



Chemical marking of a banknote, a document, or a product is not a new idea, there were many trials decades ago with mixed results. Luminochem's experienced chemists are not satisfied with mixed results, therefore they perfected the technology and developed something that works and protects what truly matters to our customers.

The LUCT systems' versatility gives us the option to provide our customers with just what they need: our tailor-made solutions provide high security and great flexibility when it comes to completing our partners' special requests.

How does it work?

LUCT system has two components: the marker and the reagent.

LUCT markers are special chemicals developed for enhanced protection of your products, documents, labels, and packages mostly via different printing technologies although, direct product marking is also possible. They are Level 3 security products as a special reagent is needed to activate the feature, and they can be easily combined with Level 2 and Level 1 features. This makes them an optimal choice for the use of brand protection and even high-security purposes.

The marking can be activated by one special chemical reagent, or by a combination of reagents for more protection. They are invisible to the naked eye and stay hidden even under UV lamps, lasers, or IR cameras. The marking only becomes visible when reacts with the special chemical needed. The process is simple and can be easily evaluated on field tests. As a result of the chemical reaction the print color changes on the marked area. The reaction can be reversible, when the liquid reagent dries off, the marking becomes invisible again.



Unmarked areas treated with the special reagent



Marked areas treated with the special reagent



Applications

- High-security
- Brand Protection
- They can be mixed into different types of printing inks depending on the systems
- On almost any surface (depending on the application, on the ink system, etc.)
- Protect your products, documents, labels, packages, prints, and more

Security

- Covert (Invisible)
- Undetectable with UV lamps, laser, or IR camera
- A combination of special reagents provides higher security
- Forensic
- Level 2 and 3 security
- Completely unique

Application technologies

The markers usually are mixed in the printing ink, the reagents are supplied separately.

LUCT markers are compatible with most UV-curing and oxidative ink systems. Depending on ink, our LUCT markers can be applied for printing paper, plastic, textile, metal, and other surfaces.

The solutions are unique and customizable to your security needs.

Additional advantages

- Simple application, no need to modify your existing printing methods
- Simple, but secure detection on field tests
- Can be integrated to your production line
- Good lightfastness
- Marking without compromising the design
- No expensive equipment needed

