

mouve^{INK}



As an expert in banknotes, identity documents and/or governmental security printing, you have certainly asked your business partners and friends what they expect from a security feature contained in these printed products. And surely, as an expert, you have also explained to your business partners and friends what security features exist, how they can be distinguished and what is currently being developed.

Most likely, you mentioned the following aspects in this context:

- simple but secure
- ahead of counterfeiters
- innovative and never seen before
- upgrade of an existing element
- for the public and experts
- properly integrated into the design
- restricted to banknotes and ID documents

On the other hand, you are also challenged by the following:

- easy to recognise
- easy to understand
- easy to check / to control
- easy to handle / to apply

Honestly, UV fluorescent inks were always part of the list of security features you mentioned, weren't they?

mouve^{INK} stands for **movable uv** element. It has been developed by GSI and a trusted and well-known German partner – Leuchtstoffwerk Breitung. **mouve^{INK}** is a patented feature to secure

your banknotes, IDs and other governmental documents.

It reflects the latest findings and developments in the field of luminescence and thus represents a unique protection against counterfeiting.

Fluorescent patterns on banknotes are already well established – and have long been mastered by counterfeiters. The GSI innovation **mouve^{INK}**, however, is a big step ahead of counterfeiters: the new security feature shows fluently merging colour impressions from red via orange or yellow to green when exposed to UV light. It shows a red emission colouring at the start of excitation (rising colour), a yellow emission colour when the feature has been charged by UV light (fluorescent colour) and a green phosphorescence lasting seconds during the decay phase (fading colour).

In other words: Three luminescence emissions with a single UV-light

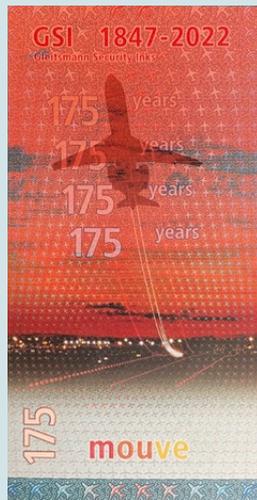
That is why we called it **“World's First Traffic Light for Banknotes and ID-Documents”**.

The combination of machine-detectable and apparently flowing colour effects makes **mouve^{INK}** a feature with the highest possible security available at this moment. It cannot be imitated by commercially available printing inks or foils, partly because counterfeiters have no access to the special pigments used. In principle, the feature is not only interesting for banknotes, but also for any security printing, such as for revenue stamps or sovereign identity documents.

Three luminescence emissions triggered by a single UV-light in a single ink



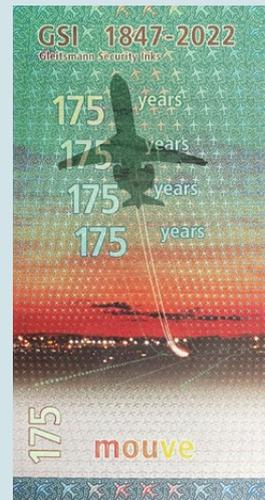
Daylight view



Rising Colour



UV-A Image



Fading Colour

Another innovation of **mouve^{INK}** is that it combines differently coloured (main) emissions at the usual excitation wavelengths UVA – 365 nm and UVC – 254 nm as well as at the less usual UVB – 312 nm whereas the rising emission colour (red) and the fading emission colour (green) remain the same irrespective of the UV excitation wavelength.

mouve^{INK} is a level 2- or teller-feature as there is no specific detector needed. It offers multiple grades of control from shop owner to expert and can be visualised with an easily available tool. At the same time it also includes elements of a level 3 feature which allows for laboratory verification.

Finally, as the application is done via intaglio or screen print, there is no additional production equipment required.

Due to **mouve^{INK}** being colourless in daylight, it can be easily integrated into existing designs.

And there is more to come.

Let's mouve^{INK}

For a video showing the effects please refer to www.mouve.ink

You need more detailed information? Please contact our sales team at sales.gsi@hubergroup.com

