



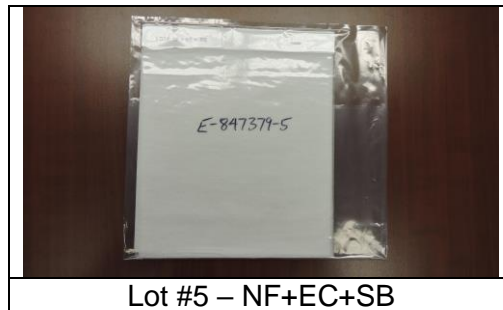
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Laboratory #: 847379-5-20
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Received Date: October 27, 2020

Attention: James Nguyen
Specimen: #5: Lot #5 – NF+EC+SB

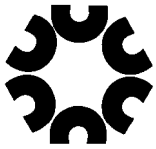
TEST REPORT

A specimen, consisting of sheet material was submitted to be tested for filtration performance to determine acceptability with Health Canada Interim Order Guidance Document for N95 respirators.



This report is subject to the following terms and conditions: 1. This report relates only to the specimen provided and there is no representation or warranty that it applies to similar substances or materials or the bulk of which the specimen is a part. 2. The content of this report is for the information of the customer identified above only and it shall not be reprinted, published or disclosed to any other party except in full. Prior written consent from Cambridge Materials Testing Limited is required. 3. The name Cambridge Materials Testing Limited shall not be used in connection with the specimen reported on or any substance or materials similar to that specimen without the prior written consent of Cambridge Materials Testing Limited. 4. Neither Cambridge Materials Testing Limited nor any of its employees shall be responsible or held liable for any claims, loss or damages arising in consequence of reliance on this report or any default, error or omission in its preparation or the tests conducted. 5. Specimens are retained 6 months, test reports and test data are retained 7 years from date of final test report and then disposed of, unless instructed otherwise in writing. 6. When making a statement of conformity to a specification or standard the report will make the statement of conformity based on the absolute value of the test result. Test Report Template Revision August 20, 2019

Per Stephen Brown
Authorized By Stephen Brown
Per Derek Wild
Technician, Derek Wild



PARTICULATE FILTRATION EFFICIENCY & INHALE RESISTANCE

The specimen, consisting of three sheets, was submitted to be tested for determination of the particulate filter efficiency level. The testing was performed by National Research Council (1200 Montreal Road, K1A 0R6) based on the TEB-APR-STP-00059 test procedure for comparison against 42 CFR Part 84.174 and 42 CFR 84.172 requirements. The sheet material was tested as filtration media intended for respirators. See test results herein obtained from NRC.

The NRC standard procedure had consisted of the following:

- The respirators were challenged for 5-minutes under a flow of 42.5 L/min ± 4 L/min with an aerosol of sodium chloride (NaCl) particles with an average count mean diameter in the range of 75 nm ± 30 nm with a geometric standard deviation not exceeding 1.86.
- Conditioning of respirators (C) were performed for 25 ± 1 hour at 85% ± 5% relative humidity and 38°C ± 2.5°C and un-conditioning of respirators (U) and tested within 10 hours of extraction from the conditioning chamber as indicated in NIOSH standard procedure TEB-APR-STP-0059.
- Reporting of results of the initial pressure drop across the mask in Pascal (Pa), and initial filtration efficiency in percentage (%).
- Testing of particulate filter efficiency may occur on one of the following systems:
 1. The TSI 8130A Automated Filter Tester. Samples are measured following the procedure MS-6.3 Loading Tests for Evaluation of Filter Efficiency of Respirators. The TSI 8130A laboratory conditions will have the temperature be 25°C ± 5°C and the relative humidity be 30% ± 10%.
 2. The Particle Filtration Efficiency Measurement System (PFEMS). Samples are measured following the procedure MASK-200-P. The PFEMS laboratory conditions will have the temperature be 25°C ± 5°C and the relative humidity be 30% ± 10%.

RESULTS

#5: Lot #5 – NF+EC+SB

Date Tested	Date Reported	Label	Lot	Conditioned C/U	Test Facility	Aerosol (NaCl/PSL)	Flow Rate (lpm)	Initial Resistance Pa	Initial Filtration %
2020-11-12	2020-11-16	187_E-847379-5_001U	E-847379-5	U	M36-B119	NaCl	42.5	48	99.5
2020-11-12	2020-11-16	187_E-847379-5_002	E-847379-5	C	M36-B119	NaCl	42.5	57	99.5
2020-11-12	2020-11-16	187_E-847379-5_003	E-847379-5	C	M36-406B	NaCl	42.5	51	99.3
							average	52	99.4
							std dev.	5	0.1

NRC and CMTL will not make any statements of conformity.

REQUIREMENTS

For N95 masks under 42 CFR 84.174 the minimum efficiency for each filter must be ≥95%.

For N95 masks under 42 CFR 84.172 the maximum allowable inhalation resistance shall be ≤343 Pa, and exhalation resistance of ≤245 Pa.