

# TEST REPORT: 7191236532-CHM20-01B-RC

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## SUBJECT

Bacterial Filtration Efficiency (BFE)

## CLIENT

MANN+HUMMEL FILTER TECHNOLOGY (S.E.A.) Pte Ltd  
2 International Business Park  
#02-36, The Strategy  
S609930 Singapore

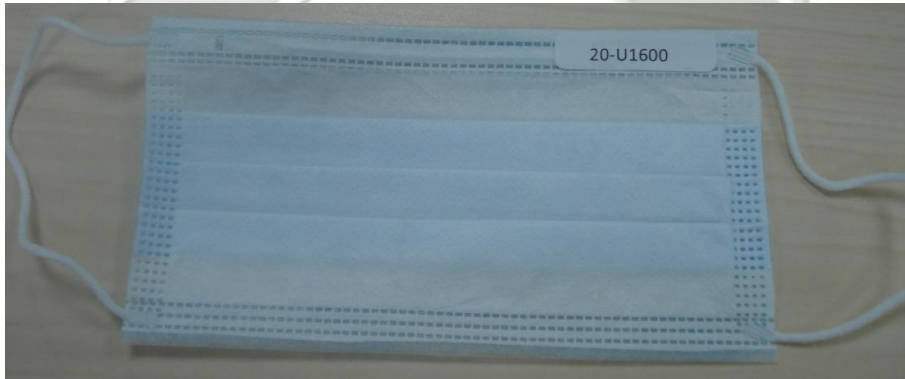
Attn : Mr Terence Wong

## SAMPLE SUBMISSION DATE / TEST DATE

07 Apr 2020 / 29 Apr 2020

## DESCRIPTION OF SAMPLE

One sample labelled as "community face masks" 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.

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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**TUV®**

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**RESULTS**

Sample Description : community face masks

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	255	473	659	258	170	367	2182	2360		
+ve Control 2	213	537	778	511	245	254	2538			
Sample 1	0	0	0	0	0	1	1		99.96	99.96
Sample 2	0	0	0	0	0	1	1		99.96	
Sample 3	0	0	0	0	0	1	1		99.96	
Sample 4	0	0	0	0	0	1	1		99.96	
Sample 5	0	0	0	0	0	1	1		99.96	

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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'.

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**MS AW HWEE YING**  
HIGHER TECHNICAL EXECUTIVE

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

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





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July 2011

