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TEST REPORT

MASK TEST

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Issue Date: 26/06/2020

Issued To

: M/s Entrepreneurship Development Center (Venture Center)
100NCL Innovation park, Dr. Homi Bhabha Road,
Pashan, Pune-411008

PART A: Particulars of Sample submitted

A.	Sample Description	:	N 95 Mask (MH12 Make) Product- Respiratory Foldable N95 Mask Batch No.- UI/20200620/V12
B.	Date of Sample Received	:	24/06/2020
C.	Date of Commencement of Testing	:	24/06/2020
D.	Date of completion of Testing	:	26/06/2020
E.	Test Method	:	NIOSH & IS:9473:2002
F.	Sample submitted By	:	Customer
G.	Instrument Used	:	Breathing machine, Aerosol Generator, Pressure Probe etc.

TEST RESULTS

1.	Leakage a) Total Inward Leakage b) Penetration of Filter Material (Sodium Chloride Test: Initial penetration of sodium chloride test Aerosol @ 95 lpm)	IS:9473:2002, Annex A 3	% %	2.32 2.08	5 max 3 max
2.	Carbon dioxide content of the inhalation Air	IS:9473:2002 Annex A 6	ppm	773	1000 max
3.	Breathing Resistance a) Inhalation permitted resistance @ 95 l/min b) Exhalation permitted resistance @ 160 l/min	IS:9473:2002	mbar mbar	2.62 2.46	3.0 max 3.0 max

4. Splash Resistance Pressure

S.No.	Parameter	Test Method	Units	Result	Limit
4.	Splash Resistance Pressure	ASTM F-1862-07	mmHg	128	120Min.



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5. Filter Efficiency as per NIOSH Standard

Summary: This procedure was performed to evaluate particulate filter penetration as specified in 42 CFR Part 84 for requirements on a N95 respirator/ Mask. Respirators were conditioned then tested for particle penetration against a polydispersed, sodium chloride (NaCl) particulate aerosol. The challenge aerosol was dried, neutralized, and passed through the test article at a concentration not exceeding 200 mg/m³ the initial airflow resistance and particle penetration for each respirator was determined. According to 42 CFR Part 84.64, pretesting must be performed by all applicants as part of the application process with NIOSH. Results seen below are part of that pretesting and must be submitted to and accepted by NIOSH for respirator approval.

TEST RESULT

Article Number	Initial Airflow Resistance (mm H ₂ O)	Particle Penetration (%)	Filtration Efficiency (%)
1	15.4	3.26	96.74
2	14.2	3.51	96.49
3	15.4	3.34	96.66
4	14.2	3.45	96.55
5	14.6	3.77	96.23

Results: The NIOSH N95 filter efficiency as stated in 42 CFR Part 84.181 is a minimum efficiency of filter is 95.0 %. The test articles submitted by the customer confirm to the NIOSH N95 criteria for filter efficiency (Equivalent to FFP2, EN 149-2001 +A1:2009).

Notes:

1. The results given above are related to the tested sample, as received & mentioned Parameters.
2. Responsibility of the Laboratory is limited to the invoiced amount only.
3. This test report will not be generated again, either wholly or in part, without prior written Permission of the laboratory.

Checked by

Authorized Signatory