TEST REPORT: 7191237456-CHM20-01-RC

Date: 19 MAY 2020

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Client's Ref:

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SUBJECT

Bacterial Filtration Efficiency (BFE)

<u>CLIENT</u>

Vital Shield Pte Ltd 30 Kallang Place #06-10 Singapore 339159

Attn : Tao Juinn Ann

SAMPLE SUBMISSION DATE / TEST DATE

06 May 2020 / 15 May 2020

DESCRIPTION OF SAMPLE

One sample of face mask was submitted by the above company as follows:

Model: VS50MB Trade name: VITAL SHIELD Description: 3-ply face mask



METHOD OF TEST

BS EN 14683:2019 "Medical face masks – Requirement and test methods" Annex B – Method for *in vitro* determination of bacterial filtration efficiency (BFE)

Area contacting with the bacterial challenge: Inside of the mask Flowrate: 28.3 \pm 0.3 L/min Mean particle size of the challenge aerosol: 3 μ m \pm 0.3 μ m Test area: Approximately 50 cm²



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RESULTS

Sample Description :

Model: VS50MB Trade name: VITAL SHIELD Description: 3-ply face mask

Test sample/ controls	Stage 1, CFU	Stage 2, CFU	Stage 3, CFU	Stage 4, CFU	Stage 5, CFU	Stage 6, CFU	Sum of Total plate count for the 6 sieves, CFU	Average Count for Controls, CFU	BFE (%)	Average BFE (%)
-ve Control	0	0	0	0	0	0	0			
+ve Control 1	214	397	897	603	449	398	2958	2978		
+ve Control 2	221	469	859	682	437	329	2997			
Sample 1	0	0	0	0	S ["]	6	6		99.80	
Sample 2	0	0	0	0	2	6	8		99.73	99.77
Sample 3	0	0	0	0	1	4	5		99.83	
Sample 4	0	0	0	0	0	9	9		99.70	
Sample 5	0	0	0	0	2	4	6		99.80	



Notes :

- CFU : Colony Forming Unit
- BFE : Bacterial Filtration Efficiency

Remarks :

The above test results relate to the samples as received.

MS AW HWEE YING HIGHER TECHNICAL EXECUTIVE

MR RANDY CHIN KOK FEI PRODUCT MANAGER MICROBIOLOGY CHEMICAL & MATERIALS



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July 2011