RESINIFY — INSTRUCTIONS FOR USE (IFU)

UltraClear (RT-CL010) — Optical-Grade, Ultra-Transparent Engineering Resin For Crystal-Clear Parts, Lenses, Fluid Models & Aesthetic Prototypes

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1. Product Overview

UltraClear is an **optical-grade resin** formulated for maximum transparency, minimal color shift, and excellent surface smoothness. Designed for clear functional prototypes, display components, fluid-flow models, and lens-like prints requiring high repeatability and low haze.

2. Printer Compatibility

- LCD / mSLA / DLP printers
- 385–405 nm wavelength
- Supports ultra-fine resolution (down to 25 µm)

3. Printing Instructions

Parameter	Recommended
Layer Height	50 µm (25 µm for highest clarity)
Normal Exposure	2.6–3.4 sec
Bottom Exposure	40–55 sec
Bottom Layers	6–8
Lift Speed	Medium
Light-Off Delay	Enabled

Support Tips:

- Use minimal and well-placed supports on optical surfaces.
- Angle 10–15° to prevent visible layer stepping.
- Avoid support points on high-clarity areas when possible.

4. Cleaning Instructions

- Wash **2 minutes** ONLY — do not exceed.
- Use clean IPA or resin cleaner.
- Do **NOT** use ultrasonic cleaning (causes haze).
- Dry with gentle air flow or allow to air dry.

5. Post-Curing Instructions

- UV cure **10–15 minutes**.
- Optional heat cure: **45–50°C for 10 minutes** to enhance clarity.
- Avoid temperatures above 55–60°C to prevent yellowing.

Clarity Enhancement Techniques:

- Fine sanding (1500 → 5000 grit)
- Spray clear coats
- Resin dip
- Vapor polishing (advanced users)

6. Usage Guidelines

- Ideal for lenses, display windows, microfluidic models, lighting components.
- Handle with care to avoid scratches.
- Clean surfaces before curing to avoid dust entrapment.
- Maintain fresh IPA for best optical results.

7. Safety & Disposal

- Wear gloves, mask, and eye protection.
- Cure waste resin fully before disposal.
- Dispose of IPA per local environmental regulations.