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CERTIFICATE OF ANALYSIS

CONTACT:	SUKI LIU	**WORK ORDER:**	HK2022838
CLIENT:	ASSOCIATED ENVIRONMENTAL SYSTEMS LIMITED	**AMENDMENT:**	1
ADDRESS:	UNIT 1221-1223, 12/F, METRO CENTRE II, 21 LAM HING STREET, KOWLOON BAY, HONG KONG	**SUB BATCH NO.:**	0
		LABORATORY:	HONG KONG
		DATE RECEIVED:	17-Jun-2020
		DATE OF ISSUE:	24-Jul-2020
PROJECT:	DISINFECTANT EFFICACY TEST ON ESCALATOR HANDRAIL BELT FOR THE PROTOTYPIC HANDRAIL DISINFECTION DEVICE - TESTING WITH "EGZX" AND WIPED WITH DILUTED DETERGENT SOLUTION	**SAMPLE TYPE:**	CHEMICAL
		NO. OF SAMPLES:	1

SPECIFIC COMMENTS

Samples(s) was/ were submitted by client. Sample(s) arrived laboratory in ambient condition.

The result(s) related only to the item(s) tested.

Testing period: 17-Jun-2020 to 16-Jul-2020

Test method - Disinfectant Efficiency Test is determined by in-house method developed based on USP 35 Chapter 1072.

Test method - Applying 3 layers of the disinfectant "EGZX" onto the escalator handrail belt samples using 2 different mist spray applicators**, each applicator is used to spray on to 3 pcs of handrail belt samples after sterilization. The spraying takes place within 24 hours based on the following time intervals: 0 hour, 6th hour and 24th hour and the sprayed samples are then left for 24 hours (1 reaction time), while having the remaining 3 pcs of handrail belt sample as the control. When the specified time interval is reached, wipe the 6 treated handrail samples with the cloth moistened with diluted detergent solution (the original detergent solution was provided by client, diluted in 1:10 against water by lab) for 3 times in one direction, then spray the samples with water and wipe the samples again with water moistened cloth for 6 times in one direction, leave the samples for another 24 hours. After that, add each culture onto the surface of the handrail belt samples (the treated samples and the control), waited for 5 minutes then conduct the swab test accordingly.

** Mist spray applicator 1: the regular mist spray applicator which the lab used in previous experiments, spray the same way as the previous tests.

This is an amendment of the Certificate of Analysis.

The report format has been amended. The information of samples and results are not changed.

GENERAL COMMENTS

This is the Final Report and supersedes any preliminary report with this batch number.

Mr Luk Hon Yin, Henry
Senior Microbiologist - Microbiology

Abbreviations: LOR denotes limit of reporting

CERTIFICATE OF ANALYSIS

Work Order: HK2022838
Amendment: 1
Sub-Batch: 0
Date of Issue: 24-Jul-2020
Client: ASSOCIATED ENVIRONMENTAL SYSTEMS LIMITED

ANALYSIS DESCRIPTION		SAMPLE IDENTIFICATION		
	LABORATORY I.D.	HK2022838-001		
Disinfectant Efficiency Test	DATE SAMPLED	17-Jun-2020		
	SAMPLE I.D.	Handrail Belt with "Mist spray applicator 1"		
Inoculated culture		Result	Reduction rate	Log reduction
	Unit	CFU/swab	%	Nil
	LOR	10	0.01	0.01
Escherichia coli (AATCC 25922)	Control	330000	>99.99	> 4.52
	sample	<10		
Staphylococcus aureus (AATCC 6538)	Control	250000	>99.99	> 4.40
	sample	<10		
Candida albicans (ATCC 10231)	Control	290000	>99.99	> 4.46
	sample	<10		