





## 广州市微生物研究所 GUANG ZHOU INSTITUTE OF MICROBIOLOGY

# 检测报告 TEST REPORT

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Report Number	KY20190034
Name of Sample	Air Purifier
Applicant	Eureka Forbes Ltd.



Remarks





## GUANG ZHOU INSTITUTE OF MICROBIOLOGY TEST REPORT

Date Received: May 10, 2019

Name of Sample	Air Purifier	Source of Sample	Delivery	
Applicant	Eureka Forbes Ltd.	Client	Anil Kumar	
Manufacturer	Eureka Forbes Ltd.	Brand	Dr. Aeroguard	
Type and Specification	Dr. Aeroguard SCPR 660 H	Quantity of Sample	1PC	
Date of Production	— A	State of Sample	Machine	
Batch Number		Packing of Sample	In box	
Sample Picture	·.e.			
Standard and Methods	<ol> <li>GB/T 18801-2015 Air cleaner</li> <li>Refer to <technical disi="" evaluation="" for="" li="" standard="" test<=""> </technical></li></ol>	nfection> 2002-2.1.3 A	ir disinfection effe	

Product (remove sample) uses ULTRA HIGH DEFINITION HEPA-UHD HEPA.

\*\*\*To be continued\*\*\*

same features. Different name has given for different divisions.

The client claims that:

\*Purification Effect of Airborne Virus Aerosol (Influenza A virus A/PR8/34 H1N1)

Dr. Aeroguard SCPR 660 H/Aeroguard Pro 1000 H, both are same products with







## GUANG ZHOU INSTITUTE OF MICROBIOLOGY TEST REPORT

Date Received: May 10, 2019 Date Analyzed: May 15, 2019

### Method for Measuring Clean Air Delivery Rate of Particulate:

1. Test Object

Particulate (≥0.3 µm)

2. Test Conditions:

1) Environment temperature:  $(25 \pm 2)$  °C

2) Environment humidity: (50±10) %RH

3. Test Equipment

Test chamber (30 m<sup>3</sup>), Particle Detector (SX-L301N)

4. Operational Conditions of the Machine

Set the switch to position "The highest gear".

5. Test Procedure

1) Place the air cleaner to be tested in the test chamber in accordance with standard request and set the air cleaner controls to the conditions for test. Test for proper operation, then turn off the air cleaner.

2) Using the test chamber HEPA filter, allow the test chamber air to clean until the background concentration in the size range of 0.3 μm to 10 μm reaches a concentration of less than 1000 particles/L. Simultaneously operate the environmental control devices until the test chamber conditions have reached the requirements.

3) When an acceptable test chamber background concentration is achieved record the background concentration, turn off the test chamber environmental control system.

4) Immediately light, then place one standard cigarette in the cigarette smoke generator, seal generator, open valve to chamber, to provide the required initial concentration (2×10<sup>6</sup>~2×10<sup>7</sup> particles/L). Turn off air supply and close test chamber valve. Mix cigarette smoke for ten minutes after the initial concentration has been reached.

5) Turn off ceiling mixing fan, begin to acquire the cigarette smoke particulate concentration. This test point is the initial concentration ( $C_0$ ).

6) Open the air cleaner and start the test as soon as the initial concentration of particulate matter is completed. Collect samples at 2min intervals for 20 min.

7) Test the natural decay according to the steps 1)  $\sim$  6), except that the air cleaner is unoperated.

6. Computational Formula

CADR Q (m<sup>3</sup>/h) =  $60 \times (k_e - k_n) \times V$ 

Where:  $k_e = \text{total decay constant}$ ;  $k_n = \text{natural decay constant}$ ;  $V = \text{volume of the test chamber, m}^3$ 

#### **Test Results**

Number of Sample	Pollutant	Natural Decay Constant $k_{\rm n}$ (min <sup>-1</sup> )	Total Decay Constant $k_{\rm e}$ (min <sup>-1</sup> )	CADR $Q$ (m $^3$ /h)	
KJ20190034-1 Particulate		0.0025	0.2355	419.4	

\*\*\*To be continued\*\*\*







## GUANG ZHOU INSTITUTE OF MICROBIOLOGY

### **TEST REPORT**

Date Received: May 10, 2019 Date Analyzed: May 15, 2019

## Test Method for Purification Effect of Airborne Virus Aerosols

1. Test Equipment

1) Strain: Influenza A virus A/PR8/34 H1N1

2) Cells: MDCK

2. Test Conditions

1) Environment temperature: (23~25) °C

2) Environment relative humidity: (50~60) %

3) Test time: 60min

4) The volume of the test chamber: 30 m<sup>3</sup>

5) Machine setting: "The highest gear".

### **Test Results**

Number of Sample	Virus		Control Group			Test Group		
		Test Number	0 min (TCID <sub>50</sub> /m³)	60 min (TCID <sub>50</sub> /m³)	Natural Decay Rate (%)	0 min (TCID <sub>50</sub> /m³)	60 min (TCID <sub>50</sub> /m³)	Purification Rate (%)
		1	3.42×10 <sup>5</sup>	7.47×10 <sup>4</sup>	78.16	5.06×10 <sup>5</sup>	/	≥99.99
KY20190034-1	A/PR8/34 (H1N1)	2	5.06×10 <sup>6</sup>	7.47×10 <sup>4</sup>	85.24	5.06×10 <sup>5</sup>	/	≥99.99
		3	1.60×10 <sup>5</sup>	3.41×10 <sup>4</sup>	78.69	1.60×10 <sup>5</sup>	/	≥99.99

Note: "/" means not detected.

\*\*\* End of report\*\*\*

Editor The Checker Berg

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Date Reported









## Statements

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- 2. For the received sample, the sample information in the report is claimed by the applicant, the inspection unit is not responsible for its authenticity. The report is responsibility for the received sample only.
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- 6. The test data and results of items which are not accredited by CMA, only used as scientific research, teaching or internal quality control.
- 7. Any ambiguity by the language which used in the report, the Chinese shall prevail.

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