

The background is a dark, moody gradient of blues and purples. A large, solid black circle is positioned in the lower-left to center area. Overlaid on this and the background is a complex pattern of thin, red, curved lines that form a grid-like structure, resembling a wireframe or a stylized globe. The lines are more densely packed in some areas and more spread out in others, creating a sense of depth and movement.

O.V.M.TM Fiduciary Inks

| by C.S.T

[CST]
CRIME SCIENCE TECHNOLOGY

A growing demand for ID documents combining reliability and easy authentication

In a world constantly needing to address the issue of securing external borders, the reliability of ID documents and the need to allow them to be authenticated easily by all law enforcement agencies is a major concern. However, the vast majority of agents who are likely to perform controls do not have access to specific reading devices. Thus, level 1 high security features, identifiable at a glance, remain the priority demand of national authorities.

Polycarbonate & Transparent areas

Traditional fiduciary paper has been gradually replaced by polycarbonate. The use of this polymeric material allows the integration of transparent areas in ID documents, such as windows: this new type of security feature is becoming a standard.

Making transparent areas secure

Currently, document manufacturers face the challenge of securing these transparent areas to level 1. Commonly used security inks, while representing a ready-made solution, are frequently the target for counterfeiting. Moreover, they are also used in other areas such as cosmetics. These inks have thus partially lost their efficiency in terms of security.

O.V.M™ Fiduciary Inks

- Security Inks exclusively reserved for ID documents
- Exceptional color fastness
- Integration without modification into existing printing processes
- An innovative and intuitive high security feature
- Multi-level protection : 1 / 1+ / 2 / 3
- Potential replacement for other security features

O.V.M™ Fiduciary Inks : innovative and flexible security for ID documents

C.S.T introduces O.V.M™ «Optical Variable Material» technology that secures the printing of ID documents.

Like the duality of the luminous atmospheres generated by the eclipse, the O.V.M technology acts on the duality of the observation of a color that will shift according to the relative clarity or darkness of the background.

This technology is different from what is used for conventional security inks. It is exclusively dedicated to the area of ID and fiduciary documents.

O.V.M Fiduciary Inks are mainly applied on the windows of ID documents. They allow the application of innovative and intuitive security features. They dot the printed patterns with previously unknown visual effects that are observable in level 1, 2 and 3.

O.V.M Fiduciary Inks are high security features available in several color shifts. They open the door to new design possibilities. These pigment-free inks have an exceptional durability compared to inks commonly used on ID documents and banknotes. Their application is naturally very flexible and their integration is possible without any modification to existing printing processes.



O.V.M™ Fiduciary Inks : a multi-level security feature

By combining the 3 levels within the same security feature, O.V.M technology can become a potential replacement for other security features.

Level 1 - At a glance

O.V.M Fiduciary Inks offer a very innovative and intuitive visual effect: **the pattern printed on the transparent area of the ID document changes color according to the color of the background on which it is displayed.** For example, the printed pattern appears **Blue** when viewed on a **light background**; it turns **Red** on a **dark background**. It is an innovative security feature, highly intuitive and easy to remember.



Level 1+ - With a Smartphone Flashlight

O.V.M Fiduciary Inks create a new level of intermediate verification between level 1 and level 2. This new level is observable thanks merely to equipment readily available to the general public: the flashlight of a smartphone (or any other conventional white light source). For example, in the light of a smartphone flashlight, **the pattern printed on the window of an ID card turns Red while its projected shadow remains Blue.**



Level 2 – With a UV Lamp

Level 2 allows authentication with a standard control device like UV lamps. They are common at border posts. The printed pattern on the transparent area shows **a very strong fluorescence under UV light.**



Level 3 - In a Laboratory

Level 3 is controlled with laboratory equipment. Each O.V.M Fiduciary Ink is identifiable by a **unique spectral DNA**. It can be certified by C.S.T labs.





About C.S.T – Crime Science Technology

Founded by a team of fiduciary and forensic experts, C.S.T develops and markets security features for identity documents and banknotes. In addition, C.S.T designs innovative processes that reveal traces and clues allowing the identification of criminals.

Criminal Identification & Fiduciary documents: the dual expertise of C.S.T

Validated by the Interior Ministry, forensic technologies developed by C.S.T are used on a daily basis by forensic experts in France. Abroad, many prestigious institutions such as the FBI or Scotland Yard have adopted the innovations of C.S.T.

In the fiduciary business, the company is developing a range of security features with innovative visual properties that allow a quick and intuitive authentication. By combining chemical properties and optical phenomena, these technologies constitute a new generation of security features for identity documents and fiduciary titles.

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« O.V.M – Optical Variable Material » is a trademark from C.S.T
