

**TEST REPORT: 7191238992-CHM20-01-RC_CR1
(re-issue dated: 04 NOV 2020)**

Date: 18 JUN 2020

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Client's Ref:

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SUBJECT

Bacterial Filtration Efficiency (BFE)

SAMPLE SUBMISSION DATE / TEST DATE

02 Jun 2020 / 12 Jun 2020

DESCRIPTION OF SAMPLE

One sample labelled as "Face Mask Material" was submitted by the above company.



METHOD OF TEST

ASTM F2101-19 Standard Test Method for Evaluating the Bacterial Filtration Efficiency (BFE) of Medical Face Mask Materials, Using a Biological Aerosol of *Staphylococcus aureus*.

Area contacting with the bacterial challenge: Inside of the mask

Flowrate: 28.3 ± 0.3 L/min

Mean particle size of the challenge aerosol: 3 µm ± 0.3 µm

Test area: Approximately 50 cm²



TÜV SÜD PSB

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RESULTS

Sample description : Face Mask Material

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	217	572	897	205	411	172	2474	2581		
+ve Control 2	206	515	851	417	437	261	2687			
Sample 1	0	0	1	0	22	74	97		96.24	95.90
Sample 2	0	0	0	0	26	85	111		95.70	
Sample 3	0	0	0	0	17	104	121		95.31	
Sample 4	0	0	0	1	15	79	95		96.32	
Sample 5	0	0	0	0	16	89	105		95.93	

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Notes :

CFU : Colony Forming Unit
BFE : Bacterial Filtration Efficiency

Remarks :

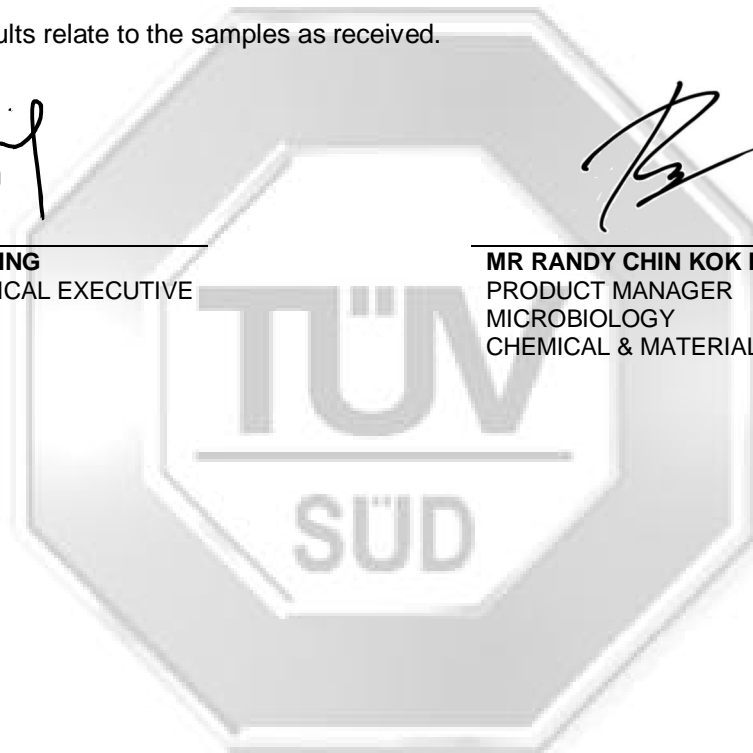
The above test results relate to the samples as received.

A handwritten signature in black ink, appearing to read 'Hwy'.

MS AW HWEE YING
HIGHER TECHNICAL EXECUTIVE

A handwritten signature in black ink, appearing to read 'Randy'.

MR RANDY CHIN KOK FEI
PRODUCT MANAGER
MICROBIOLOGY
CHEMICAL & MATERIALS



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Effective 01 September 2020

