Crime scene fingerprints sometimes require chemical techniques to make them visible. Here, we take a look at four key techniques used.

**Types of Fingerprint**

**Patent Print**

The name given to fingerprints on hard surfaces which are visible. These can be photographed without the aid of chemicals to improve visibility.

**Latent Print**

Fingerprints made by the body’s oils and sweat remaining on hard surfaces after contact. Not visible, so various techniques are used to make them visible.

**Plastic Print**

Three-dimensional fingerprints left on soft surfaces such as wax or wet paint. Already visible, so can be photographed without the use of additional techniques.

**Latent Fingerprint Powders**

A range of powders of varying compositions, but commonly consisting of a pigment and a binder. When brushed on a surface, the powder clings to the moist and oily residue left by fingerprints, visualising them.

**Chemical Developers**

Ninhydrin is a commonly used chemical developer. It reacts with amino acids in sweat, producing a purple compound. Other developers, such as 1,2-diazafluoren-9-one (DFO), make fingerprints glow in certain colours of light.

**Cyanoacrylate Fuming**

Surfaces where latent fingerprints may be found can be exposed to cyanoacrylate fumes to make them visible. Cyanoacrylates are used in superglue, and polymerise on contact with fingerprint residue, making a white 3D matrix.

**Vacuum Metal Deposition (VMD)**

This process involves layers of metal atoms being left on a surface under vacuum conditions to visualise latent prints. The usual combination is gold followed by zinc. It works because the zinc doesn’t deposit on fatty regions.