tap at low speeds.

#### 7. Safety & Disposal

- Wear gloves and eye protection.
- Avoid skin contact.
- Cure waste resin before disposal.
- Dispose of IPA per local regulations.