

Health-Mor EFFICACY TEST REPORT

SCOPE OF WORK

Non-standardized Test Method: Microbial Reduction Rate Test

PRODUCT – Air purification unit

MODEL - Defender filter queen

REPORT NUMBER

104868700COL-002

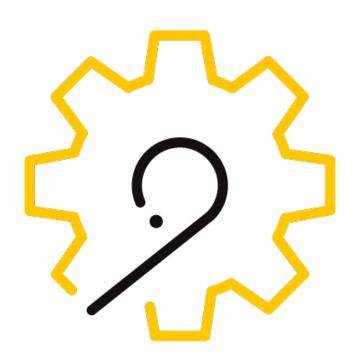
ISSUE DATE

11/30/21

PAGES 5



GFT-OP-10h (6-July-2017) © 2021 INTERTEK



HEALTH-MOR

Report No.: 104868700COL-002

SECTION 1 EFFICACY STUDY SUMMARY

Client		Health-Mor 13325 Darice Pkwy Strongsville, OH 44149-3819 USA	
Project No.		G104868700	
Sample	Product	Air purification unit	
	Model	Defender filter queen	
Procedural	Engineer	Amanda Mastronicolas	
	Reviewer Nicholas Unger		
	Dates Tested 11/22/21 – 11/24/21		
	Report Date	11/30/2021	
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

The test chamber measured 10'x10'x10' (1000 cubic ft) room and a microbial suspension was aspirated into the chamber. Air samples were taken from the test chamber once the unit was turned on and sampling was taken every 15 minutes over a period of 2 hours, and then plated. The process was then repeated without the test unit in the chamber to provide the natural decay results. All plates were incubated overnight and viral growth on the test plate was compared to that of the natural decay control.

Air sampling took place using an SKC BioStage Single-stage impactor for 30 seconds at 12L/min (.424 cubic feet/min). Results below represent the percent reduction at 90 minutes.

HEALTH-MOR

Report No.: 104868700COL-002

SECTION 3 ORGANISMS

Organism Name	Organism Type	ATCC Number	Source
MS2 bacteriophage	small, non-enveloped RNA virus	15597-B1	ATCC

SECTION 3 EQUIPMENT

Equipment Type	Equipment No.	Calibration Due Date
Micropipette	CE 2587	06/30/2022
Incubator	CE 2381	7/7/2022
Balance	CE 1882	7/7/2022
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	9/9/2022
Ambient Temperature/RH	CE 1179	For Reference Only

SECTION 4 MEDIA AND REAGENTS

Туре	Manufacturer	Lot No	Expiration Date
Nutrient Agar	DIFCO	9346039	10/31/2024
PBS	Fisher	192736	08/01/2022

SECTION 5 SAMPLE ACQUISITION

Acquisition method	Shipped to Intertek
Description	Air Purifier Unit
Model Number	Defender filter queen
Arrival date	11/15/2021
Condition	New
Sample Identification No.	COL2111150955-001
Development Level	Production
Sample Photo	Defender 0

SECTION 6 SUMMARY OF RESULTS

Air Flow	Optional Features	
Max Speed per unit	N/A	

HEALTH-MOR

Report No.: 104868700COL-002

Organism Type	Virus	
Temperature Min/Max	18°C (66°F)	
Humidity Min/Max	41 % RH	
Organism Name	MS2	
Percent Reduction (90 Mins)	99.9%	
Log Reduction (90 Mins)	3.0	

Completed by:	Amanda Mastronicolas	Reviewed by:	Nicholas Unger
Title:	Microbiology, Team lead	Title:	Staff Engineer
Signature:	and Mark	Signature	Meh
Date	30-NOV-2021	Date:	30-Nov-2021

This report is for the exclusive use of Intertek's Client and is provided pursuant to the agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this report. Only the Client is authorized to copy or distribute Intertek's Reports and then only in their entirety, and the Client shall not use the Reports in a misleading manner. Client further agrees and understands that reliance upon the Reports is limited to the representations made therein. In the event any portion of this report becomes public, including but not limited to press releases, articles, and marketing material, without prior written consent from Intertek, Intertek will enforce the reproduction of the report in its entirety by making the full report public. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek. The observations and test results in this report are relevant only to the sample tested. Should Customer use an Intertek Report, in whole or in part, in such a manner as to involve Intertek in legal controversy or to adversely affect Intertek's reputation, it shall be Intertek's right to utilize any and all Customer information, including, but not limited to, data, records, instructions, notations, samples or documents within Intertek's custody and control which relate to the customer for the purpose of offering any necessary defense or rebuttal to such circumstances. This report by itself does not imply that the material, product, or service is or has ever been under an Intertek certification program.