



# TEST REPORT



中国认可  
国际互认  
检测  
TESTING  
CNAS L7673

**201819000873**

Applicant : Qierling (Beijing) Health Technology Co., Ltd.  
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The following merchandise was (were) submitted and identified by the client as:

Name of Sample : 720 DS-X400N Air Purifying Disinfectant  
Test Type : Commission  
Sample Quantity : 1  
Model : DS-X400N  
Batch No. : /  
Brand : 720  
Manufacturer: Healthlead Corporation Limited  
Sample Received : 2020/07/07  
Test Period : 2020/07/07-2020/08/11  
Test Items : Please refer to next page(s).  
Test Method : Please refer to next page(s).  
Test Result : Please refer to next page(s).  
Sample Description : Machine  
Note: The appearance,color pattern, and network connection of model DS-X400W, DS-P400 are different from the main test model DS-X400N, but the rest of the electrical structure and filter materials are exactly the same as the main test model.

Edited by: 黄培盈

Approved by: [Signature]

Checked by: 叶智星

Official Seal: [Red Seal: 广州中科检测技术服务有限公司 检验检测专用章]

**TEST RESULTS (1):**

Table 1 Summary of test results							
Chapter	Test Item(s)		Unit	Test Result(s)		Limiting Value	Test Method(s)
4.2.1	Removal rate (simulated field test)	<i>Staphylococcus aureus</i>	%	60min	>99.99	≥50%	GB 21551.3-2010
		<i>Escherichia coli</i>		60min	>99.99		
		<i>Candida albicans</i>		60min	>99.99		
		<i>Aspergillus niger</i>		60min	99.95		

\*\*\*\*\* TO BE CONTINUED \*\*\*\*\*

**TEST RESULTS (2):**

Table 2 Test data of removal rate (simulated field test)								
Test bacteria	Test time (min)	Test number	Control group			Test group		Removal rate $K_t$ (%)
			Colony count before test $V_0$ (CFU/m <sup>3</sup> )	Colony count after test $V_t$ (CFU/m <sup>3</sup> )	Natural decay rate $N_t$ (%)	Colony count before test $V_1$ (CFU/m <sup>3</sup> )	Colony count after test $V_2$ (CFU/m <sup>3</sup> )	
<i>Staphylococcus aureus</i>	60	1	1.10×10 <sup>5</sup>	8.37×10 <sup>4</sup>	23.91	1.20×10 <sup>5</sup>	<6	>99.99
		2	8.46×10 <sup>4</sup>	6.34×10 <sup>4</sup>	25.06	8.55×10 <sup>4</sup>	<6	>99.99
		3	1.02×10 <sup>5</sup>	7.77×10 <sup>4</sup>	23.82	9.99×10 <sup>4</sup>	<6	>99.99
		Mean						
<i>Escherichia coli</i>	60	1	8.18×10 <sup>4</sup>	6.05×10 <sup>4</sup>	26.04	7.93×10 <sup>4</sup>	<6	>99.99
		2	6.88×10 <sup>4</sup>	5.44×10 <sup>4</sup>	20.93	6.48×10 <sup>4</sup>	<6	>99.99
		3	1.05×10 <sup>5</sup>	7.85×10 <sup>4</sup>	25.24	9.94×10 <sup>4</sup>	<6	>99.99
		Mean						
<i>Candida albicans</i>	60	1	8.89×10 <sup>4</sup>	6.59×10 <sup>4</sup>	25.87	8.68×10 <sup>4</sup>	<6	>99.99
		2	7.22×10 <sup>4</sup>	5.56×10 <sup>4</sup>	22.99	7.11×10 <sup>4</sup>	<6	>99.99
		3	7.67×10 <sup>4</sup>	5.60×10 <sup>4</sup>	26.99	7.59×10 <sup>4</sup>	<6	>99.99
		Mean						
<i>Aspergillus niger</i>	60	1	6.24×10 <sup>4</sup>	4.12×10 <sup>4</sup>	33.97	6.41×10 <sup>4</sup>	24	99.94
		2	6.46×10 <sup>4</sup>	4.39×10 <sup>4</sup>	32.04	6.62×10 <sup>4</sup>	29	99.94
		3	5.88×10 <sup>4</sup>	4.06×10 <sup>4</sup>	30.95	5.77×10 <sup>4</sup>	12	99.97
		Mean						

\*\*\*\*\* TO BE CONTINUED \*\*\*\*\*

Inspection instructions:

1. Test method

GB 21551.3-2010 Antibacterial and cleaning function for household and similar electrical appliances-Particular requirement of air cleaner (Annex A)

2. Test microorganism

*Staphylococcus aureus* ATCC6538, *Escherichia coli* 8099, *Candida albicans* ATCC10231, *Aspergillus niger* CMCC98003

3. Test conditions

1) Environment temperature:(20~25)°C

2) Environment humidity:(50~70)%RH

4. Test equipment

Test chamber (30 m<sup>3</sup>), six-stage sieve sampler (FA-1), Microbial aerosol generator, NA, SDA, PDA.

5. Operation conditions of the machine

Set the switch to position"Maximum Wind Speed".

6. Computational formula

$$\text{Natural decay rate } N_t(\%) = \frac{V_0 - V_t}{V_0} \times 100$$

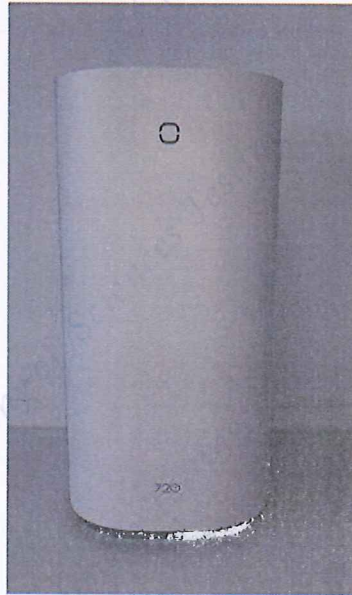
where:  $V_0$  = Colony count before test of control group;  $V_t$  = Colony count after test of control group

$$\text{Removal Rate } K_t(\%) = \frac{V_1 \times (1 - N_t) - V_2}{V_1 \times (1 - N_t)} \times 100$$

where:  $V_1$  = Colony count before test of test group;  $V_2$  = Colony count after test of test group.

\*\*\*\*\* TO BE CONTINUED \*\*\*\*\*

**SAMPLE PHOTO**



\*\*\*\*\* END OF REPORT \*\*\*\*\*

## Statement

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2. This report is invalid if not affixed with authorized stamp of test and paging seal.
3. This report is invalid without signature of verifier and approver.
4. This report is invalid if being supplemented, deleted or altered.
5. Without written permission of our Company, this report can not be reproduced in part (except in whole).
6. The result(s) shown in this report refer only to the sample(s) tested, but do not apply to the same batch, size or brand of products (except the test samples) or to prove the related methods of making, processing or production of the test sample(s), or the correctness and rationality of processes or process.
7. Objections to this report must be submitted to our Company within 15 days. Otherwise, it will automatically deem to have accepted this report.
8. The Client shall be responsible for the accuracy, authenticity and completeness of the samples and information submitted for inspection, and the disputes arising therefrom shall be borne by the Client.
9. As any reports is issued as a result of this application for testing services, our Company will strictly keep confidentiality to the Clients. Except where disclosure is required on the basis of laws, regulations, judgments, and rulings (including in accordance with summons, court, or government proceedings).
10. The result(s) or conclusion(s) shown in this report about the description of the characteristics, composition, properties or quality are based on the specific time, methods and applicable criteria. Using different methods and criteria or under different environmental conditions for testing may come to different conclusions.
11. Since our Company’s causes lead to modify the contents of this report, our Company shall reissue this report and bear the modification cost. The Client shall return the original report. Since the Client’s causes lead to modify the contents of this report, the Client need to submit an application form for the change of report to our Company. The Client shall bear the modification cost and return the original report if our Company approves to reissue this report.
12. The English version of this statement is translated from the Chinese one. If there is any disagreement between them, the Chinese version will be the final explanation.