



Test Report

QDF23-007600-02

Date: 27 Apr 2023

Client Name: Membrane Solutions (Nan Tong) Co., Ltd.
 Client Address: No.3,Hongxing East Road ,NETDA Nantong
 City,Jiangsu,P.R.China
 Sample Name: MSA3 Air Purifier/MSA3S Air Purifier
 Manufacturer: /
 Sample Batch No.: /
 Production Date: /

Above information and sample(s) was/were submitted and certified by the client, SGS quoted the information with no responsibility as to the accuracy, adequacy and/or completeness.

SGS Reference No. : ASH23-003734
 Date of Sample Received : 15 Feb 2023
 Testing Period : 15 Feb 2023 - 27 Apr 2023
 Test Requested: Selected test(s) as requested by client.
 Test Method : Please refer to next page(s).
 Test Result(s): Please refer to next page(s).

 SGS Authorized Signature



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Test results:

Test Requested: Evaluation of eliminating bacterial capability: Simulated field experiment

Test Method(s): GB 21551.3-2010 Antibacterial and cleaning function for household and similar electrical appliances—Particular requirements of air cleaner, Annex A: Evaluation of Eliminating bacterial capability of air cleaner

Test organism(s)	Times	Control samples		Test samples		Antibacterial rate (%)	Average antibacterial rate(%)
		Before treatment (CFU/m ³)	After treatment (CFU/m ³)	Before treatment (CFU/m ³)	After treatment (CFU/m ³)		
Klebsiella pneumoniae ATCC 4352	1	7.6x10 ⁴	2.8x10 ⁴	6.6x10 ⁴	25	99.90	99.94
	2	5.8x10 ⁴	2.3x10 ⁴	6.0x10 ⁴	7.1	99.97	
	3	6.5x10 ⁴	2.5x10 ⁴	6.3x10 ⁴	14	99.94	
Staphylococcus aureus ATCC 6538	1	1.4x10 ⁵	6.6x10 ⁴	1.5x10 ⁵	25	99.96	99.94
	2	1.3x10 ⁵	5.8x10 ⁴	1.2x10 ⁵	49	99.91	
	3	8.8x10 ⁴	3.7x10 ⁴	8.2x10 ⁴	18	99.95	

Notes:

1. Test chamber volume: 30m³
2. Operation time: 60min
3. Sampling method: Six-level sieve air impact sampling

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*Test virus & host cell: Influenza A virus H1N1, host: MDCK cell line

Test method: T/SAEPI 005-2020

Test space: 30 m³ Test cabin

Test conditions: Environment temperature: 24°C, Environment relative humidity: 62%

Test result:

Action time	Times	Control samples		Test samples		Antibacterial rate (%)
		Air virus infection titer before start (TCID ₅₀ /m ³)	Air virus infection titer after action (TCID ₅₀ /m ³)	Air virus infection titer before start (TCID ₅₀ /m ³)	Air virus infection titer after action (TCID ₅₀ /m ³)	
1 h	1	1.7×10 ⁶	1.0×10 ⁶	1.0×10 ⁶	<2.4×10 ²	>99.96
	2	2.2×10 ⁶	1.5×10 ⁶	1.3×10 ⁶	<2.4×10 ²	>99.97
	3	2.6×10 ⁶	1.7×10 ⁶	8.0×10 ⁵	<2.4×10 ²	>99.95

Sample Description: sample in box

Notes:

* Test item(s) was/were carried out by GUANGDONG DETECTION CENTER OF MICROBIOLOGY.

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Sample photos



Attention:

Chinese shall prevail in this report.

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*** End***

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