STERILYFT LLC

EFFICACY TEST REPORT

SCOPE OF WORK
Non-standardized Test Method: Microbial Reduction Rate Test

PRODUCT
Sterilyft Elevator Sterilization System

REPORT NUMBER
104471079COL-001

ISSUE DATE
20-OCTOBER-2020

PAGES 8

DOCUMENT CONTROL NUMBER
GFT-OP-10h (6-July-2017)

SECTION 1 EFFICACY STUDY SUMMARY

Client		**Sterilyft LLC 540 Manida St Bronx, NY 10474 USA**
Project No.		G104471079
Sample	Product	Elevator Sterilization System
	Model	Sterilyft Model 1001
Procedural	Engineer	Amanda Mastronicolas
	Reviewer	Nicholas Unger
	Dates Tested	10/13/20 – 10/16/20
	Report Date	10/20/2020
Standard	Non-standardized Test Method: Microbial Reduction Rate Test	
Testing Facility	Intertek Microbiological Laboratory 1717 Arlingate Ln. Columbus, OH 43228 United States	

SECTION 2 TEST PROCEDURE

A room was constructed measuring 88”H X 70” W X 70” D = 249.5 cu/ft. The test unit was placed in the center of the constructed room (Photo 1) and the room sealed. A microbial suspension was then aspirated into the chamber for 30 minutes. The test unit was turned on the and samples drawn at intervals of 0, 1, 2, 3, 4, 5, 10, 15 and 30 minutes. The process was then repeated without the test unit in the chamber to provide the natural decay results.

Air sampling took place using an SKC BioStage Single-stage impactor for 30 seconds at 12L/min (.424 cubic feet/min).

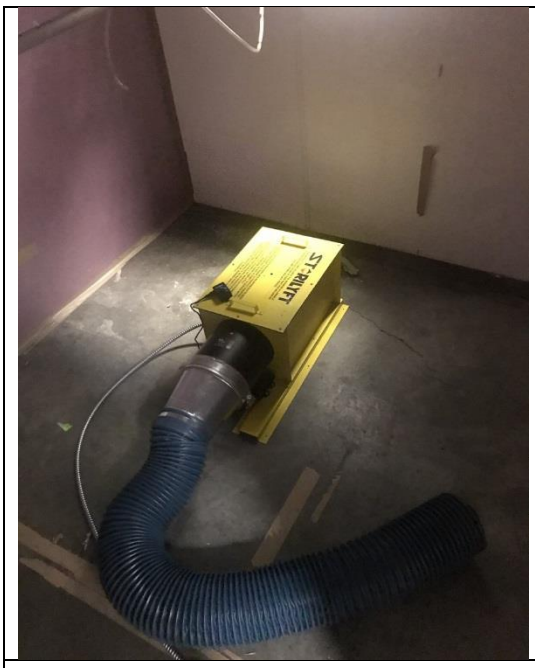


Photo 1: Sterilyft Model 1001

SECTION 3 ORGANISMS

Organism Name	Organism Type	ATCC Number	Source
Phi X174 bacteriophage	small, non-enveloped virus	13706-B1	Carolina Bioscience
Escherichia coli	Gram negative bacteria	11229	ATCC
Aspergillus niger	mold spore	6275	ATCC

SECTION 3 EQUIPMENT

Equipment Type	Equipment No.	Calibration Due Date
Micropipette	CE 2587	6/12/2021
Incubator	CE 2381	7/7/2021
Incubator	CE2427	7/7/2021
Balance	CE 1882	7/7/2021
Autoclave	CE 2376	Verify Before Use
Centrifuge	CE 2382	For Reference Only
Chamber	CE 1149	For Reference Only
Collision Nebulizer	CE 1139	For Reference Only
Refrigerator	CE 1157	For Reference Only
Pump	CE 1137	For Reference Only
Stopwatch	SW013	07/07/2021
Ambient Temperature/RH	CE 1179	For Reference Only

SECTION 4 MEDIA AND REAGENTS

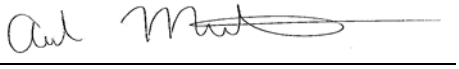
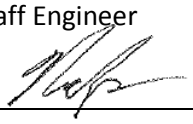
Type	Manufacturer	Lot No	Expiration Date
Nutrient Agar	DIFCO	9346039	10/31/2024
Potato Dextros Agar	DIFCO	9311217	10/31/2024
PBS	Fisher	192736	08/01/2022

SECTION 5 SAMPLE ACQUISITION

Acquisition method	Shipped to Intertek
Description	UV-C Germicidal and Dual MERV 13 Filtration Elevator Sterilization System
Model Number	1001
Arrival date	10/14/2020
Condition	New
Sample Identification No.	COL2010140937-001
Development Level	Production

SECTION 6 SUMMARY OF RESULTS

Organism Type	Virus	Mold	Bacteria
Temperature Min/Max	20°C (68°F) / 20°C (68°F)		20°C (68°F)
Humidity Min/Max	46% RH / 53 % RH		43%RH
Organism Name	*Phi-X174*	*A. niger*	*E. coli*
30 Minute Percent Reduction	99.9%	99.9%	99.9%

Completed by:	Amanda Mastronicolas	Reviewed by:	Nicholas Unger
Title:	Microbiology Tech I	Title:	Staff Engineer
Signature:		Signature	
Date	20-OCT-2020	Date:	20-OCT-2020

Annex A: Raw Test Data

Test Parameter		Test Result	Natural Decay Result	Units
Organism	Species	*Coliphage φX174*		---
	ATCC No.	(Item # 124425)		---
	Challenge Concentration	2.0×10^9		PFU/mL
Samples (min)	0	TNTC	TNTC	No Reduction
	1	TNTC	TNTC	No Reduction
	2	110	TNTC	95.8%
	3	84	TNTC	96.8%
	4	71	TNTC	97.3%
	5	40	TNTC	98.5%
	10	22	TNTC	99.2%
	15	11	TNTC	99.6%
	30	1	TNTC	99.9%
Results	--	99.9%		Reduction

Test Parameter		Test Result	Natural Decay Result	Units
Organism	Species	*E. coli*		---
	ATCC No.	11229		---
	Challenge Concentration	8.8×10^8		CFU/mL
Samples (min)	0	TNTC	TNTC	No Reduction
	1	TNTC	TNTC	No Reduction
	2	77	TNTC	96.8%
	3	66	TNTC	97.2%
	4	31	TNTC	98.7%
	5	25	TNTC	98.9%
	10	9	TNTC	99.6%
	15	3	TNTC	99.9%
	30	<1	TNTC	99.9%
Results	--	99.9%		Reduction

Test Parameter		Test Result	Natural Decay Result	Units
Organism	Species	*A.niger*		---
	ATCC No.	6275		---
	Challenge Concentration	1.0 x 10^7		CFU/mL
Samples (10min.)	0	TNTC	TNTC (2628)	For Reference
	1	86	TNTC (2628)	91.4%
	2	45	TNTC (2628)	93.5%
	3	29	TNTC (2628)	97.1%
	4	10	TNTC (2628)	99.0%
	5	7	TNTC (2628)	99.3%
	10	<1	TNTC (2628)	99.9%
	15	1	TNTC (2628)	99.9%
	30	<1	TNTC (2628)	99.9%
Results	--	99.9%		Reduction

Annex B: Incubation Data: