

Technical Information



Background and Purpose

Cyanoacrylate, commonly known as Super Glue, has been used to develop fingerprints since its discovery by the Criminal Investigation Division in Japan in 1978. The cyanoacrylate ester polymerizes forming ridge detail and revealing latent fingerprints on a variety of non-porous and semi-porous surfaces. The problem with most cyanoacrylate is its stability. Most cyanoacrylate has a shelf life of 12-18 months before it polymerizes and turns hard, rendering the glue useless for fingerprinting.

CyanoPowder is a new crystalline formulation that eliminates the shelf life issues of standard liquid cyanoacrylate, but yields identical, if not improved, results. The powder remains usable for years, reducing the waste, without sacrificing performance.

Health / Safety

- Refer to Safety Data Sheet before using this product (<http://www.sirchie.com/support/safety-data-sheets>)
- Recommended PPE: Wear safety glasses, dust/mist respirator, nitrile gloves
- **Warning!** CyanoPowder fumes are severe irritants. Avoid breathing or exposing skin, eyes, or other body parts to the fumes. Make sure to release fumes only in a filtered hood or a well ventilated area.
- **Warning!** Do not wear contacts when working with CyanoPowder. Fumes may cause bonding of the lenses to the eye and require medical treatment.
- **Warning!** CyanoPowder is applied with high temperature. Avoid burns when handling used weighing trays or working around the surface of the heat source.

Equipment

- Fuming chamber (with high temperature capability of 220°C / 428°F)
- Weighing trays (aluminum) (SIRCHIE CNA106) or similar
- Optional: hot plate (SIRCHIE HP110 or similar) if chamber does not have high temp capability
- Optional: Defumigator for fume removal (SIRCHIE FR300N)

Specifications

- Material: Ethyl-2 polycyanoacrylate
- Net Weight: CYP15 = 1.5g, CYP30 = 30g

Usage Instructions

Fuming:

1. Place items in chamber making sure to avoid contact with heat source or hot plate.
2. Dispense CyanoPowder in aluminum weighing tray based on chamber volume:
 - a. Use one pack of CYP15 -OR- one scoop (1.5g) of CYP30 for chamber volume up to and including 4.0 ft³ (0.113 m³)
 - b. Use one additional pack of CYP15 -OR- one additional scoop of CYP30 for every 4.0 ft³ of chamber volume.

Chamber type	Chamber Volume	CyanoPowder required
10 gal. tank (SIRCHIE FR100)	1.34 ft ³ (0.038 m ³)	1 pk. CYP15; 1 scoop CYP30
20 gal. tank	2.68 ft ³ (0.076 m ³)	1 pk. CYP15; 1 scoop CYP30
SIRCHIE FR200HT Fuming Chamber	4 ft ³ (0.113 m ³)	1 pk. CYP15; 1 scoop CYP30
Tabletop fuming chamber	15 ft ³ (0.425 m ³)	4 pk. CYP15; 4 scoops CYP30

- Place weighing tray with CyanoPowder on heating surface.
- Set heat source or hot plate to 220°C (428°F).
- Close chamber.
- Observe CyanoPowder. Once powder starts to fume, crystals will begin to sublimate and turn a brown color.
- Cycle should take 20-30 minutes from start. Monitor development using a controlled print.
- Once cycle is complete, turn off heat source and evacuate fumes.
- Remove items and spent cyanoacrylate tray.
- Any developed prints should be allowed to fully cure for a minimum of 10 minutes prior to ANY post treatment.



Post treatment:

- CyanoPowder developed prints can be post-treated with fingerprint powder and lifted with fingerprint tape or other conventional lifting means.
- CyanoPowder developed prints on colored or patterned objects can be stained with agents such as Ardrex, Rhodamine G, Basic Yellow, RAM, or RAY. These stains, when used with an alternate light source and filter, can be used to remove backgrounds and visualize the developed prints.
- CyanoPowder prints can be lifted directly with black background gelatin lifters.

Storage / Disposal

- CyanoPowder has no expiration date if kept in a dry room temperature environment.
- CyanoPowder should be disposed according to any regional, state, or local regulations.



Cyanoacrylate print enhanced with Basic Yellow.