10A LIMITED

RMS 1001-1005, 10/F, NANYANG PLAZA,57 HUNG TO RD.,KWUN TONG,KLN,HONG KONG

The following samples were submitted and identified by/on behalf of the client as:

NANOGO™ NANOFIBER MATERIAL RESPIRATOR - ORIGINAL / 10 CYCLES CLEANED / 20 CYCLES CLEANED

Case No.	:	CA321202224159
Lot No. / Batch Code	:	NOT PROVIDED
Colour	:	STRIPE PRINTED
Sample Description	:	BLACK AND WHITE STRIPE RESPIRATOR
Manufacturer	:	10A LIMITED
Country of Origin	:	HONG KONG
Sample Receiving Date	:	JAN 20, 2021
Testing Period	:	JAN 20, 2021 – FEB 08, 2021

Test Requested	Conclusion
Bacterial filtration efficiency (With reference to ASTM F2101-19)	See Result
Differential pressure (With reference to EN14683:2019+AC:2019 Appendix C)	See Result
Determining the Initial Efficiency of Materials Used in Medical Face Masks to Penetration by Particulates Using Latex Spheres (With reference to ASTM F2299/F2299M-03 (Reapproved 2017))	See Result

******** FOR FURTHER DETAILS, PLEASE REFER TO THE FOLLOWING PAGE(S) ********

Signed for and on behalf of
SGS Hong Kong Ltd.

Au Kam Chi, Gigi
Technical Manager

Signed for and on behalf of
SGS Hong Kong Ltd.

Tsang Chuk Hai
Senior Microbiologist

Test Results:

Bacterial filtration efficiency With reference to ASTM F2101-19

NANOGO™ Nanofiber Material Respirator (Stripe Printed) S101: Original.

Test Side	:	Inside
Pre-Conditioning	:	Minimum of 4 hours at 21±5°C and 85±5% R.H.
Dimensions of test specimen	:	161 mm x 218 mm
BFE Test Area	:	49 cm^2
BFE Flow Rate	:	28.3 l/min
Test bacteria	:	Staphylococcus aureus ATCC 6538
Positive Control Average	:	2.5 x 10^3 CFU
Negative Monitor Count	:	< 1 CFU

Test Specimen	Percent BFE (%)
1	99.9
2	99.9
3	99.9
4	99.9
5	99.9

Note: Plate count total for each stage can be provided upon request.

NANOGO™ Nanofiber Material Respirator (Stripe Printed) S102: 10 cycles cleaned.

Test Side	:	Inside
Pre-Conditioning	:	Minimum of 4 hours at 21±5°C and 85±5% R.H.
Dimensions of test specimen	:	161 mm x 218 mm
BFE Test Area	:	49 cm^2
BFE Flow Rate	:	28.3 l/min
Test bacteria	:	Staphylococcus aureus ATCC 6538
Positive Control Average	:	2.4 x 10^3 CFU
Negative Monitor Count	:	< 1 CFU

Test Specimen	Percent BFE (%)
1	99.9
2	99.9
3	99.9
4	99.8
5	99.9

Note: Plate count total for each stage can be provided upon request.

Bacterial filtration efficiency With reference to ASTM F2101-19 (Cont'd)

NANOGO™ Nanofiber Material Respirator (Stripe Printed) S103: 20 cycles cleaned.

Test Side	:	Inside
Pre-Conditioning	:	Minimum of 4 hours at 21±5°C and 85±5% R.H.
Dimensions of test specimen	:	161 mm x 218 mm
BFE Test Area	:	49 cm^2
BFE Flow Rate	:	28.3 l/min
Test bacteria	:	Staphylococcus aureus ATCC 6538
Positive Control Average	:	2.3 x 10^3 CFU
Negative Monitor Count	:	< 1 CFU

Test Specimen	Percent BFE (%)
1	99.8
2	99.9
3	99.9
4	99.8
5	99.9

Note: Plate count total for each stage can be provided upon request.

Differential pressure with reference to EN14683:2019+AC:2019 Appendix C

NANOGO™ Nanofiber Material Respirator (Stripe Printed) S101: Original.

Test Side : Inside
Pre-Conditioning : Minimum of 4 hours at 21±5°C and 85±5% R.H.
Test Area : 4.9 cm^2
Flow Rate : 8 l/min

Test Location	ΔP (mm H_2O/cm^2)				
	Specimen 1	Specimen 2	Specimen 3	Specimen 4	Specimen 5
Top Centre	5.9	6.8	6.1	6.5	5.7
Centre Left	6.4	7.1	7.0	6.1	8.6
Centre	6.5	7.8	7.2	7.4	8.3
Centre Right	6.6	8.5	7.3	7.0	8.0
Bottom Centre	6.3	6.3	6.8	6.9	7.9
Average	6.3	7.3	6.9	6.8	7.7

NANOGO™ Nanofiber Material Respirator (Stripe Printed) S102: 10 cycles cleaned.

Test Side : Inside
Pre-Conditioning : Minimum of 4 hours at 21±5°C and 85±5% R.H.
Test Area : 4.9 cm^2
Flow Rate : 8 l/min

Test Location	ΔP (mm H_2O/cm^2)				
	Specimen 1	Specimen 2	Specimen 3	Specimen 4	Specimen 5
Top Centre	6.2	7.1	8.1	6.1	6.7
Centre Left	7.5	10.3	8.2	7.2	7.7
Centre	7.3	7.7	7.2	7.3	8.1
Centre Right	8.8	6.1	7.3	7.5	9.4
Bottom Centre	6.8	6.7	6.8	6.4	7.3
Average	7.3	7.6	7.5	6.9	7.8

NANOGO™ Nanofiber Material Respirator (Stripe Printed) S103: 20 cycles cleaned.

Test Side : Inside
Pre-Conditioning : Minimum of 4 hours at 21±5°C and 85±5% R.H.
Test Area : 4.9 cm^2
Flow Rate : 8 l/min

Test Location	ΔP (mm H_2O/cm^2)				
	Specimen 1	Specimen 2	Specimen 3	Specimen 4	Specimen 5
Top Centre	5.3	6.8	6.2	7.1	5.6
Centre Left	8.0	7.3	7.5	6.6	6.0
Centre	7.3	7.1	7.0	8.0	6.6
Centre Right	7.1	7.3	6.9	7.1	7.6
Bottom Centre	6.1	6.6	6.0	6.0	6.5
Average	6.8	7.0	6.7	7.0	6.5

Determining the Initial Efficiency of Materials Used in Medical Face Masks to Penetration by Particulates Using Latex Spheres (With reference to ASTM F2299/F2299M-03 (Reapproved 2017))

NANOGO™ Nanofiber Material Respirator (Stripe Printed) S101: Original.

Test Side	:	Outside
Pre-Conditioning	:	Minimum of 4 hours at 21±3°C and 30-50±5% R.H.
Test Condition	:	21±3°C and 50±5% R.H.
Test Area	:	41.61 cm^2
Face Velocity	:	18.30 cm/s
Particle Size	:	0.1 µm (+/-15% CV) Latex Microspheres
Average Filtration Efficiency	:	98.65%
Standard Deviation	:	0.10

Test Specimen	Pressure Drop (inH_2O)	Downstream Particle Count	Upstream Particle Count	Filtration Efficiency (%)
1	1.171	2450	171663	98.57
2	1.641	1948	140267	98.61
3	1.802	1884	142355	98.68
4	1.904	2272	159812	98.58
5	1.908	1589	132641	98.80

Note: The procedure incorporated a non-neutralized challenge. The non-neutralized aerosol is also specified in the FDA guidance document on surgical face masks.

NANOGO™ Nanofiber Material Respirator (Stripe Printed) S102: 10 cycles cleaned.

Test Side	:	Outside
Pre-Conditioning	:	Minimum of 4 hours at 21±3°C and 30-50±5% R.H.
Test Condition	:	21±3°C and 50±5% R.H.
Test Area	:	41.61 cm^2
Face Velocity	:	17.68 cm/s
Particle Size	:	0.1 µm (+/-15% CV) Latex Microspheres
Average Filtration Efficiency	:	98.89%
Standard Deviation	:	0.27

Test Specimen	Pressure Drop (inH_2O)	Downstream Particle Count	Upstream Particle Count	Filtration Efficiency (%)
1	1.717	1459	171663	99.15
2	1.916	1948	140267	98.61
3	1.918	1884	142355	98.68
4	1.777	1281	159812	99.20
5	1.710	1589	132641	98.80

Note: The procedure incorporated a non-neutralized challenge. The non-neutralized aerosol is also specified in the FDA guidance document on surgical face masks.

Determining the Initial Efficiency of Materials Used in Medical Face Masks to Penetration by Particulates Using Latex Spheres (with reference to ASTM F2299/F2299M-03 (Reapproved 2017)) (Cont'd)

NANOGO™ Nanofiber Material Respirator (Stripe Printed) S103: 20 cycles cleaned.

Test Side	:	Outside
Pre-Conditioning	:	Minimum of 4 hours at 21±3°C and 30-50±5% R.H.
Test Condition	:	21±3°C and 50±5% R.H.
Test Area	:	41.61 cm^2
Face Velocity	:	17.60 cm/s
Particle Size	:	0.1 µm (+/-15% CV) Latex Microspheres
Average Filtration Efficiency	:	97.57%
Standard Deviation	:	0.35

Test Specimen	Pressure Drop (inH_2O)	Downstream Particle Count	Upstream Particle Count	Filtration Efficiency (%)
1	1.532	4034	156982	97.43
2	1.742	3357	115252	97.09
3	1.649	2440	123069	98.02
4	1.635	3801	154827	97.55
5	1.582	3270	146820	97.77

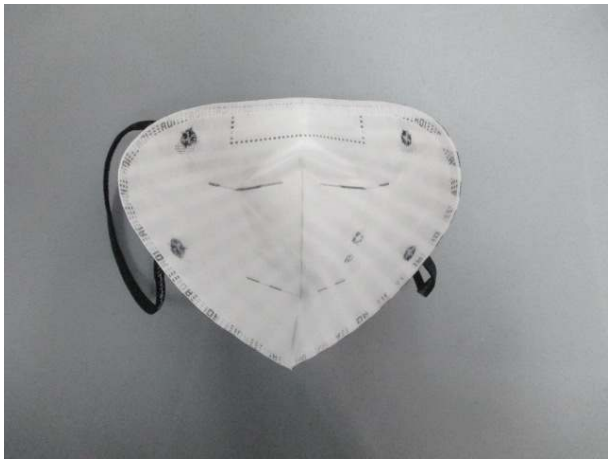
Note: The procedure incorporated a non-neutralized challenge. The non-neutralized aerosol is also specified in the FDA guidance document on surgical face masks.

Sample Photo:

Sample Picture (As received) NANOGO™ Nanofiber Material Respirator (Stripe Printed) S101: Original	
	

Sample Picture (As received) NANOGO™ Nanofiber Material Respirator (Stripe Printed) S102: 10 cycles cleaned.	
	

Sample Picture (As received)
NANOGO™ Nanofiber Material Respirator (Stripe Printed) S103: 20 cycles cleaned.



SGS authenticate the photo on original report only

*** End of Report ***