

Presentation of our Security Labels

Design & Security

Protection possibilities of the labels

Printing technology: narrow-web flexo, UV curing inks, 8 units

The solutions recommended on the next pages are options, not all of them have to be used on the same label.

The complete design is very flexible, can be easily adapted to the needs.

Compatibility and durability tests will be carried out upon your specifications.

Oil canister labels

Levels of security on the label

- 1st level : can be checked by the **naked eye** like security design elements or special colors
- 2nd level: can be checked by simple devices like **UV lamps** for fluorescent features or magnifier for micro printed elements
- 3rd level: can be checked by special devices like **UV and IR fluorescence detectors**

The front label



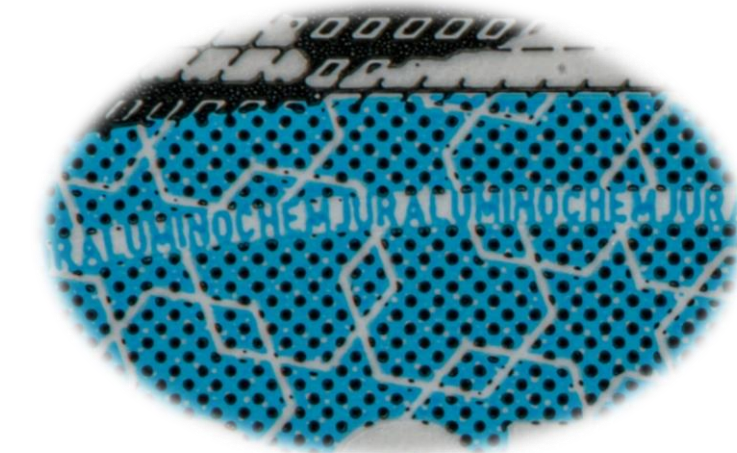
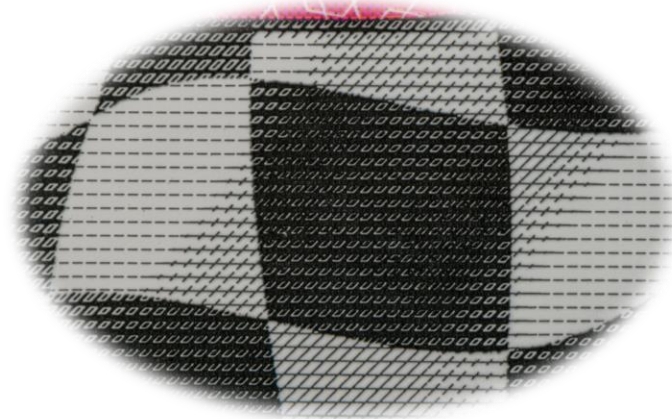
Oil canister labels

1st level, visible elements

- Jura's proprietary tone-sensitive custom screening

2nd level, visible elements

- micro lettering

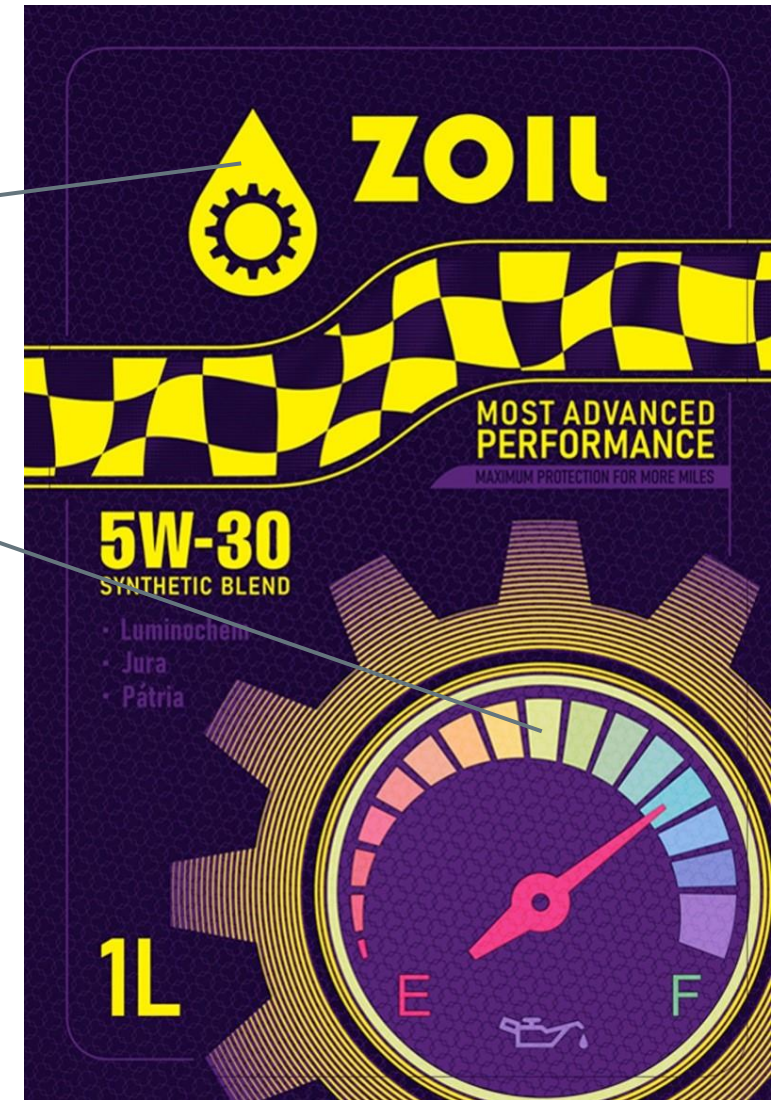


Oil canister labels

2nd level elements

- Vivid fluorescent yellow print containing
- Full color (RGB) fluorescent image in UV 365 nm
It provides **high security** due to the necessary special fluorescent materials and graphic design – **at reasonable costs**
- Continuous color transition
It has an **exclusive appearance** at the same time

UVA fluorescence
(365 nm)



Oil canister labels

3rd level elements & Special fluorescent features

- Bi-fluorescent ink + taggant

Bi-fluorescent ink that is orange under UVC and UVB lamps

(it is yellow under standard UV 365 nm lamp) The same ink also contains a taggant. Our proprietary reader identifies yellow fluorescence and/or the taggant. Suitable for lab and field use.

UVB, UVC fluorescence
(313, 254 nm)

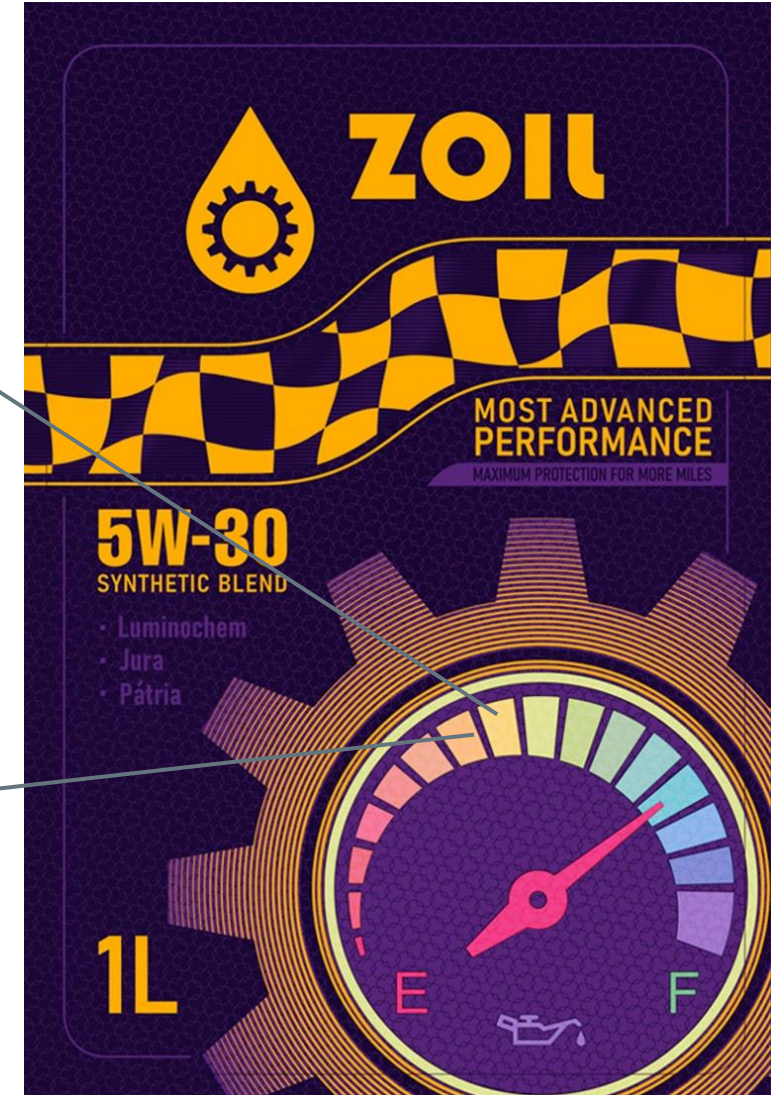


UVB, UVC fluorescence
(313, 254 nm)

Oil canister labels

3rd level elements & Special fluorescent features

The green and the blue fluorescent ink contain anti-Stokes (up converting) material, that shows green fluorescence using appropriate IR laser (for lab use) or a special handheld reader (for field use) – we supply both.



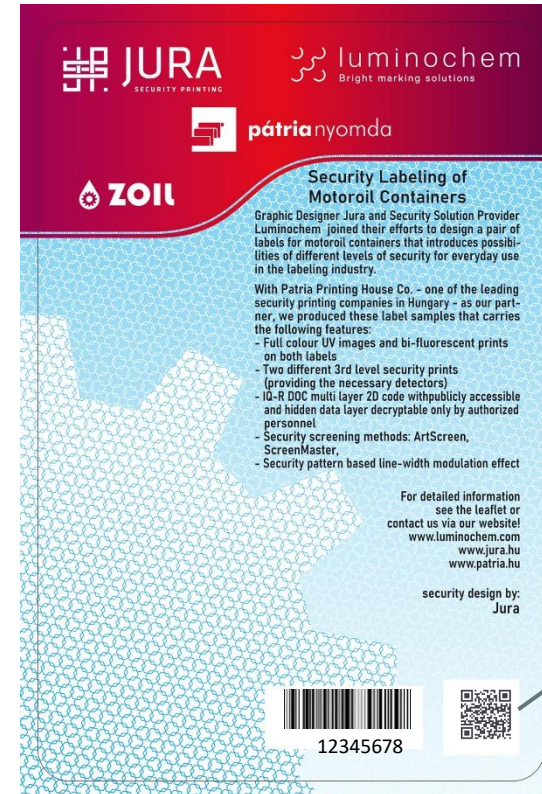
Rear label

- same inks, same technology
- similar visible security elements

IQ-R Doc, JURA's proprietary 2D code

Features

- Offline multi-layered protection :
 - Public data
 - Hidden data
 - Digital signature
- Implemented linked data technology
- Prevents data manipulation
- Public part readable with all code readers – interoperability

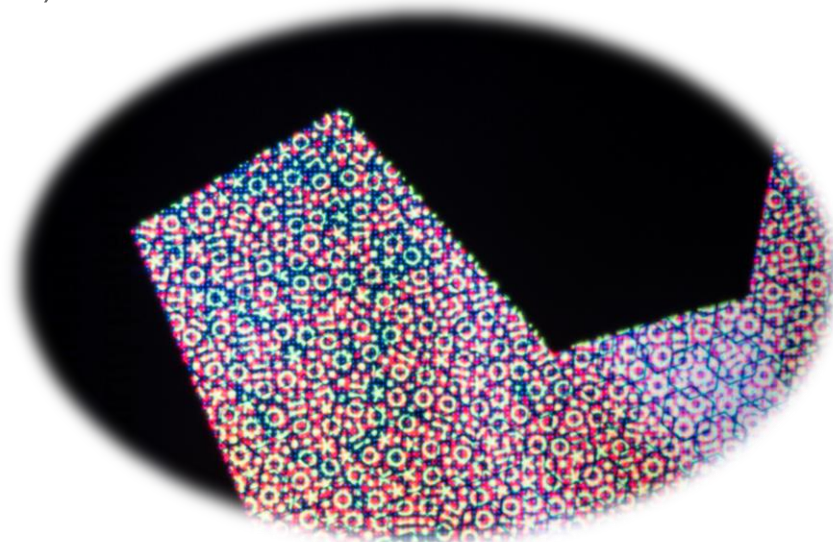


Rear label under UVA light
(365 nm)

Rear label

Additional UV features

- RGB image of an oil drilling station
- The RGB image builds up from special micro lettering (LetterScreen)



Front label

- tone-sensitive custom screening
- micro lettering
- Full color (RGB) fluorescent image
- Continuous color transition
- Bi-fluorescent ink + taggant
- anti-Stokes (up converting) material

Rear label

- IQ-R Doc, JURA's proprietary 2D code
- Full color (RGB) fluorescent image
- Micro lettering (LetterScreen)



Sealing label for paper boxes

- High quality security design
- Complex guilloche system
- Fine lines
- Tight register
- Direct colors (no halftones, no CMYK)
- Security cuts to prevent tampering (kiss-cuts)

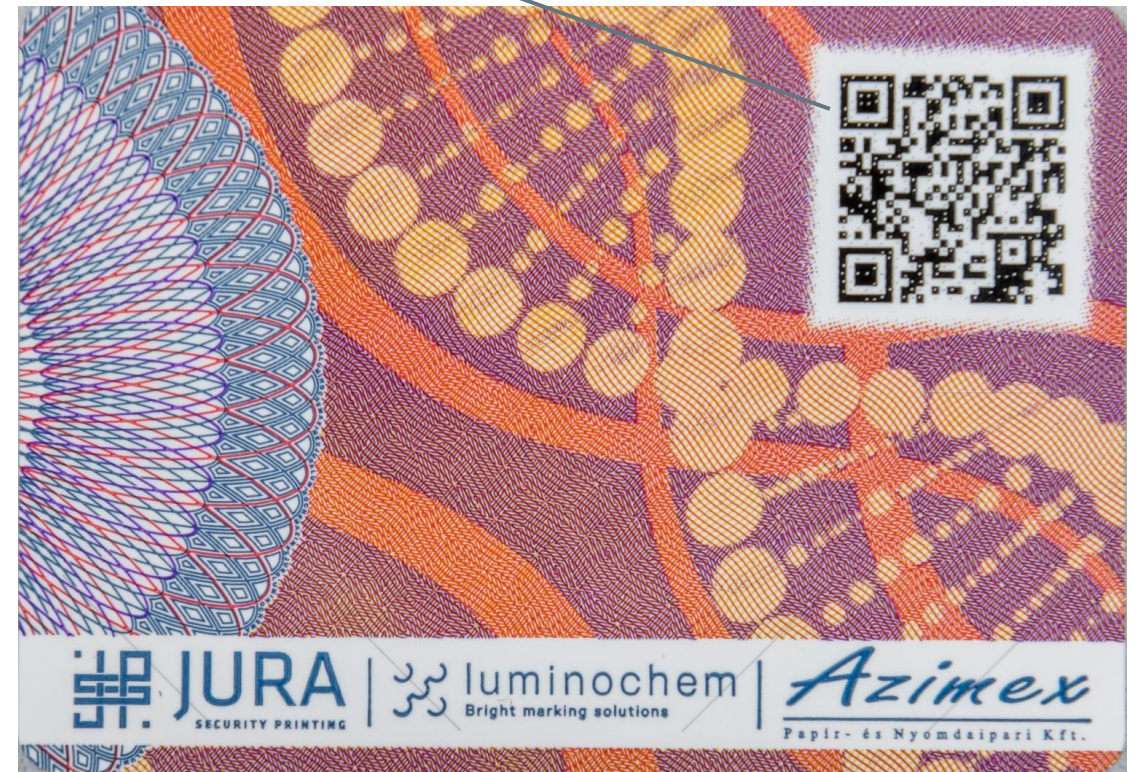


IQ-R Pro

- JURA's proprietary 2D code with copy protection

Important characteristics

- Offline multi-layered protection
 - Public data
 - Hidden data
 - Digital signature
 - Copy protection
- Implemented linked data technology
- Prevents data manipulation
- Public part readable with all code readers – interoperability
- The quality of copy protection depends on the printing technology



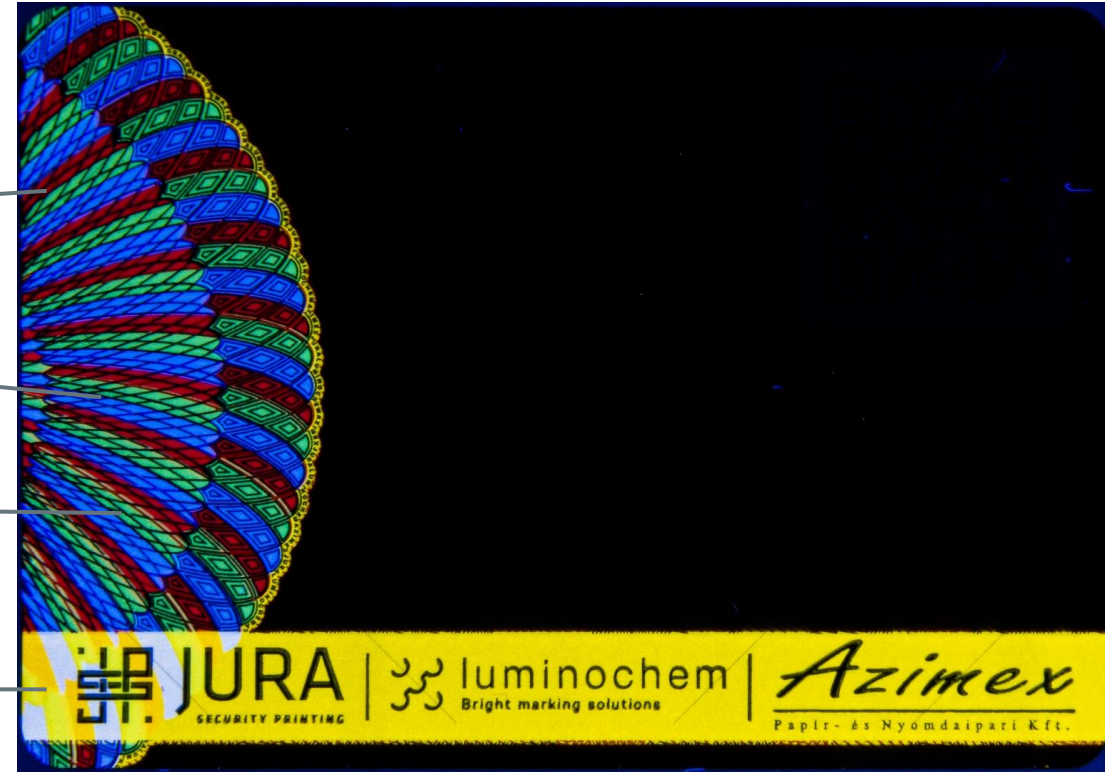
UV features

- complex, colorful UV design
- Same inks and security features as in the oil canister label

Applied Luminochem pigments

- RGB Red: LUERDBN11
- RGB Blue: LUHK2
+ LUUPC7/2 up-converter
- RGB: Green: LUPCZ
+ LUUPC7/2 up-converter

- Bi-fluorescent ink + taggant
 LUWY1/A – yellow fluo. 365 nm
 LUREDCP2 red fluo. 254 nm
 LUTG1 taggant



A complex security system at reasonable cost

- Application of security solutions of the high security printing industry for labeling
- Standard label production: high security quality with flexo technology
- Attractive appearance
- 100% custom made





luminochem
Bright marking solutions



Dr. Jürgen Haas

CCO

haas@luminochem.com

+43 664 516 1389

Luminochem Kft.

H-1222 Budapest

Háros utca 7A

www.luminochem.com