



CERTIFICATE OF ANALYSIS

Work Order : MF2007472
Amendment : ---
Client : WPCP SDN BHD
Contact : MS CHAN WEI KIEN
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Page : 1 of 4
Date Samples Received : 06-May-2020 18:00
Date Analysis Commenced : 16-May-2020
Issue Date : 22-May-2020
No. of Samples Received : 2
No. of Samples Analysed : 2

This Certificate of Analysis contains the following information:

- General Comments
Workorder Specific Comments
Analytical Results



Signatories

This laboratory is accredited under STANDARDS MALAYSIA. The tests reported herein have been performed in accordance with laboratory's Terms of Accreditation. This document has been electronically signed by authorized signatories indicated below.

Signatories

[Handwritten signature]

Nurnadira Binti Abdul Rashid
Microbiologist (MJMM No: 0290)
BSc. (Hons) Microbiology

*Please direct all technical queries to the laboratory (Reports.MF@alsglobal.com)

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General Comments

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. All pages of this report have been checked and approved for release.

The analytical procedures used by the Food & Pharmaceutical Division have been developed from established internationally recognized procedures such as those published by the FDA BAM, AOAC, ISO, GB, USP, BP and BS EN. In house developed procedures are employed in the absence of documented standards or by client request.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digested dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Key: LOR = Limit of reporting CFU = Colony Forming Unit MPN = Most Probable Number PN = Probable Number
ø = ALS is not accredited for these tests

Work Order Specific Comments

- ALS TECHNICHEM prepares this Test Report based on the tests requested and on the specific sample(s) submitted for analysis. The significance of this Report is subject to the adequacy and representative character of the sample(s) and to the comprehensiveness of the tests requested or made. ALS TECHNICHEM assumes no responsibility for variations in quality or other characteristic of the product produced or supplied under conditions over which ALS TECHNICHEM has no control.
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- Result < LOR = Not Detected (ND)
- **This analysis is performed in ALS Shah Alam, Malaysia.**

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Analytical Results

Sample ID: MF2007472-001

ACE 2001 HAND GEL SANITIZER

ø Microbial Challenge Test Method: USP <51>											
Test Organism	Inoculum Count (cfu/ml)	Contact Time: 30 Sec		Contact Time: 1 Min		Contact Time: 2 Min		Contact Time: 3 Min		Contact Time: 5 Min	
		Result (cfu/g)	Percentage of Microorganism Reduced (%)	Result (cfu/g)	Percentage of Microorganism Reduced (%)	Result (cfu/g)	Percentage of Microorganism Reduced (%)	Result (cfu/g)	Percentage of Microorganism Reduced (%)	Result (cfu/g)	Percentage of Microorganism Reduced (%)
<i>Candida albicans</i> ATCC 10231	9.2 x 10 ⁵	<10	>99.99	<10	>99.99	<10	>99.99	<10	>99.99	<10	>99.99
<i>Aspergillus niger</i> ATCC 16404	6.4 x 10 ⁵	2.0 x 10 ⁴	96.88	1.9 x 10 ⁴	97.03	1.5 x 10 ⁴	97.66	1.3 x 10 ⁴	97.97	1.0 x 10 ⁴	98.44
<i>Escherichia coli</i> ATCC 8739	9.7 x 10 ⁵	<10	>99.99	<10	>99.99	<10	>99.99	<10	>99.99	<10	>99.99
<i>Pseudomonas aeruginosa</i> ATCC 9027	6.8 x 10 ⁵	<10	>99.99	<10	>99.99	<10	>99.99	<10	>99.99	<10	>99.99
<i>Staphylococcus aureus</i> ATCC 6538	8.9 x 10 ⁵	<10	>99.99	<10	>99.99	<10	>99.99	<10	>99.99	<10	>99.99
Uninoculated sample	No Growth										

<10 – Not Detected