

# TEST REPORT: 7191239667-CHM20-01-RC

Date: 24 JUL 2020

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Client's Ref:

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## SUBJECT

Bacterial Filtration Efficiency (BFE)

## CLIENT



## SAMPLE SUBMISSION DATE / TEST DATE

01 Jul 2020 / 15 Jul 2020

## DESCRIPTION OF SAMPLE

One mask sample described as below was received.

Product Name/Brand Name	Manufacturer	Lot No.
		Nil



TÜV SÜD PSB

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**DESCRIPTION OF SAMPLE** (cont'd)



Figure 1: “ – Before Wash” sample as received

**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:  $28.3 \pm 0.3$  L/min

Mean particle size of the challenge aerosol:  $3 \mu\text{m} \pm 0.3 \mu\text{m}$

Test area: Approximately  $50 \text{ cm}^2$

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**RESULTS**

Sample Description: [REDACTED] Before Wash

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	BE (%)
-ve Control	0	0	0	0	1	0	1		
+ve Control 1	196	505	812	674	384	178	2749	2797	
+ve Control 2	187	510	807	770	400	170	2844		
Sample 1	0	0	0	0	2	22	24		99.14
Sample 2	0	0	0	0	1	5	6		99.79
Sample 3	0	0	0	0	1	14	15		99.46
Sample 4	0	0	0	0	1	11	12		99.57
Sample 5	0	0	0	0	0	6	6		99.79

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Notes :

CFU : Colony Forming Unit  
BFE : Bacterial Filtration Efficiency

Remarks :

The above test results relate to the samples as received.

Handwritten signature of MS AW HWEE YING in black ink.

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**MS AW HWEE YING**  
HIGHER TECHNICAL EXECUTIVE

Handwritten signature of MR RANDY CHIN KOK FEI in black ink.

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**MR RANDY CHIN KOK FEI**  
PRODUCT MANAGER  
MICROBIOLOGY  
CHEMICAL & MATERIALS



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July 2011

