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Antiviral activity of PUREZONE060/PRZ150/PURECOVER surface on human coronavirus HCoV-229E for a contact time of 15 and 60min. Adapted protocol from ISO 21702 (201) standard

HEXIS

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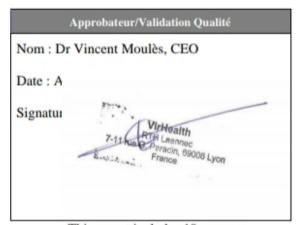
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I. CONCLUSION

Antiviral activity of the PUREZONE060/PRZ150/PURECOVER surface and non-active surface have been tested under conditions defined by the ISO 21702 (2019) adapted protocol for contact times of 15 and 60 minutes on the human coronavirus HCoV-229E

Stainless steel surface is the control for this test.

PUREZONE060/PRZ150/PURECOVER surface, 15 minutes of contact time

Under experimental conditions, (20°C, 15 minutes), the PUREZONE060/PRZ150/PURECOVER surface shows an antiviral activity associated with a logarithmic reduction of 1.30 log₁₀ which is equivalent to a 94.99% efficiency under the ISO 21702 adapted protocol.

PUREZONE060/PRZ150/PURECOVER surface, 60 minutes of contact time

Under experimental conditions, (20°C, 15 minutes), the PUREZONE060/PRZ150/PURECOVER surface shows an antiviral activity associated with a logarithmic reduction of 2.90 log₁₀ which is equivalent to a 99.87% efficiency under the ISO 21702 adapted protocol.

PRODUCT	Contact time (min)	Logarithmic reduction (log ₁₀)	Antiviral efficiency (%)
PUREZONE060/PRZ1 50/PURECOVER	15	1.3	94,99%
	60	2.9	99.87%



III. RÉSULTS

Antiviral activity of the PUREZONE060/PRZ150/PURECOVER surface on human coronavirus HCoV-229E for a contact time of 15 and 60 minutes

Cell susceptibility

Surface	IOG TCID50/mL
PUREZONE060/PRZ150/PUR ECOVER	5.1
Stainless steel	5.0
Difference < 1 log ₁₀ ⊠ yes □ no	

Comparative titre of human coronavirus HCoV-229E on MRC5 cells inoculated with PUREZONE060/PRZ150/PURECOVER surface and stainless steel surface recuperation buffer show a difference less than 1log₁₀. Results showed that recuperation buffers of the test surfaces didn't affect the MRC5 susceptibility to human coronavirus HCoV-229E under test conditions.

a. Cytotoxicity

The test surface cytotoxicity is determined by reading of cytopathic effect (CPE) on MRC5 permissive cells and quantified by TCID50 technique.

For viral recuperation on surface, the surfaces are submerging in 2mL of infection medium without FCS (recuperation buffer). The recuperation buffer cytotoxicity is determined by reading of cytopathic effect (CPE)

Under test conditions, the recuperations buffers from PUREZONE060/PRZ150/PURECOVER and stainless steel surfaces didn't show cytopathic effects on MRC5 cells for a contact time of 15 and 60 minutes.

The test results are dependant and take into account the cytotoxicity results.