

## Supply Hawk bid for Jefferson Parish Correctional Center (50133711, Addendum 1)

### Option 1: Large Coverage ASTM Level 1 Fluid Resistance 3-Ply Masks, Yellow

<https://supplyhawk.org/collections/ppe/products/large-coverage-astm-level-1-fluid-resistance-3-ply-masks-yellow>



## Option 2: ASTM Level 2 Medical-Grade 3-Ply Procedure Masks, White

<https://supplyhawk.org/collections/ppe/products/astm-level-2-medical-grade-procedure-masks>



**Nelson Labs.**  
A Sirona Health company

Sirona Medical Products (Korean)  
Company Limited  
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Sponsor:  
Sirona Medical Supplies  
Company  
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**Bacterial Filtration Efficiency (BFE)  
and Differential Pressure (Delta P) GLP Report**

Test Article: Sirona, SP02 mask  
Study Number: 1219008-001  
Study Received Date: 25-Mar-2020  
Testing Facility: Nelson Laboratories, LLC  
6030 S. Redwood Rd  
San Jose City, CA 95128 U.S.A.  
Test Procedure(s): Standard Test Protocol (STP) Number: STP0004 Rev 18  
Deviation(s): None

**Summary:** The BFE test is performed to determine the filtration efficiency of test articles by comparing the bacterial control counts upstream of the test article to the bacterial counts downstream. A suspension of *Staphylococcus aureus* was aerosolized using a nebulizer and delivered to the test article at a constant flow rate and tested as follows. The challenge delivery was maintained at  $3.8 \times 10^7$  colony forming units (CFU) with a mean particle size (MPS) of  $3.0 \pm 0.5 \mu\text{m}$ . The aerosols were drawn through a so-called, water percolator, Andersen sampler for collection. This test method complies with ASTM F2100-18 and EN 14883-2018, Annex B, with the exception of the higher challenge level, which may represent a more severe test.

The Delta P test is performed to determine the breathability of test articles by measuring the differential air pressure on either side of the test article using a manometer, at a constant flow rate. The Delta P test complies with EN 14883-2018, Annex C and ASTM F2100-18.

All test method acceptance criteria were met.

The positive control average was set at specification per STP0004 Rev 18 section 6.1, which states, "The BFE positive control average shall be maintained at  $1.7 \pm 0.2 \times 10^7$  CFU." Testing with a more severe challenge to the test articles represents a worst case. The sponsor accepted the view of the higher challenge; therefore, the results are considered valid at the testing conditions that occurred.

Study Director: *[Signature]* James W. Lusk  
Study Completion Date: 25 April 2020

ANAB  
25 April 2020

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A Sirona Health company

Study Number: 1219008-001  
Bacterial Filtration Efficiency (BFE)  
and Differential Pressure (Delta P) GLP Report

Test Side: Inside  
BFE Test Area:  $\approx 40 \text{ cm}^2$   
BFE Flow Rate: 38.2 L/min (per minute (L/min))  
Delta P Flow Rate: 8 L/min  
Conditioning Parameters: 65  $\pm$  5% relative humidity (RH) and 21  $\pm$  5°C for a minimum of 4 hours  
Test Article Dimensions:  $\approx 17 \text{ cm} \times \approx 10 \text{ cm}$   
Positive Control Average:  $3.8 \times 10^7$  CFU  
Negative Monitor Count:  $< 1$  CFU  
MPS:  $3.0 \mu\text{m}$

**Results:**

Test Article Number	Percent BFE (%)
1	>99.9
2	99.9
3	>99.9
4	>99.9
5	>99.9

Test Article Number	Delta P (mm H <sub>2</sub> O/cm <sup>2</sup> )	Delta P (kPa/cm <sup>2</sup> )
1	4.3	42.2
2	4.1	40.4
3	4.3	41.7
4	4.0	39.3
5	4.2	40.8

The filtration efficiency percentages were calculated using the following equation:  

$$\% \text{BFE} = \frac{C - P}{C} \times 100$$
 C = Positive control average  
 P = Plate count total recovered downstream of the test article  
 Note: The plate count total is available upon request.

**Test Article Preparation:** The test articles were conditioned for a minimum of 4 hours at 21  $\pm$  5°C and 65  $\pm$  5% RH prior to BFE and Delta P testing.

**Test Method Acceptance Criteria:** The BFE positive control average shall be maintained at  $1.7 \pm 0.2 \times 10^7$  CFU.  
 The MPS control average of the challenge aerosol shall be maintained at  $3.0 \pm 0.5 \mu\text{m}$ .  
 The Delta P test flow rate shall be maintained at 8 L/min throughout the testing.

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