

Scratch-off Inks from Printcolor

Range of Scratch-off Inks for Screen and Flexo Printing

YOUR ADVANTAGES

- › Good scratch-off properties
- › High productivity
- › Maximum opacity
- › Fast printability
- › Very good levelling

Printcolor's scratch-off inks combine high productivity with maximum opacity and good scratch-off properties – the latter even after a long storage period of the printed product. Moreover, the inks stand out due to their good levelling, fast printability and high light-tightness. The product range of Printcolor includes UV as well as solvent-based scratch-off inks for screen printing and UV flexo inks.

Screen Printing

UV Scratch-off Inks

To ensure a lasting scratch-off ability, we recommend using the UV preprint varnish Series 140-5107/VD (mesh 150.31) or, after preliminary testing, a release varnish in offset printing. Furthermore, please note that the print realisation must generally be secured by preliminary tests, as many different factors influence the result.

Product range

The range of UV scratch-off inks includes Series 140-5107-100/LV in silver as well as a 2-component scratch-off ink in various shades of gold. The Series 140-5107-100/LV was developed with a view to high productivity and economy for rotary screen printing and is equally suitable for fast cylinder screen printing and flexo printing. Despite the high reactivity and the associated high possible printing speeds, a soft, splinter-free ink film is achieved with the press-ready ink.

Press-ready UV Scratch-off Ink

Color	Series
Preprint varnish, colorless	Series 140-5107/VD
Silver, low viscosity	Series 140-5107-100/LV

Printcolor offers the golden scratch-off ink as a 2-component screen printing ink concentrate Series 500-1xx/KONZ + binder Series 140-5107/07). The mixture has a limited shelf life and should be processed within 24 hours.

Please note that the opacity of the golden scratch-off ink is somewhat limited compared to the silver one. The series is suitable for screen printing but only limited for high speeds (not suitable for rotary screen printing or flexo printing).

2C Scratch-off Inks

Color	Series
Binder	Series 140-5107/07
Rich gold, greenish	Series 500-102/KONZ
Rich pale gold, medium	Series 500-103/KONZ
Pale gold, reddish	Series 500-104/KONZ

Ducat gold, reddish	Series 500-105/KONZ
Copper	Series 500-106/KONZ

Specifications

Thinner	Press-ready
Mixing ratio 2C scratch-off ink	70 % Series 140-5107/07, 30 % Series 500-1xx/KONZ
Cleaner	Series 500-BRS
Mesh	Silver: 100.40-120.34 Gold: 120.34–150.31 Preprint varnish: 150.31
Curing	Silver: 100–200 mJ/cm ² (Technigraf Integrator) Gold: 400–600 mJ/cm ² (Technigraf Integrator)
Squeegee	75 Shore
Substrates	Paper, cardboard, rigid PVC, soft PVC, OPP (preliminary test required), offset varnished
Further processing	Punching, cutting
Available quantities	1 kg / 5 kg / 20 kg
Shelf life	See information on the container lid.
Others	Stir well before use. Protect from light.

Solvent-based Scratch-off Inks

To ensure a lasting scratch-off ability, we recommend using the preprint varnish Series 140-3107/VD (77.55) or, after preliminary testing, a suitable release varnish in offset printing. If required, 5 to 15 per cent of the thinner Series 300-017 can be added to the preprint varnish.

Please note: Contrary to the preprint varnish, only the thinner Series 10-010 may be used for the scratch-off inks. All other thinners reduce or harm scratch-off properties. The print realisation must always be secured by preliminary tests, as many different factors influence the result.

Product range

The solvent-based scratch-off inks Series 140-3107/xxx are press-ready.

Color	Series
Preprint varnish, colorless	Series 140-3107/VD
White	Series 140-3107/00
Black	Series 140-3107/33
Silver, soft	Series 140-3107/100
Gold, soft	Series 140-3107/103

Specifications

Thinner scratch-off inks	Series 10-010
Addition ratio	10–20 % by weight
Thinner preprint varnish	Series 300-017
Addition ratio	5–15 % by weight
Cleaner	Series 200-BRS
Mesh	White, Black, Silver and Gold: 90.48 Preprint varnish: 77.55 (depending on the substrate, the varnish can also be printed thinner, in which case preliminary tests are necessary)
Drying	Air
Squeegee	65 Shore
Substrates	Paper, cardboard, rigid PVC, soft PVC, OPP (preliminary test required), offset varnished
Further processing	Punching, cutting
Available quantities	1 kg / 5 kg / 25 kg
Shelf life	See information on the container lid.
Others	Stir well before use. Protect from light.

Flexo Printing

Product range

The following product range consists of unique UV flexo printing inks for the printing of scratch-off layers.

Color	Series
Release varnish, colorless	Series 140-9107/05
Silver, low viscosity	Series 140-9107-100/LV
Black	Series 140-9107/33
White	Series 140-9107/00

Specifications

Roll type	Anilox roll Silver / black / white: pick-up volume 12–22 cm ³ /m ² , Lining 70–100 lines/cm Release varnish: pick-up volume 6–12 cm ³ /m ² , Lining 300–400 lines/cm
Printing speed	15–25 m/min (Silver: 25–70 m/min)
Curing	80–200 mJ/cm ² (Technigraf Integrator)
Substrates	Paper, cardboard, rigid PVC, soft PVC, OPP (preliminary test required), offset varnished
Further processing	Punching, cutting
Available quantities	1 kg / 5 kg / 20 kg
Shelf life	See information on the container lid.
Others	Stir well before use. Protect from light.

Processing information

The following processing instructions apply equally to the UV and solvent-based scratch-off inks described:

- › A double-sided coating by the offset printer with a suitable dispersion varnish (suitable for screen printing) is advisable. However, it must be ensured that the offset print has dried sufficiently.
- › The stencil should be as flat as possible to ensure a uniform height of the ink film over the entire surface.
- › Sufficient curing of the preprint varnish is essential before being overprinted with the scratch-off ink (recommended are at least 24 hours). The varnish should have a closed and smooth surface.
- › Also, one must pay attention to a sufficient hardening of the scratch-off ink, no lubrication film must remain on the preprint varnish after scratching. This is particularly important if part of the motif consists of dark colors. In this case, please note that the energy requirement for UV scratch-off inks increases by up to 80 % when printing on dark substrates.
- › Due to thermoplasticity, blocking may occur. Therefore, the pile temperature must not exceed 35 °C. The pile height shall be kept accordingly low, especially if high pressure may occur at certain points.
- › The print must be placed on the sheet in a way that when cutting the sheet, the press bar does not directly lie on the scratch-off ink.
- › Double-sided applications are to be checked very critically; the scratch-off inks must not have any contact with each other under any circumstances.

Important information: Our technical advice, whether spoken, written, or through test trials corresponds to our current knowledge to inform about our products and their use. This is not meant as an assurance for certain properties of the products nor their suitability for each application. You are, therefore, obliged to conduct your own tests with our supplied products to confirm their suitability for the desired process or purpose. The selection and testing of the ink for specific applications is exclusively your responsibility. Should, however, any liability claims arise, such claims shall be limited to the value of the goods delivered by us and utilized by you with respect to any and all damages not caused intentionally or by gross negligence (T30 / T12 / V2 / 12/2022)