

CHALLENGE TEST

BV-AQ REF. : 20-69581
 COMPANY : Mclean Green Technologies And Services
 ATTENTION TO : Mr Lee Tuck Wah
 PAGE : 01 OF 06
 SAMPLE DESCRIPTION : One (1) no. of Mclean- Jophie Disinfectant
 SAMPLE MARKING : Contact Time: (1) 5 seconds; (2) 1 minute
 Pure Culture Used (i) *Escherichia coli*;
 (ii) *Pseudomonas aeruginosa*;
 (iii) *Staphylococcus aureus*;
 (iv) *Candida albicans*;
 (v) *Aspergillus brasiliensis*

RECEIVED DATE : 9 MARCH 2020
 REPORTED DATE : 31 MARCH 2020

On analysis of the sample (s) submitted, the result (s) obtained as follows:

(i) 5 seconds

NO.	PARAMETER	METHOD REF. NO.:	ORGANISM	RESULT (CFU/g)	PERCENTAGE KILLED (%)
1.	Total Aerobic Microbial Count	In-House M068 based on USP Chapter 51 & 61	<i>Escherichia coli</i>	NR*	99.99
			<i>Staphylococcus aureus</i>	NR*	99.99
			<i>Pseudomonas aeruginosa</i>	NR*	99.99
2.	Total Yeast & Mould Count		<i>Candida albicans</i>	NR*	99.99
			<i>Aspergillus brasiliensis</i>	NR*	99.99

NR*- No Recovery

(ii) 1 minute

NO.	PARAMETER	METHOD REF. NO.:	ORGANISM	RESULT (CFU/g)	PERCENTAGE KILLED (%)
1.	Total Aerobic Microbial Count	In-House M068 based on USP Chapter 51 & 61	<i>Escherichia coli</i>	NR*	99.99
			<i>Staphylococcus aureus</i>	NR*	99.99
			<i>Pseudomonas aeruginosa</i>	NR*	99.99
2.	Total Yeast & Mould Count		<i>Candida albicans</i>	NR*	99.99
			<i>Aspergillus brasiliensis</i>	NR*	99.99

NR*- No Recovery





COMPANY: Mclean Green Technologies And Services

BV-AQ 20-69581

SAMPLE DESCRIPTION: One (1) no. of Mclean- Jophie Disinfectant

PAGE: 02 OF 06

BACTERIA	RESULT
<p><i>Escherichia Coli</i></p>	 <p>The image shows three petri dishes on a black background. The top dish is labeled 'ESCHERICHIA COLI' and contains a yellow agar with numerous yellow colonies. Below it are two dishes labeled '5 SECOND' and '1 MINUTE', both of which are clear and show no bacterial growth.</p>
<p><i>Staphylococcus Aureus</i></p>	 <p>The image shows three petri dishes on a black background. The top dish is labeled 'STAPHYLOCOCCUS AUREUS' and contains a yellow agar with numerous yellow colonies. Below it are two dishes labeled '5 SECOND' and '1 MINUTE', both of which are clear and show no bacterial growth.</p>




COMPANY: Mclean Green Technologies And Services

BV-AQ 20-69581

SAMPLE DESCRIPTION: One (1) no. of Mclean- Jophie Disinfectant



PAGE: 03 OF 06

BACTERIA	RESULT
<p><i>Pseudomonas aeruginosa</i></p>	



COMPANY: Mclean Green Technologies And Services
SAMPLE DESCRIPTION: One (1) no. of Mclean- Jophie Disinfectant
PAGE: 04 OF 06

BV-AQ 20-69581

Yeast/Mould	Result
<p><i>Candida Albicans</i></p>	 <p>The image shows three petri dishes for <i>Candida Albicans</i> testing. The top dish, labeled 'CANDIDA ALBICAN', shows a dense, white, fuzzy growth. Below it are two dishes labeled '5 SECOND' and '1 MINUTE', both of which appear clear and free of growth, indicating that the disinfectant effectively kills the yeast within one minute.</p>
<p><i>Aspergillus brasiliensis</i></p>	 <p>The image shows three petri dishes for <i>Aspergillus brasiliensis</i> testing. The top dish, labeled 'ASPERGILLUS', shows a dense, white, fuzzy growth. Below it are two dishes labeled '5 SECOND' and '1 MINUTE', both of which appear clear and free of growth, indicating that the disinfectant effectively kills the mould within one minute.</p>



COMPANY: Mclean Green Technologies And Services
SAMPLE DESCRIPTION: One (1) no. of Mclean- Jophie Disinfectant
PAGE: 05 OF 06

BV-AQ 20-69581

Quality Control

NO.	PARAMETER	UNIT	RESULT
1.	Control plate TSA (sample without inoculant)	CFU/ml	ND (<1)
2.	Control plate SDA (sample without inoculants)	CFU/ml	ND (<1)
3.	Blank control TSA	CFU/plate	ND (<10)
4.	Blank control SDA	CFU/plate	ND (<10)
5.	Inoculant (Initial Count) (quantity of <i>Escherichia coli</i> cultures used)	CFU/ml	5.7x10 ⁸
6.	Inoculant (Initial Count) (quantity of <i>Pseudomonas aeruginosa</i> cultures used)	CFU/ml	4.6x10 ⁸
7.	Inoculant (Initial Count) (quantity of <i>Staphylococcus aureus</i> cultures used)	CFU/ml	4.3x10 ⁸
9.	Inoculant (Initial Count) (quantity of <i>Candida albicans</i> cultures used)	CFU/ml	4.4x10 ⁷
10.	Inoculant (Initial Count) (quantity of <i>Aspergillus brasiliensis</i> cultures used)	CFU/ml	2.3x10 ⁷

Note : CFU - Colony Forming Unit; ND – Not Detected; < - Less Than The Minimum Detection Limit Reported.



BVAQ

PERMULAB SDN. BHD. (392059-x) | A-G-16, Merchant Square @ Tropicana |
Jalan Tropicana Selatan 1 | PJU3 47410 Petaling Jaya Selangor | Malaysia
t. +60 3 7883 0068 | e. info@permulab.com.my | w. www.permulab.com.my
A Bureau Veritas AsureQuality Company

COMPANY: Mclean Green Technologies And Services
SAMPLE DESCRIPTION: One (1) no. of Mclean- Jophie Disinfectant
PAGE: 06 OF 06

BV-AQ 20-69581

FORMULA FOR PERCENTAGE KILLED:

$$\frac{\text{Initial Organism's Count} - \text{Count of Organism Survive}}{\text{Initial Organism's Count}} \times 100\%$$

COMMENT :

Based on the results above, the sample tested was able to eliminate 99.9% of *E.coli*, *S. aureus*, *P. aeruginosa*, *C. albicans* and *A. brasiliensis* within the contact time and concentration tested.

METHOD REFERENCES :

(1) In-House M068 based on USP Chapter 51 & 61

MS SHEGARYSWARY A/P BHASKARAN
MICROBIOLOGIST

EN. AHMAD ZARIFF MAT WAZIR
MICROBIOLOGIST
MJMM0799