Security Printing Inks

offer for security printing companies

Security printing inks

for offset and screen printing

The specialists of the Document Security Laboratory of ANY Security Printing Company PLC have developed numerous complex, effective protection solutions. The Company – as a result of its decades of experience – can assist its customers in document and product protection projects from the design to the implementation phase. Furthermore, it can serve partners who need only partial solutions for their particular projects.

ANY offers a wide range of inks of its own development with UV, IR and unique additives including mono-, bi-, tri-, quadro- and penta-fluorescent inks emitting different colours and it provides anti-Stokes inks as well.

CHECK OUT our new developments!

Multi-fluorescent ink

Multi-fluorescent inks are a new and unique grade of security inks. This grade (or family) of inks exploits the possibilities that lie in the versatile application of HEV (High Energy Visible) materials. These materials can be excited with blue light and they typically emit yellowish light. To detect this fluorescence, one needs not only a blue light source but a yellow optical filter too. We provide a small, handheld device with a built-in light source and filter for checking this feature.

Combined with our HEV material we provide numerous different combinations, like

- Fluorescence in almost any colour at different wavelengths (365, 313, 254 nm)
- Bi- and tri-fluorescent combinations
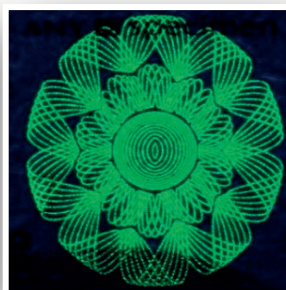- Up-converting (anti-Stokes) feature

The number of possible variations is huge; we are ready to supply our partners with exclusive combinations.
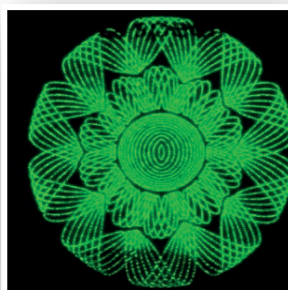
Anti-stokes

UV 313 nm

UV 365 nm

HEV (Highly Energy Visible)

Penta-fluorescent ink

Blue/pink/greenish yellow fluorescence in long/medium/short wave UV respectively, plus anti-Stokes and infrared fluorescence: these are the five fluorescent features that are available in one offset ink. The print made with this ink may give unique protection for documents of high security.

Encrypted ink

Our new grade of inks is called "Encrypted inks". This grade of security inks is based on time-resolved fluorescence. For most people fluorescence is an immediate process, some material emits light as long as they are excited with UV light e.g. once the lamp is switched off the fluorescence is gone. But by analysing the process in the microsecond scale a totally new picture develops. Different materials may behave differently as a function of time.

"Encrypted" inks may show different visible colours and/or different fluorescence. The number of combinations is infinite, thus we are able to offer our partners exclusive inks. Our new set of inks exploits this specific behaviour of different materials. Of course, for the detection of this feature, a device is needed that has been specifically developed for this purpose. We offer this handy device for our partners.

OUR STANDARD RANGE OF INKS

Luminescent inks at long wavelength (365 nm)

This is one of the most widely used protective elements, which is easy to verify, and provides a high level of protection against photocopying.

Luminescent inks at short wavelength (254 nm)

These security elements provide a higher level of protection, as UV lamps using short wavelengths are less common.

Bi-fluorescent inks (365/254 nm)

Bi-fluorescent security inks emit fluorescence of different colours when exposed to UV light of different wavelengths. These inks are easy to verify and difficult to reproduce.

# Tri- and quadro fluorescent inks

Our unique tri-fluorescent UV security ink provides the same security advantages as our bi-fluorescent inks, but on a higher level. This UV security ink of ours displays blue/violet/green luminescence under 365/313/254 nm illumination. The quadro-fluorescent security ink is an even more sophisticated one. It shows an additional anti-Stokes luminescence compared to our tri-fluorescent ink.

SP1 and anti-Stokes inks

These inks are to be activated with IR irradiation and are able to emit not only green but orange and blue light as well. They are ideal to place hidden information and also lend themselves to use with mechanical verification systems.
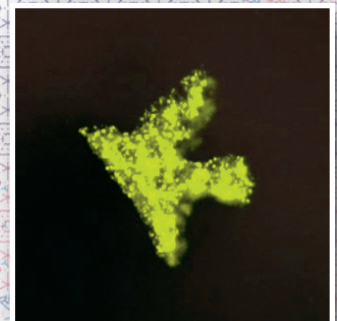
UV A
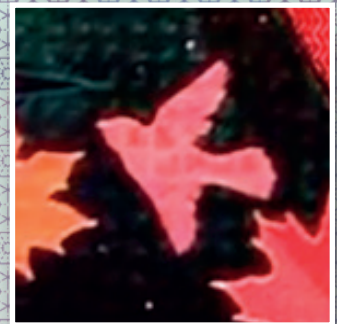
UV B

UV C

Anti-Stokes

Green fluo black ink

This special black ink shows intensive green fluorescence under the influence of ultraviolet activation of any wavelength. This security ink is absolutely suitable for serial numbering, or individual visualisation of logos.

IR/IR fluorescent ink (IF 15)

Prints with this ink emit infrared radiation when irradiated in the near-infrared (IR) range. The prints are not visible to the naked eye or with regular verification equipment. IF 15 ink can be detected with a special verification device developed for this purpose. Our device called 'RADIR' reacts with a flashlight and sound to the presence of such inks.

Parts of our product portfolio can be seen in the following tables. To meet individual demands, we undertake the development of further inks with special features for paper-based documents and plastic cards, data pages as well.

UV LUMINESCENT INKS

code	excitation 365 nm	excitation 313 nm	excitation 254 nm
	emission colour		
MF 01	yellow	yellow	yellow
MF 05	orange	orange	orange
MF 06	yellow	yellow	yellow
MF 08	orange	orange	orange
MF 10	green	green	green
MF 12	green	green	green
MF 13	greenish blue	greenish blue	greenish blue
MF 14	intense green	intense green	intense green
MF 15	green	green	green
MF 24	blue	blue	blue
MF 28	blue	blue	blue
MF 36	red	red	red
MF 40	blue	blue	blue
MF 50	-	-	greenish blue
MF 60	-	red	red
MF 71	-	-	green
MF 72	-	green	green
Green Twin 365	green	green	green
Green Twin 254	-	green	green
Red Twin 365	red	red	red
Red Twin 254	-	red	red
BF 01	yellow	orange	orange
BF 12	blue	pink	pink
BF 13	greenish blue	reddish	reddish
BF 16	blue	red	red
BF 18	blue	pink	pink
BF 19	greenish blue	orange	orange
BF 20	green	orange	orange
BF 22	green	yellow	yellow
BF 30	red	red	greenish
BF 32	red	yellowish	yellowish
TF 03	blue	pink	green

QUADRO-FLUORESCENT INK

code	excitation 365 nm	excitation 313 nm	excitation 254 nm	980 nm led/laser
QF 02	blue	pink	green	green

ANTI-STOKES (UP-CONVERTING) INKS

code	excitation	emission colour
UF 02	980 nm led/laser	green

MISCELLANEOUS

code	excitation	emission colour	special feature
Green Fluo Black	UV 365 nm	green	black visible colour

Special security features

the use of inks in practice

Buried image
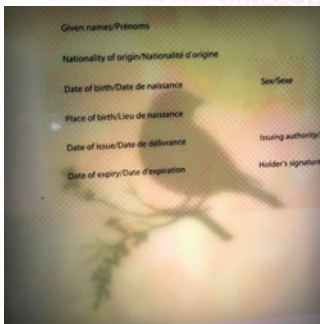
This is a security element printed inside of the data page, acting like a watermark. By turning the data page against a powerful light source an image of a bird sitting on a brunch becomes visible.

Shadow image

This watermark-like feature gives extra security to the document. In infrared radiation (850-950 nm) the image of the bird only (without the brunch) shows up as a faint shadow image. The MRZ area remains completely free of IR absorbing elements as per the ICAO 9303 recommendations.

LENA

The print is invisible in both normal and UV light. However, its presence can be easily verified by holding the window over a simple piece of copy paper and illuminating it with a basic flashlight.
The printed pattern becomes clearly visible as a shadow. This provides the simplicity of checking like a usual second-level device, while being more deeply concealed than a typical fluorescent print.

MA (mark advanced)

Invisible colourful fluorescent image. This is a unique printed feature that is completely invisible under normal light but becomes visible under UV 365 light.

ANY Security Printing Company PLC

About the Company

ANY Security Printing Company PLC is one of the leading security printing companies and an identity solutions provider in the Central Eastern European region, with a significant presence in more than 60 countries worldwide. More than 1000 people in 5 countries at 10 premises work according to the highest standards through continuous innovation and development to serve our Partners. The Company's shares have been listed on the Budapest Stock Exchange in the premium category since 2005.

The Company's mission includes the facilitation of state administrations in secure person and product identification projects from the design to the implementation phase. The acquired international qualifications and certificates assure the appropriate level of security in the field of paper-based document and card production, as well as personalisation. Aside from manufacturing high security products, ANY Security Printing Company PLC – as a system integrator – offers complex solutions and know-how transfer for the preparation, execution and operation of a document reform, including a security printing house establishment.

The specialists of the Document Security Laboratory of ANY have developed numerous complex, effective protective solutions, including document printers, security inks, paper additives and special control devices. These products can be offered as a supplement to the project, further maximising the security features of the goods to be manufactured at the future plant. The Company – as a result of its decades of experience – can assist its customers in document and product protection projects from the design to the implementation phase. Furthermore, it can serve partners who need only partial solutions for their particular projects. In this manner, ANY is a synergistic partner of paper-mills, security printing houses, state administration and private companies. Its own Document Security Laboratory, references, special technology, security preparedness and more than 170 years of experience guarantee that it can offer the best possible products for its Customers.

References

- Hungarian electronic identity card
- Sri Lankan ID card, driving licence
- Hungarian ePassport
- Vanuatu passport
- Driving licences in more than 4 countries
- European and Ghanaian health insurance card
- Schengen (for 3 countries) and Guinean, Cameroonian, Angolan visa stickers, Ivory Coast diplomatic visa
- Hungarian, Ivorian and Yemeni excise, tax and revenue stamps
- EU residence permit
- Election forms in 3 countries
- Vouchers for Sodexo Group
- Norwegian and Burundi vehicle registration certificate
- Georgian sea services book, seafarer's documents

Domestic and international certificates

- certified bidder and securities producer of Hungary
- authorised supplier to NATO (up to NATO "Secret" level)
- Industrial Security Clearance up to NATO and EU "Secret" level, system licence for classified data management
- Industrial Security Clearance up to national "Strictly confidential" level, system licence for classified data management
- ISO 9001 quality management system certificate
- ISO 14001 environmental management system certificate
- ISO 27001 information security certificate
- ISO 14298 certificate (Central Bank level, Governmental level)
- ISO 45001 occupational health and safety management system certificate
- AQAP 2110 certificate
- MasterCard Card Quality Management certificate

Value-added services

- decades of experience in document production and issuing
- special inks and additives, printers and control devices developed by ANY
- full lifecycle management of issued documents
- know-how transfer

Our products are manufactured using cutting-edge technology coupled with our staff's innovative professional knowledge. Our references, special technology and security preparedness guarantee that we can offer the best possible product for our customers. Please do not hesitate to contact our colleagues if you have questions.

ANY SECURITY PRINTING COMPANY PLC

📞 +36 1 431 1200

🌐 www.any.hu/en/

@ info@any.hu

✉ Halom utca 5, Budapest 1102, Hungary