

Security Printing Inks

Optical Variable Inks (OVI)

OVI changes color depending the angle at which the OVI printed image it is viewed. The color shift appears from one to a second color; as e.g. from Green to Red. OVI is applied by intaglio or screen-printing.

The design should be of solid coverage. The security ink is available only to security printers who have undergone extensive qualification and demonstrate the ability to handle it in a secure environment.



Image of "1000" viewed under two different angles

Few examples of color combinations.



Red - Green



Blackish green – Red purple



Purple - Green



Red - Golden



Golden - Silver



Yellow - Green

Anti-absorption Ink

Infrared anti-absorption Inks are made for offset-, silk screen-, letterpress-, intaglio and gravure printing.

Anti-absorption inks are used for printing of security documents. Printed areas are visible under IR light. Black color has a strong absorption of near infrared light spectrum.

Under IR inspection, areas printed with IR absorption Ink are clearly visible; areas printed with normal ink are invisible under IR light.



Image under day light



IR absorbing black Ink (under IR light)

UV fluorescent Ink

Several colorless or colored long wave- and short wave- or bi-wave UV fluorescent inks are available

1. Colorless fluorescent red, yellow, green, white, beach glow and blue.
2. Colored fluorescent ink red-red fluorescent, black-red fluorescent, blue-red fluorescent, green-red fluorescent.
3. Bi-wave fluorescent inks in various colors.

Printing in dry or wet offset, gravure, number printing, intaglio and silk screen.

Chop ink belong to security ink, available in short wave, long wave and bi-wave.

UV fluorescent inks appear to glow when exposed to ultraviolet light. Under normal light these inks are invisible to the naked eye.

Thermochromic Ink

Reversible and irreversible color changing inks, for various temperatures

1. Low temperature
2. Intermediate temperature
3. High temperature.



Available as reversible and irreversible for dry or wet offset, gravure, number printing, intaglio and silk screen.

Thermochromic ink change color in reaction to temperature changes by human contact or other temperature altering means. The ink's reaction is reportedly reversible and can be reactivated continually. Thermochromic inks can also be used in color combinations the ink reacts by changing from one color to another color.

Anti-alteration Ink

Anti-alteration Ink is used for bank papers, invoices, customs declarations, tickets and air ticket. For letterpress printing only.