

Testing of the virucidal activity of the *DYPHOX*[®] *Universal-Beschichtung* against *Adenovirus*

Test of the light inducible photo-biocide in the quantitative carrier test following the RKI-Richtlinie (1995) against *Adenovirus, type 5 (strain: Adenoid 75)*

- Excerpt from the test report S4 dated 15.07.2020 -

by

PD Dr. Olaf Thraenhart and Dr. Christian Jursch

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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

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Aim of the testing and performing the test

The product **DYPHOX[®] Universal-Beschichtung** should be tested for its ability to inactivate the *Adenovirus, type 5* under the influence of light.

To test this feature, stainless steel test squares (carrier) were coated with the **DYPHOX[®] Universal-Beschichtung**. Afterwards the test virus material, containing the *Adenovirus* 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 RKI-guideline (1995) and ISO 21702 (modified) at room temperature and under the influence of visible light.

Test results

The testing of the **DYPHOX[®] Universal-Beschichtung** under the described test conditions and with the *Adenovirus, type 5 (strain: Adenoid 75)* as the test virus has shown that:

1. with the **DYPHOX[®] Universal-Beschichtung** and after irradiation with visible light a significant reduction of the test virus was recorded. The virus reduction on the test surface and after 83 min. of exposure amounted to 2,02 Log, corresponding to a virus inactivation of 99%.
2. without irradiation with light, the test samples had no virus-inactivating activity.

Judgement

On the basis of the data obtained it can therefore be concluded that the described antiviral effect on the *Adenovirus* can clearly be attributed to the photo catalytic effect of the coating under test.

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Dr. Ch. Jursch
(GF and Laboratory Manager Eurovir)