

CIN:U74220DL1998PLC092698

TEST REPORT

Test Report Issued To:

UNOR EXIM PRIVATE LIMITED

403, 4TH FLOOR, KIRTI MAHAL BUILDING, 19,
RAJENDRA PLACE, NEW DELHI, DELHI, INDIA, 110008,

Test Report No: D201016013/D201016013-11

Date of Issue: 24-Oct-2020



Sample Receipt Date: 16-Oct-2020

Date of Start of Testing: 16-Oct-2020

Date of Completion of Test: 23-Oct-2020

Customer Relationship Number

61470

Sample Description :

PRODUCT NAME-UNOMAK- GNL-99 DISPOSABLE FACE MASK ,
MODEL NAME-UNOMAK- GNL-99 , BRAND-
UNOMAK,FUNCTION-ANTI-DUST, ANTI-BACTERIA,
ANTI-VIRUS,MATERIAL-NON WOVEN CLOTH,FABRIC-1st
PLY:25GSM2 PP SPUN- BOND , 2nd PLY:25GSM2
MELT-BLOWN(FILTER) (NELSON LAB USA APPROVED),3rd
PLY:25GSM2 PP SPUN- BOND, TYPE- EAR LOOP, TIE STRAP,
COLOR- BLUE/WHITE, ITEM SIZE-175*95MM, USAGE-PREVENT
FROM BACTERIA AND VIRUSES, DROPLETS



Customer Reference No

Kind Attention : MS. PRIYANKA GOEL

E-Mail: accounts@unorexim.com

Contact No: 8826450088

Sample Condition : GOOD

Sample Quantity (Approx) : -

Sample Size (Approx) : -

SAMPLE NOT DRAWN BY OUR LABORATORY. THE RESULTS RELATE ONLY TO THE ITEMS TESTED

Report Issued By

ULR-TC549220000018095F

Authenticity of report can be verified by mail at verification@spectrolab.in

This is a Digitally Signed Report and hence doesn't require Physical Signature.

Spectro Analytical Labs Limited, E-41, Okhla Indl. Area, Phase-II, New Delhi- 110020 (India)

Phone :+91-11-40522000, 41611000 || Web : www.spectro.in || Email:care@spectro.in

ISO 9001:2015, ISO 14001:2015 & ISO 45001:2018 Certified Laboratory

Please refer to our Website <http://www.spectro.in/spectro-policies.html> for Terms & Condition

TEST REPORT FOR DETERMINATION OF:

Evaluating the Bacterial Filtration Efficiency (BFE) of Medical Face Mask Materials, Using a Biological Aerosol of Staphylococcus aureus

1. Name of Product

UNOMAK- GNL-99 DISPOSABLE FACE MASK

2. Test Method

BS EN 14683:2019/Annex B: Medical face masks - Requirements and test methods

3. Scope

To perform bacterial filtration efficiency test on surgical mask as per procedure given BS EN 14683:2019, by using biological aerosol of Staphylococcus aureus.

4. Testing Laboratory

Name: Spectro Analytical Labs Limited
Address: E-41, Okhla Phase-2
New Delhi
Pin Code: 110020
Ph: 011-40522000

5. Date of Test

Test Date : 16.10.2020

6. Specimen Verification

6.1. Specimen Definition

The testing laboratory was not involved in the selection of the test specimen.

7. Conditioning

Each test specimens were placed for 5 h at a temperature of 21 ± 5 °C and a relative humidity of 85 ± 5 %.

8. Inoculum Size

Staphylococcus aureus ATCC 6538 (5×10^5 cfu/ml)

9. Medium Used

Tryptic soya agar

10. Temperature condition

37°C/20 to 52 hours

Rity Tiwari

Analyst Signature



Testing(TC-5492)

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11. Observations, Requirements & Result

Sr. no.	Test Parameters	Result	Limits as per BS EN 14683:2019/ANNEX B	Test Method
1	Bacterial Filtration Efficiency of Specimen (%)	99.3	Level 1= ≥ 95 Level 2= ≥ 98 Level 3= ≥ 98	BS EN 14683:2019
		98.8		
		99.1		
		98.6		
		98.7		
	Average of BFE results (%)	98.9		
2	Area of test Specimen	Face side	Face side	BS EN 14683:2019
3	Flow rate of aerosol	28.3	28.3 L/Minute	BS EN 14683:2019
4	Mean particle size of Challenge aerosol of Staphylococcus aureus, micron	3.0	3 \pm 0.3	BS EN 14683:2019
5	Average Plate count of Positive control of Staphylococcus aureus in count, per test	2286	1700-3000	BS EN 14683:2019
6	Average Plate count of Negative control	Negative	Negative	BS EN 14683:2019

Remarks: The sample showed average 98.9 % Bacterial filtration efficiency against Staphylococcus aureus ATCC 6538 according to BS EN 14683:2019 test method.

Rity Tiwari

Analyst Signature



Testing(TC-5492)

ULR-TC549220000018095F



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TEST REPORT FOR DETERMINATION OF
Evaluating the Microbial cleanliness in Mask

1. Name of Product

UNOMAK- GNL-99 DISPOSABLE FACE MASK

2. Test Method

BS EN 14683 2019 Annex-D

3. Scope

To perform Microbial cleanliness test on coverall as per procedure given in Annex-D of BS EN 14683 2019, by using filtration techniques.

5. Testing Laboratory

Name: **Spectro Analytical Labs Limited**
Address: E-41, Okhla Phase-2
New Delhi
Pin Code: 110020
Ph: 011-40522000

5. Date of Test

Test Date : 16.10.2020

6. Specimen Verification

6.1. Specimen Definition

The testing laboratory was not involved in the selection of the test specimen.

7. Conditioning

Each test specimens were shaken for 5 minute at 250 RPM on orbital shaker.

Rity Tiwari

Analyst Signature



Testing(TC-5492)

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8. Observations, Requirements & Result

Sr.no.	Test Parameters	Result	Limits	Test Method
1	Total Bio-burden, (Microbial cleanliness) average value of (a+b) cfu/gm	6	≤30 cfu/gm	BS EN 14683 2019-Annex-D
a)	Bacterial count on TSA, at 30°C/3 days, cfu/gm	9		
		8		
		10		
		7		
		6		
b)	Yeast & Mould count on SDA, at 25°C/7 days, cfu/gm	2		
		3		
		5		
		3		
		2		

Remarks: The sample complies to the above test parameters according to BS EN 14683: 2019.

Rity Tiwari

Analyst Signature



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TEST REPORT FOR DETERMINATION OF BREATHABILITY (DIFFERENTIAL PRESSURE)

1. Name of Product

UNOMAK- GNL-99 DISPOSABLE FACE MASK

2. Test Method

EN 14683:2019+AC:2019 (E); Medical face masks - Requirements and test methods

3. Scope

To determine the breathing resistance or Breathability of medical face mask as per Annex. C given in BS EN 14683: 2019; Medical face mask - Requirements and test method.

1. Testing Laboratory

Name: Spectro Analytical Labs Limited

Address: E-41, Okhla Phase-2

New Delhi, Pin Code: 110020

5. Date of Test

Test Date - 19.10.2020

6. Specimen Verification

6.1. Specimen Definition

The testing laboratory was not involved in the selection of the test specimen.

7. Conditioning

Each test specimen were placed for 5 Hours at a temperature of 23 °C and a relative humidity of 80 %.

Analyst Signature



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8. Observations, Requirements & Test Result:

1. Pre test parameters

Sr. No.	Parameter	Test Method
1	Flow rate	8 Lit/min
2	Specimen area	4.9 cm ²

Sr. No.	Specimen	Pressure (Pa)	Area (cm ²)	Differential Pressure (Pa/cm ²)	Average (Pa/cm ²)
1	A	234	4.9	47.76	47.63
2	B	237	4.9	48.37	
3	C	222	4.9	45.31	
4	D	232	4.9	47.35	
5	E	242	4.9	49.39	

2. Requirement of Material

Sr. No.	Type of medical mask	Differential Pressure (Pa/cm ²)
1	Type I	Less than 40
2	Type II	Less than 40
3	Type IIR	Less than 60

3. Test Result: 47.63 Pa/cm²

4. Conclusion: Pass in Type IIR

[Signature]

Analyst Signature



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TEST REPORT FOR DETERMINATION OF:

The Resistance against penetration by synthetic blood (Fixed Volume, Horizontally projected)

2. Name of Product

UNOMAK- GNL-99 DISPOSABLE FACE MASK

3. Test Method

EN 14683:2019+AC: 2019 (E); Medical face masks - Requirements and test methods

ISO 22609:2004; Resistance against penetration by synthetic blood (Fixed Volume, Horizontally projected)

3. Scope

To perform penetration test on coverall as per procedure given in

ISO 22609:2004; Resistance against penetration by synthetic blood (Fixed Volume, Horizontally projected)

4. Testing Laboratory

Name: **Spectro Analytical Labs Limited**

Address: E-41, Okhla phase 2
New Delhi-110020

5. Date of Test

Test Date – 19-10-2020

6. Specimen Verification

6.1. Specimen Definition

The testing laboratory was not involved in the selection of the test specimen.

7. Conditioning

Each test specimens were placed for 5 h at a temperature of 21 ± 5 °C and a relative humidity of $85 \pm 10\%$.

Analyst Signature



Testing(TC-5492)

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8. Observations & Test Result

1. Selected Blood Pressure : 16 kPa
2. Volume : 2 ml
3. Valve Time : 690 ms
4. Target Area : Centre of mask
5. Test Condition : Temperature 23 ± 2 °C and Relative Humidity $85 \pm 10\%$.
6. Pre- Treatment technique used : Not Given
7. Targeting plate Used : No
8. **Result** : **Pass**

Table 1. Summary of Individual specimen

Specimen Number	Result	Specimen Number	Result
1	Pass	17	Pass
2	Pass	18	Pass
3	Pass	19	Pass
4	Pass	20	Pass
5	Pass	21	Pass
6	Pass	22	Pass
7	Pass	23	Pass
8	Pass	24	Pass
9	Pass	25	Pass
10	Pass	26	Pass
11	Pass	27	Pass
12	Pass	28	Pass
13	Pass	29	Pass
14	Pass	30	Pass
15	Pass	31	Pass
16	Pass	32	Pass

Analyst Signature



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Photographs



Before Test



Exposed Side Face



Unexposed Side Face

-- End of Test Report --

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[Handwritten Signature]

Analyst Signature



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