

PRICE INDUSTRIES LTD.

EFFICACY TEST REPORT

SCOPE OF WORK

Non-standardized Test Method: Microbial Reduction Rate Test

PRODUCT – Fan Filter Unit

MODEL – FFU Puraflo 24x48

REPORT NUMBER

104772417COL-002

ISSUE DATE

November 10, 2021

PAGES 5

DOCUMENT CONTROL NUMBER

GFT-OP-10h (6-July-2017)

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SECTION 1 EFFICACY STUDY SUMMARY

Client		Price Industries Ltd. 638 Raleigh St Winnipeg, MB R2K 3Z9 Canada
Project No.		G104772417
Sample	Product	Fan Filter Unit
	Model	FFU Purafluo 24x48
Procedural	Engineer	Leta Myers
	Reviewer	Nicholas Unger
	Dates Tested	11/5/21 – 11/9/21
	Report Date	11/10/21
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. The unit was set at low fan speed (254 CFM) for the duration of testing. 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).

SECTION 3 ORGANISMS

Organism Name	Organism Type	ATCC Number	Source
Aspergillus niger	Mold spore	6275	ATCC
Escherichia coli	Bacteria	11229	ATCC
Phi X174 bacteriophage	Small, non-enveloped virus	13706-B1	Carolina Bioscience
Penicillium citrinum	Fungus	9849	ATCC

SECTION 4 EQUIPMENT

Equipment Type	Equipment No.	Calibration Due Date
Micropipette	CE 2587	06/30/2022
Incubator	CE 2381	07/07/2022
Balance	CE 1882	07/07/2022
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	11/09/2021
Ambient Temperature/RH	CE 1179	For Reference Only

SECTION 5 MEDIA AND REAGENTS

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

SECTION 6 SAMPLE ACQUISITION

Acquisition method	Shipped to Intertek
Description	Fan Filter Unit
Model Number	FFU Puraflo 24x48
Arrival date	8/4/2021
Condition	New
Sample Identification No.	COL2108041323-001
Development Level	Production

SECTION 7 SUMMARY OF RESULTS



Air Flow	UV Light	Ionizer
Low Speed	N/A	N/A

Organism Type	Mold	Virus	Bacteria	Fungus
Organism Name	<i>A. niger</i>	<i>Phi-X174</i>	<i>E. coli</i>	<i>P. citrinum</i>
Temperature Min/Max	19°C (66°F)	21°C (70°F)	19°C (66°F)	18°C (64°F)
Humidity Min/Max	25% RH	28% RH	28% RH	27% RH
Time to Reduction	15 Min	30 Min	30 Min	30 Min
Percent Reduction	99.9%	99.9%	99.9%	99.9%

Completed by: Leta Myers
 Title: Microbiology Tech I
 Signature: Signature on file
 Date: 10-November-2021

Reviewed by: Nicholas Unger
 Title: Staff Engineer
 Signature: Signature on file
 Date: 10-November-2021

Microbiological Performance Test Report

PRICE INDUSTRIES LTD.
Report No.: 104772417COL-002

Date / Project Number	Engineer / Reviewer	Pages	Description of Change
11/22/21 G104772417	A. Mastronicolas <i>AM</i> N.Unger <i>NTU</i>	All	<ul style="list-style-type: none"> • Changed G number from G104764796 to G104772417 • Changed the report number to 104772417COL-002

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