

PRODUCT PERFORMANCE TESTING LABORATORY

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TEST REQUESTED BY: Graboplast

TEST SUBJECT MATERIAL: Identified by client as: "SILVER KNIGHT"

TEST DATE: 2/16/2021 - 3/5/2021

TEST PROCEDURE:

ISO 21702:2019 Measurement of antiviral activity on plastics and other non-porous surfaces. Test method was modified to test with viruses – Human Coronavirus 229E

TEST CONDITIONS:

Test sample size: 50 mm x 50 mm

Sterilization of samples: UV sterilization for 15 minutes

Test viruses and cell lines:

Virus	Cell line
Human Coronavirus 229E ATCC VR-740	MRC-5 ATCC CCL-171

Volume of test suspension applied on

test sample: 0.40 mL

Infectivity titer of virus: 10⁶ TCID50/mL

Contact exposure time: 24 hours

Environmental conditions for exposure: Temperature at $25^{\circ}\text{C} \pm 1$

 $RH \ge 90\%$



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Test Results: Results of testing performed with Human Coronavirus 229E on Si

Sample	Virus	Cell line	Infectivity titer TCID50/mL	Contact exposure time	Percentage Reduction (%)*
Sample 1	Human Coronavirus 229E	MRC-5	TCID50/mL 10 ⁶	24 hours	99.99%
Sample 2					99.99%
Sample 3					99.99%

^{*}Reduction calculated based on the infectivity titer of viruses recovered from control glass samples after 24 hours of contact time



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Research Scientist

3/5/2021