

mouve^{INK} *polar*

In 2021 GSI launched its “traffic light” feature, **mouve^{INK}**. Since its launch and after the positive reception by many experts, our strive for innovation and new secure solutions has continued. GSI is proud to showcase a new variant of its luminescence feature: **mouve^{INK}polar**. While maintaining the existing advantages and general properties of the first version, **mouve^{INK}polar** now provides designers and printers with a new combination of colours.

Taking fluorescent features to the next level of security, **mouve^{INK}polar** - inspired by the colours of the polar lights - not only secures your ID documents and currency but also adds a touch of natural beauty.

Fluorescent patterns on banknotes are already well established – and have long since been mastered by counterfeiters. The GSI innovation, **mouve^{INK}polar**, represents another significant milestone in the fight against counterfeiting: the new security feature shows fluently merging colour impressions from blue via purple or pink to green when exposed to UV-A/B/C light.

Experience the brilliance of **mouve^{INK}polar**: Three luminescence emissions combined in a single ink!

It is based on a core technology which has been developed together with GSI’s trusted, well-known German partner: Leuchtstoffwerk Breitungen. **mouve^{INK}polar** reflects the latest findings and developments in the field of luminescence, thus representing a unique protection against counterfeiting. The combination of machine-detectable and visually changing colour effects make **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 revenue stamps or sovereign identity documents.

mouve^{INK} is an excellent solution for central banks and high-security printers who are looking for a feature which is:

- simple but secure
- ahead of counterfeiters
- upgrade of an existing element
- for the public but also experts
- properly integrated into the design
- restricted to banknotes and ID documents

The feature is user-friendly which benefits the general public since it is:

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

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



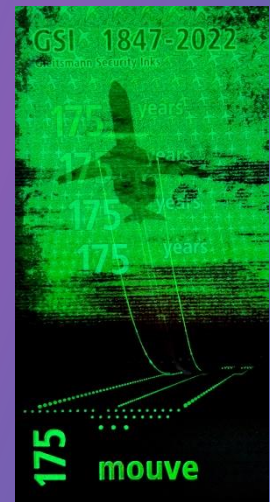
Daylight view



UV-A Image



UV-B Image



Fading Colour

Another innovation of **mouve^{INK}** is that it combines differently coloured emissions at the usual excitation wavelengths UVA – 365 nm, UVB – 312 nm as well as UVC – 254 nm. The rising emission colour (blue or pink) depends on the wavelength you use. While the fading colour (green) remains the same irrespective of the UV excitation wavelength. **mouve^{INK}polar** is a level 2 - or teller-feature as there is no specific detector needed. It offers multiple grades of control, which can easily be verified by anyone from shop owners to experts using tools available to the public. At the same time, it also includes elements of a level 3 feature which allows for laboratory verification.

Finally, as the application is done using standard intaglio or screen printing, no additional production equipment is required.

And the best part is that due to **mouve^{INK}polar** being colourless in daylight, it can be easily integrated into your existing designs.

Enabling your right to choose – **mouve^{INK}polar**

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

UV-A



UV-B