

TEST REPORT: 7191240725-CHM20-01-RC

Date: 06 AUG 2020

Tel: +65 68851345 Fax: +65 67732912

Client's Ref:

Email: Randy.CHIN@tuv-sud-psb.sg

Note: This report is issued subject to the Testing and Certification Regulations of the TÜV SÜD Group and the General Terms and Conditions of Business of TÜV SÜD PSB Pte Ltd. In addition, this report is governed by the terms set out within this report.



PSB Singapore

Add value.
Inspire trust.

SUBJECT

Bacterial Filtration Efficiency (BFE)

CLIENT

Cyber Pte Limited
Cyber Centre
16/18 Jalan Kilang Barat
Singapore 159358

Attn : Paul Cheong

SAMPLE SUBMISSION DATE / TEST DATE

20 Jul 2020 / 04 Aug 2020

DESCRIPTION OF SAMPLE

One mask sample described as below was received.

Sample Description	Product Name / Brand Name	Manufacturer	Lot No.
BioMask 3-Layer Protective Mask	3-Layer Protective Mask / BioMask	Cyber Pte Limited	BM202007CY1



TÜV SÜD PSB

Laboratory:
TÜV SÜD PSB Pte. Ltd.
No.1 Science Park Drive
Singapore 118221

Phone : +65-6885 1333
Fax : +65-6776 8670
E-mail: enquiries@tuv-sud-psb.sg
www.tuv-sud-psb.sg
Co. Reg : 199002667R

Regional Head Office:
TÜV SÜD Asia Pacific Pte. Ltd.
1 Science Park Drive, #02-01
Singapore 118221
TÜV®

DESCRIPTION OF SAMPLE

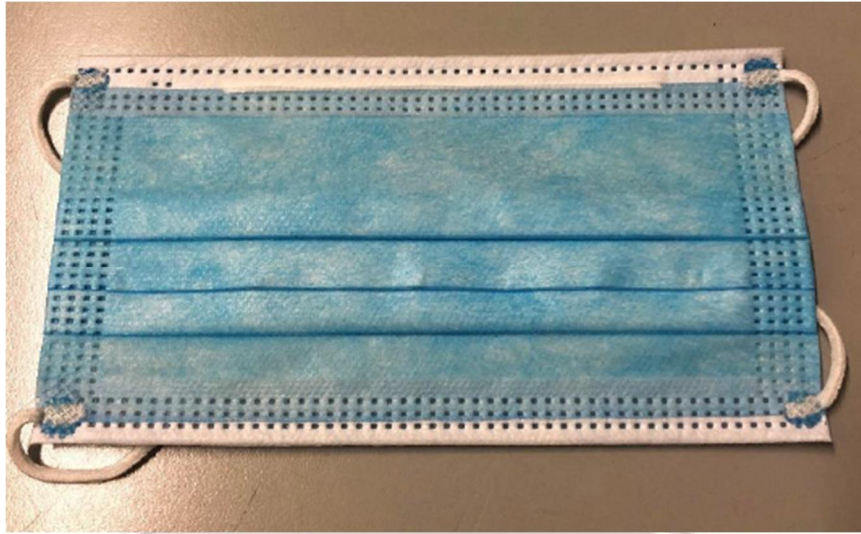


Figure 1: "3-Layer Protective Mask / BioMask" sample as received

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 ± 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 cm^2

TEST REPORT: 7191240725-CHM20-01-RC
06 AUG 2020



PSB Singapore

RESULTS

Sample Description : 3-Layer Protective Mask / BioMask

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 (%)
-ve Control	0	0	0	0	0	0	0		
+ve Control 1	164	414	722	704	518	17	2539	2544	
+ve Control 2	166	460	725	675	510	13	2549		
Sample 1	0	0	0	0	1	0	1		99.96
Sample 2	0	0	0	0	0	0	0		100.00
Sample 3	0	0	0	0	0	1	1		99.96
Sample 4	0	0	0	0	0	0	0		100.00
Sample 5	0	0	0	0	0	0	0		100.00

TEST REPORT: 7191240725-CHM20-01-RC
06 AUG 2020



PSB Singapore

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.

MS AW HWEE YING
HIGHER TECHNICAL EXECUTIVE

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

MR RANDY CHIN KOK FEI
PRODUCT MANAGER
MICROBIOLOGY
CHEMICAL & MATERIALS



TEST REPORT: 7191240725-CHM20-01-RC
06 AUG 2020



PSB Singapore

Please note that this Report is issued under the following terms :

1. This report applies to the sample of the specific product/equipment given at the time of its testing/calibration. The results are not used to indicate or imply that they are applicable to other similar items. In addition, such results must not be used to indicate or imply that TÜV SÜD PSB approves, recommends or endorses the manufacturer, supplier or user of such product/equipment, or that TÜV SÜD PSB in any way "guarantees" the later performance of the product/equipment. Unless otherwise stated in this report, no tests were conducted to determine long term effects of using the specific product/equipment.
2. The sample/s mentioned in this report is/are submitted/supplied/manufactured by the Client. TÜV SÜD PSB therefore assumes no responsibility for the accuracy of information on the brand name, model number, origin of manufacture, consignment or any information supplied.
3. Nothing in this report shall be interpreted to mean that TÜV SÜD PSB has verified or ascertained any endorsement or marks from any other testing authority or bodies that may be found on that sample.
4. This report shall not be reproduced wholly or in parts and no reference shall be made by the Client to TÜV SÜD PSB or to the report or results furnished by TÜV SÜD PSB in any advertisements or sales promotion.
5. Unless otherwise stated, the tests were carried out in TÜV SÜD PSB Pte Ltd, No.1 Science Park Drive Singapore 118221.

July 2011

