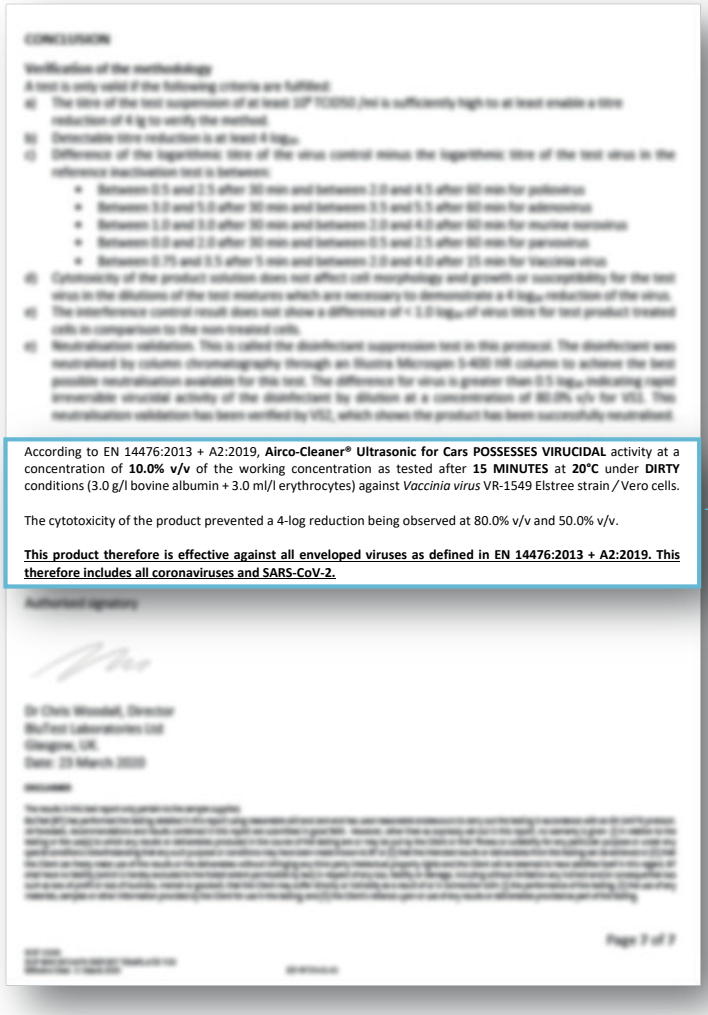
Specialist in Additives

Test Report: BS EN 14476:2013 + A2:2019 Chemical disinfectants and antiseptics – Quantitative suspension test for the evaluation of virucidal activity in the medical area- Test method and requirements (Phase 2/Step 1)

23 March 2020



CONCLUSION

Verification of the methodology

A test is only valid if the following criteria are fulfilled:

a) The titre of the test suspension of at least 10^8 TCID50 /ml is sufficiently high to at least enable a titre reduction of 4 lg to verify the method.

b) Detectable titre reduction is at least 4 $\log_{10}$.

c) Difference of the logarithmic titre of the virus control minus the logarithmic titre of the test virus in the reference inactivation test is between:

- Between 0.5 and 2.5 after 30 min and between 2.0 and 4.5 after 60 min for poliovirus
- Between 3.0 and 5.0 after 30 min and between 3.5 and 5.5 after 60 min for adenovirus
- Between 1.0 and 3.0 after 30 min and between 2.0 and 4.0 after 60 min for murine norovirus
- Between 0.0 and 2.0 after 30 min and between 0.5 and 2.5 after 60 min for parvovirus
- Between 0.75 and 3.5 after 5 min and between 2.0 and 4.0 after 15 min for Vaccinia virus

d) Cytotoxicity of the product solution does not affect cell morphology and growth or susceptibility for the test virus in the dilutions of the test mixtures which are necessary to demonstrate a 4 $\log_{10}$ reduction of the virus.

e) The interference control result does not show a difference of < 1.0 $\log_{10}$ of virus titre for test product treated cells in comparison to the non-treated cells.

f) Neutralisation validation. This is called the disinfectant suppression test in this protocol. The disinfectant was neutralised by column chromatography through an Illustra Microspin S-400 HR column to achieve the best possible neutralisation available for this test. The difference for virus is greater than 0.5 $\log_{10}$ indicating rapid irreversible virucidal activity of the disinfectant by dilution at a concentration of 80.0% v/v for VS1. This neutralisation validation has been verified by VS2, which shows the product has been successfully neutralised.

According to EN 14476:2013 + A2:2019, **Airco-Cleaner® Ultrasonic for Cars POSSESSES VIRUCIDAL** activity at a concentration of **10.0% v/v** of the working concentration as tested after **15 MINUTES** at **20°C** under **DIRTY** conditions (3.0 g/l bovine albumin + 3.0 ml/l erythrocytes) against *Vaccinia virus* VR-1549 Elstree strain / Vero cells.

The cytotoxicity of the product prevented a 4-log reduction being observed at 80.0% v/v and 50.0% v/v.

This product therefore is effective against all enveloped viruses as defined in EN 14476:2013 + A2:2019. This therefore includes all coronaviruses and SARS-CoV-2.

Authorised signatory

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Date: 23 March 2020

DISCLAIMER

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