



# 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

Test Report No : M1900233

Report Date : 04-03-2020

Ref : Letter DT-22.02.2020

**Test Name :** Bacterial Filtration Efficiency ASTM F 2101-Standard Test Method for Evaluating the Bacterial Filtration Efficiency (BFE) of Medical Face Mask Materials, Using a Biological Aerosol of *Staphylococcus aureus*

**Test Condition:**

Inoculum size : *Staphylococcus aureus* ATCC 6538 =  $5 \times 10^5$  CFU/ mL

Media used : Tryptic soya agar

Dilution medium used : Peptone water

Incubation conditions : 37°C for 24 h

**Observation :**

Test Parameter	M1900233-1
	Described by the customer : <b>Nonwoven: Meltblown 25 GSM</b>
Area of test specimen	Facemask
Sample exposure side	Faceside
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	1878
Average plate count of negative control	0
BFE of test specimen (%)	99.9
<b>Result :</b> : The sample showed 99.9% bacterial filtration efficiency against <i>Staphylococcus aureus</i> ATCC 6538 when tested according to ASTM F 2101 test method.	

Authorized Signatory

- End of Report -