



THE SOUTH INDIA TEXTILE RESEARCH ASSOCIATION

CENTRE OF EXCELLENCE FOR MEDICAL TEXTILES

Physical, Chemical & Biological Testing Laboratories

(ISO/IEC 17025 NABL ACCREDITED)

13/37, Avinashi Road, Aerodrome Post, Coimbatore - 641 014, INDIA



Cert. Number:TC-6944

CoE - Microbiology Laboratory

Test Report No	: M2000127	ULR: TC694420700000153F	Report Date	: 22-04-2020
SITRA Ref No	: XXVII / M / E / 2906 / 20		No of Samples	: 1
Customer Ref No	: Mail 14.04.2020		Received On	: 14-04-2020

To

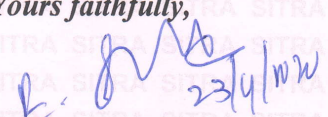
Tested on: 20.04.2020 to 22.04.2020

Dear Sir / Madam,

This has reference to the sample(s) submitted by you for testing vide your Email reference no :
Mail 14.04.2020.

The results pertaining to your sample(s) are enclosed herewith.

Yours faithfully,


23/4/2020
Authorized Signatory

Encl : Bill [T-COE-2021-00864]



Dr. E. Santhia

IMPORTANT

This report is strictly CONFIDENTIAL. Its use for publicity, arbitration or as evidence in legal disputes is forbidden. Reference of sample(s) given by the party. Samples are not drawn by the laboratory. The above results are related to the samples tested. The report shall not be reproduced except in full, without the written approval of the laboratory.

GSTIN: 33AAAAT3433H1ZT

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Cert. Number:TC-6944

Test Report No : M2000127

ULR: TC694420700000153F

Report Date : 22-04-2020

Ref : Mail 14.04.2020

Test Name : ASTM F 2101 - Bacterial filtration Efficiency

Test Condition:

Test Organisms Used : *Staphylococcus aureus* ATCC 6538
Inoculum size : 5×10^5 CFU/mL
Media used : Tryptic soya agar
Dilution medium used : Peptone water
Incubation conditions : 37°C for 24 h

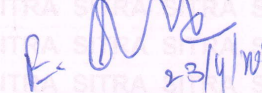
Observation :

Test parameter	M2000127-1 Described by the customer : Face Mask: Face Mask SS96
Area of test specimen	Face mask 10 x 10 cm
Sample exposure side	Face side
Flow rate of aerosol	28.5 L / min
Mean particle size of challenging aerosol	3.0 ± 0.3 micron
Average plate count of positive control	2256
Average plate count of negative control	0
BFE of test specimen (%)	96.1
Result : : The sample showed 96.1 % bacterial filtration efficiency against <i>Staphylococcus aureus</i> ATCC 6538 when tested according to ASTM F 2101 test method.	

- End of Report -



Authorized Signatory


23/4/2020
Dr. E. Santhini

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FACE MASK SS96



TEST REPORT

LAB NO. : 2001322/ 1

DATE: 02/06/2020

NAME OF CUSTOMER : M/S. EXEALA HEALTHCARE INDUSTRIES
ADDRESS : 3rd Floor, Standard Design Factory Building,,
KINFRA Industrial Park, Koratty, Thrissur District
Kerala, India
REFERENCE : Letter Ref NIL dated May 26, 2020
K. Attention: Amaan Sait
DATE OF RECEIPT : 29/05/2020
DATE OF INITIATION : 29/05/2020
DATE OF COMPLETION : 02/06/2020
SAMPLE DESCRIPTION : MASK SAMPLE LABELED AS: -

Sr. No.	Description
1.	3Ply Face Mask





BIOTECH TESTING SERVICES

Name of Test:

Bacterial Filtration Efficiency (BFE) of Face Mask Sample Materials, using a Biological Aerosol of Staphylococcus aureus by ASTM: F 2101 - 19

Test Organism Used:

Staphylococcus aureus – ATCC 6538

Inoculum Size:

2.10×10^8 CFU/ ml

Test Equipment:

Aerosol challenge Apparatus with Nebulizer assembly and Cascade impactor

Flow Rate of Cascade Impactor:

28.3 L / min

Aerosol Size:

3 microns \pm 0.5

Procedure:

Test sample was clamped between cascade impactor and an aerosol chamber at a distance of 15 cms. Bacterial aerosol of bacteria – Staphylococcus aureus were generated in the chamber using the nebulizer assembly. Aerosols of test organisms of size 3 microns were drawn through the test material using a vacuum attached to cascade impactor. Positive control samples collected aerosol with no test specimen to determine the upstream aerosol counts. The ratio of upstream to down stream was reported as Percentage Bacterial Filtration efficiency. Following results are the Average of three readings.

Results:

Sample Identification	Average Bacterial count	BFE (Percentage)
3Ply Face Mask	20	99.25
Positive Control	2.70×10^3	N. A.

INTERPRETATION:

Mask labeled as 3Ply Face Mask has exhibited 99.25% Bacterial Filtration Efficiency when analysed as per ASTM: F 2101 - 19 standard.



For BIOTECH TESTING SERVICES

Dr Shilpa U. Nair
Quality Manager
(Authorized Signatory)

2001322/1
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