



Antimicrobial Screen Printing Varnish from Printcolor
Effective Protection against Microbes

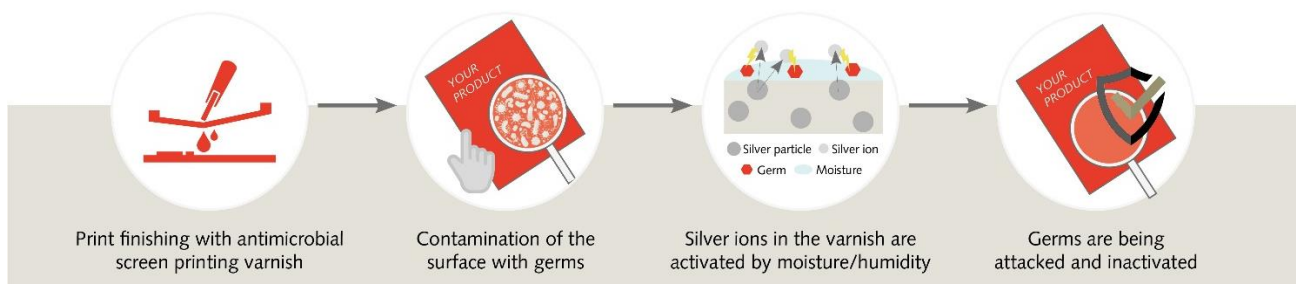
YOUR ADVANTAGES

- › Effective against microbes
- › Germ reduction of 99.99 %
- › Transparent screen printing varnish
- › Optics of the substrate is preserved

Nowadays, the protection against germs and extensive hygienic measures are more important than ever. The antimicrobial screen printing varnishes of Printcolor kill germs reliably and permanently and increase the hygiene of your products lastingly. The varnishes have an antimicrobial mechanism which inhibits enzymatic activity and the reproduction of microbes in the presence of moisture or humidity. The product range includes 2-component, solvent-based as well as UV screen printing varnishes. The varnishes are printed as a top-coat or protection varnish and ensure an antimicrobial effect while preserving the print image.

Mode of action of the varnish

The antimicrobial, colorless screen printing varnishes contain active silver components which permanently kill germs. If the varnish comes into contact with moisture or air humidity, highly reactive silver ions are released. These ions attack the cell activities of germs, prevent them from multiplying and disrupt vital processes – the germs are ultimately killed. As the ions not only target one specific but rather various cell areas at the same time, they have an antimicrobial effect and combat various microbes.



The active agent released on the coated surface eradicates over 99.99 per cent of germs, with a germ reduction value of > 3 log levels tested according to JIS Z 2801-2010 NORM.

Product range and application

The antimicrobial varnishes of Printcolor are ideally suited for the print on plastics or metals and applications such as labels, stickers, promotional items, technical components but also hollow bodies such as tubes.

The product range includes four screen printing varnishes:

Article	Description
Series 140-3123-05	Solvent-based screen printing varnish, antimicrobial
Series 140-5123-05/01	UV screen printing varnish, antimicrobial
Series 140-5123-05/02	UV protection varnish, antimicrobial
Series 140-6123-05	2C screen printing varnish, antimicrobial

Series 140-3123-05

The universally applicable, highly transparent 1-component screen printing varnish Series 140-3123-05 is based on highly resistant raw materials. It is suited for the coating of a variety of plastics such as powder coatings, composite materials, PVC, ABS, SAN, copolymers, acrylic glass (PMMA), foils, polycarbonate or polyester. Typical applications are labels and stickers, signs, automotive applications, promotional items or displays.

Series 140-5123-05/01

The UV screen printing ink Series 140-5123-05/01 is also universally applicable and can be printed on several plastics such as polycarbonate, PET-G/PET-GAG, polyester, Tritan™ (copolyester), PVC, polystyrene or composite materials. Typical areas of application are signs, displays, promotional items, labels, hollow bodies or tubes.

Series 140-5123-05/02

This article is a UV-curing protective varnish that has an antimicrobial effect and increases the mechanical resistance of printed products. The protective varnish stands out due to its resistance to scratches, water and caustic soda as well as chemical and mechanical effects. Suitable substrates are printed goods, HDPE or pretreated/coated PP.

Series 140-6123-05

The 2C screen printing varnish Series 140-6123-05 offers impressive durability. The varnish is suitable for coating of plastics such as ABS, SAN, powder coatings, polyamide, polyester, polyethylene and polypropylene pre-treated, Tritan™ (copolyester), composite materials as well as metal. Examples of applications are signs, technical components or highly resistant vinyl stickers.

Please find further information on the articles in the corresponding Fact Sheet: www.printcolor.ch/tds.

Increase of resistance

To increase the resistance to disinfectants of Series 140-3123-05 and 140-5123-05/01, we recommend the addition of a hardener. Further information regarding the hardener and addition ratio can be found in the Fact Sheet of the respective article.

Further information

Please note that the silver particles can only be effective as long as the coating is intact. Furthermore, the antimicrobial surface provides additional protection for general hygiene but does not replace regular cleaning with a disinfectant.

Transparency and preservation of the print image

The antimicrobial product range of Printcolor consists of transparent, clear screen printing varnishes that do not change the appearance of your product. As the silver ions are released in a speed and volume-controlled manner, discoloration of the varnish is prevented.

Examining the varnish layer

The antimicrobial varnishes contain luminescent pigments that allow the coating layer to be examined. When irradiated with a UV light, the coating shows a clear colour change due to the pigments it contains. Thanks to these pigments, it can be ensured in the printing process that the surface is properly coated, or the varnish layer can be checked for completeness after a certain period of use.

Wide range of applications

Apart from the mentioned areas of application, numerous other uses are possible. Please contact our sales team for further applications or comprehensive advice; we are looking forward to discussing your project with you.

FURTHER INFORMATION

Technical Data Sheets

www.printcolor.ch/tds

Contact

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