
PRODUCT INFORMATION

Finishfit Microbe Protect 2500

water-based silkmatt varnish

FIELD OF APPLICATION

The field of application of the water-based silkmatt varnish ranges from pharmaceutical and food packaging, magazines, playing cards and other printed products that require active surface protection. Finishfit Microbe Protect 2500 contains an additive based on a special nanosilver formulation with specially activated active ingredient. The antimicrobial and antiviral efficacy of the active ingredient has been demonstrated.¹⁾ Elementary silver-nanoparticles (Ag^0) that are firmly anchored in the varnish film release positively charged silver ions (Ag^+), which significantly reduce the number of bacteria and viruses on the surface of the varnish.

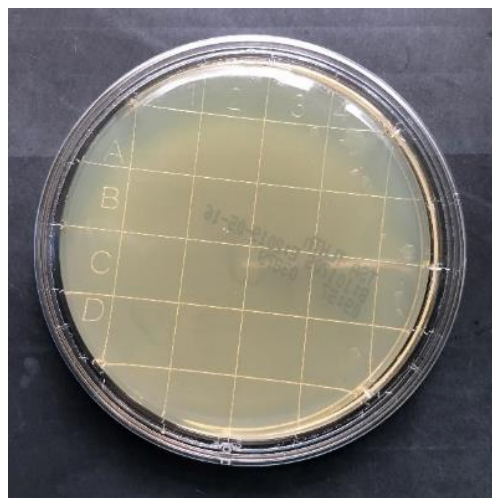
The functionality of the active ingredient in the varnish was proven on print samples according to ISO 22196 against the bacterial species

- Escherichia-coli (E. coli)
- Staphylococcus aureus (S. aureus)

and showed a reduction of up to 99.99%. The effectiveness depends on the concentration of the active ingredient.



WITHOUT activated nanosilver active ingredient



WITH activated nanosilver active ingredient

- The antimicrobial and antiviral efficacy of the active ingredient has been demonstrated¹⁾
- The active ingredient is also used in medical masks for protection against viruses²⁾
- In addition, the active ingredients used are subject to external checks on corona viruses at the renowned University of Groningen
- The active ingredient is permanently (24/7) and long lasting active
- Silver-nanoparticles are not released from the dried varnish film nor can they be rubbed off³⁾

PROPERTIES

- Permanent (24/7) and long lasting effectiveness
- Varnish application (wet) at least 13 - 15 cm³ / m² for coated substrates
- Suitable for indirect food contact
- Drying by IR and hot air
- Excellent rub resistance
- Very good wet-blocking resistance
- Fast drying
- Applicable on both sides
- Suitable for long and short delivery
- Can be used on paper and cardboard
- Standard viscosity 35 – 50 sec., measured at 20 °C (68 °F), DIN 4mm viscosity cup

APPLICATION

- **Always read label and product information before use**
- With regard to technical and organisational protective measures, personal protective equipment if necessary, please read safety data sheet
- The properties depend on the substrate and the application quantity
- Stir well before use
- Attention: Finishfit Microbe Protect 2500 has a yellow-greenish inherent colouring which does not affect the effectiveness of the varnish and has only a marginal effect on the printed image, hardly noticeable to the naked eye
- Use only printing inks which meet all fastness standards according to DIN ISO 2836

COUNTRY LISTINGS

The product is currently available in the member states of the European Union (EU).

ADDITIVES

- For cleaning flexo engraved rollers we recommend Cleanfit Anilox 2259

STORAGE

- Protect from frost, heat and direct sun light
- Storage only in original packaging at 10 – 30 °C (50 – 86 °F)
- At higher temperatures, the active ingredient can change optically into greyish, but this has no influence on its effectiveness
- Unopened and correctly stored, the Finishfit Microbe Protect 2500 has a shelf life of 12 months from delivery date

DISPOSAL

Varnish wash water and Finishfit Microbe Protect 2500 must be separated and disposed of professionally with waste key number AVV 08 01 11*. If you have any questions, please contact your local, regional or national specialist disposal company on site.

STANDARD PACKAGING

- 25 kg can
- 220 kg drum
- 1050 kg IBC

- 1) <http://dx.doi.org/10.1016/j.biomaterials.2014.01.054>
- 2) <https://heiq.com/2020/03/16/heiq-viroblock-antiviral-textile-technology-against-coronavirus/>
- 3) a. M. Henker, M. Becker, S.- L. Theisen, M. Schieß, Deutsche Lebensmittel-Rundschau (2013), S. 194
b. M. Vorbau, L. Hillemann, P. Fiala, M. Stintz, A. Rommert, D. Eichstädt, Farbe und Lack 116 (2010) 12, S. 25

Note: This technical description is intended to inform and advise you. It corresponds to our current state of knowledge. However, since the specific application depends on a number of factors over which we have no influence, no guarantee and liability for the pressure failure can be derived.