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FINAL REPORT #2011877-450

**EVALUATION OF VIRUCIDAL PROPERTIES OF TREATED UNWOVEN FABRIC MATERIAL  
VERSUS SEVERE ACUTE RESPIRATORY SYNDROME-RELATED CORONAVIRUS 2 (SARS-CoV-2)  
USING ISO 18184:2019(E)**

Prepared for:

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## EXECUTIVE SUMMARY

<b><u>STUDY NUMBER</u></b>	<b>2011877-450</b>
<b><u>TITLE</u></b>	<b>EVALUATION OF VIRUCIDAL PROPERTIES OF TREATED UNWOVEN FABRIC MATERIAL VERSUS SEVERE ACUTE RESPIRATORY SYNDROME-RELATED CORONAVIRUS 2 (SARS-CoV-2) USING ISO 18184:2019(E)</b>
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<b><u>TESTING FACILITY</u></b>	<b>BIOSCIENCE LABORATORIES, LLC</b> 1755 South 19th Avenue Bozeman, Montana 59718
<b><u>STUDY INITIATION DATE</u></b>	<b>02/08/2021</b>
<b><u>STUDY COMPLETION DATE</u></b>	<b>04/22/2021</b>

This study evaluated the virucidal properties of one non-woven treated fabric test material and one untreated control material when challenged with Severe Acute Respiratory Syndrome-related Coronavirus 2 (SARS-CoV-2). Testing as based on the International Organization for Standardization (ISO) Method ISO 18184:2019(E), *Textiles — Determination of antiviral activity of textile products* with modification recommended by the Sponsor. All testing was performed in accordance with Good Laboratory Practices, as specified in 21 CFR Part 58, with the exception that the characterization of the identity, strength, purity, composition, stability, and solubility of the treated test material and untreated control material remained the responsibility of the Study Sponsor and was not performed by the Testing Facility (GLP 58.105 and GLP 58.113). Table 1 presents the summary of test results.

Table 1: Summary of Test Results

Test Material Designation	Timed Exposure	Log <sub>10</sub> TCID <sub>50</sub> Reduction	Standard Deviation	Percent Reduction
Anti-viral filter media (Lot #1948)	24-hour	2.8	0.00	99.84

## **STUDY CONCLUSIONS**

Under conditions of this evaluation, the Test Material, Anti-viral filter media (Lot #1948), reduced the infectivity of SARS-CoV-2 by an average of 2.8 log<sub>10</sub> following a 24-hour exposure. In accordance with ISO18184, the Test Material, may be categorized to have a Good antiviral effect ( $\geq 2.0$  log<sub>10</sub>) following a 24-hour exposure.