

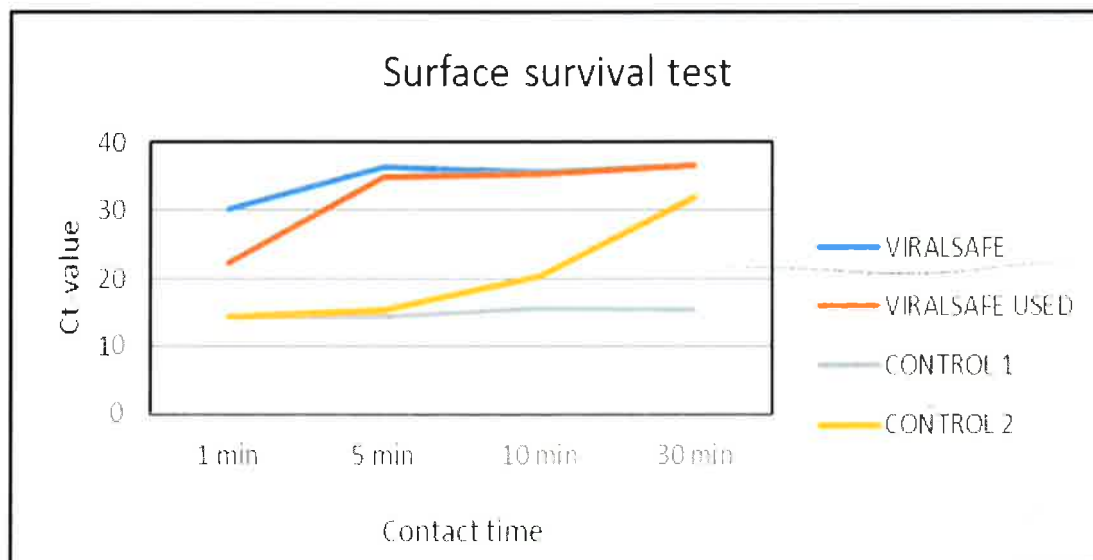
Helsinki September 17, 2020

To Clean Touch Medical Oy

Test report, University of Helsinki

University of Helsinki has tested the capability of VIRALSAFE to inactivate SARS-coronavirus-2. The test was performed according to the principles of Good Laboratory Practice (GLP) and the ISO 17025 standard. The testing was performed in a biosafety-level-3 (BSL-3) laboratory in accordance with the ISO 35001 standard on biorisk management.

The SARS-CoV-2 sample was applied on the VIRALSAFE surface as well as control materials, and allowed to air-dry in room temperature for 1 to 30 minutes. After this incubation time, a sample from the virus was added to susceptible cultured cells and the virus viability was tested by allowing virus to infect the cells for the duration of at least 5 days. During this time, if the virus is viable, it will cause a visible cytopathic effect on the cultured cells. Additionally, all samples were checked with qRT-PCR to measure the level of viral RNA copies (relative quantitation). The results are given as qRT-PCR Ct-values (a low value equals high amount of virus RNA). No CPE is observed when the Ct-value is >30 meaning that no infectious particles are present.



Together these findings may be taken to show that in the conditions tested, VIRALSAFE inactivates the virus in less than a one minute contact time. On a used surface, viral RNA is still detected at 1 minute, but this likely represents noninfectious particles as no CPE was observed in the cell culture.

It should be noted however, that the test result may not be the same if tested using other incubation times or conditions. It should also be noted that the virus concentration tested here is considerably higher than those typically observed in non-laboratory conditions. This was done in order to give the surface material a 'maximum' challenge in this test.



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