

ASTAR LABORATORY PTE LTD
ENVIRONMENTAL CONSULTANTS & TESTING

27 Gul Avenue, Singapore 629667
 Tel: 63396136 Fax: 62557608 Email: admin@astarlab.com.sg
 Company Registration No. & GST: 201323826G

TEST REPORT NO: ASL-M177-19-S

Company Name : Life3 Pte Ltd
 Address : 17 Kaki Bukit Place, Singapore 416195
 Date Received : 03 May 2019
 Date Tested : 03 May – 13 May 2019
 Date Reported : 14 May 2019
 Sample Description : One (1) sample said to be Quantum Ion Series

Sample was submitted by client on 03 May 2019 in a plastic container marked as:

Quantum Ion Series E304

On analysis, the following results were obtained:

Test Microorganism	Initial Bacterial Load, cfu/mL	Log ₁₀
Salmonella Typhimurium ATCC 14028	6.1×10^8	8.79
Staphylococcus aureus ATCC 25923	1.3×10^9	9.11
Candida Albicans ATCC 10231	4.1×10^6	6.61

Contact Time: 5 minutes, no dilution

Test Microorganism	Count of Surviving Test Microorganism, CFU/ml (Log ₁₀)	Log Reduction	Percentage Kill of Test Microorganism, %
Staphylococcus aureus ATCC 25923	<10 (1.0)	> 8.11	> 99.9999
Salmonella Typhimurium ATCC 14028	<10 (1.0)	> 7.79	> 99.9999
Candida Albicans ATCC 10231	<10 (1.0)	> 5.61	> 99.9999

Contact time: 60 minutes, no dilution

Test Microorganism	Count of Surviving Test Microorganism, CFU/ml (Log ₁₀)	Log Reduction	Percentage Kill of Test Microorganism, %
Staphylococcus aureus ATCC 25923	<10 (1.0)	> 8.11	> 99.9999
Salmonella Typhimurium ATCC 14028	<10 (1.0)	> 7.79	> 99.9999
Candida Albicans ATCC 10231	<10 (1.0)	> 5.61	> 99.9999

- Remarks:**
- 1) The above results were tested as per sample submitted.
 - 2) Test Method: In house method with reference to United States Pharmacopeia (USP) 41.
 - 3) This report supersedes Test Report No. ASL-M177-19.



Roselle Monteloyola
Laboratory Manager

Property of Quantum-ION™