

Testing of the virucidal activity of the printer vernish
„Lock 3 WB OPV“
against *Vacciniavirus*

Screening test of the product using the quantitative carrier test
following the *RKI-Richtlinie (1995)* against the *Modified Vacciniavirus Ankara (MVA)*

- Excerpt from the test report: screening test S7 dated 07.12.2020 -

by

PD Dr. Olaf Thraenhart and Dr. Christian Jursch

Study time: November - December 2020
Principal: dyphox® Hygiene Solutions
TriOptoTec GmbH
Am Biopark 13
D-93053 Regensburg / Germany

Eurovir Hygiene-Labor GmbH
Im Biotechnologiepark TGZ I
D-14943 Luckenwalde
Geschäftsführer: Dr. Christian Jursch
Hauptgesellschafter: PD Dr. Olaf Thraenhart

Amtsgericht Potsdam
Handelsregister-Nr.: HRB 26128 P
Steuer-Nr.: 050/108/05610
USt-IdNr.: DE 288 863 508

Mittelbrandenburgische
Sparkasse in Potsdam
SWIFT/BIC: WELA DE D1 PMB
IBAN: DE14 1605 0000 1000 9939 37

Aim of the testing and performing the test

The printer varnish **Lock 3 WB OPV** should be tested for its ability to inactivate the **Vaccinia-virus**¹ under the influence of light.

To test this feature, test squares (PVC-foil) were coated with the printer varnish **Lock 3 WB OPV**. Afterwards the test virus material, containing the **Modified Vacciniavirus Ankara (MVA)** were evenly distributed on the surface of the coated test specimen and exposed to the irradiation with visible light. After irradiation the virus material was then recovered from the test carriers and the remaining amount of virus was quantified.

The underlying test was carried out in the dry state based on the guideline of the Robert Koch-Institute (1995) and ISO 21702 (modified) at room temperature and under the influence of visible light.

Test results

The testing of the printer varnish **Lock 3 WB OPV** under the described test conditions and with the **Modified Vacciniavirus Ankara (MVA)** as the test virus has shown that:

1. with the printer varnish **Lock 3 WB OPV** and after irradiation with visible light a significant reduction of the test virus was recorded. The virus reduction on the test surface amounted to more than 6,85 Log, corresponding to a virus inactivation of more than 99,99%.
2. without irradiation with light, the test samples have shown no virus-inactivating activity.

Judgement

On the basis of the data obtained it can therefore be concluded that the described antiviral effect on the **Modified Vacciniavirus Ankara (MVA)** can clearly be attributed to the photodynamic effect of the printer varnish under test.

Luckenwalde, 07th of December 2020


(

¹ = Annotation regarding virucidal activity: according to EN14476 the Vaccinivirus is the (only) test virus for the so-called „limited virucidal activity“. This efficacy claim includes an efficacy against the enveloped viruses (e.g. HIV, HCV, HBV, the influenza viruses as well as SARS-CoV-1 and and SARS-CoV-2 [and others]).