

Bacterial Filtration Efficiency (BFE) Final Report

Test Article: Product name: Particulate Respirator
 Code of product: 9500-N95
 Manufacturer name: Makrite Industries Inc.
 Lot N° 082212
 Laboratory Number: 709248.1 Amended
 Study Received Date: 26 Aug 2013
 Study Completion Date: 06 Sep 2013
 Test Procedure(s): Standard Test Protocol (STP) Number: STP0004 Rev 09

Summary: The BFE test is performed to determine the filtration efficiency by comparing the bacterial control counts to test article effluent counts. A suspension of *Staphylococcus aureus* was aerosolized using a nebulizer and delivered to the test article at a constant flow rate. The aerosol droplets were drawn through a six-stage, viable particle, Andersen sampler for collection. This procedure allows a reproducible bacterial challenge to be delivered to test materials. This method complies with ASTM F2101.

All test method acceptance criteria were met.

Test Side: Outside Surface
 BFE Area Tested: Entire Outside
 BFE Flow Rate: 28.3 Liters per minute (L/min)

Results:

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

Note: Plate count totals for each stage are available upon request.

^a There were no detected colonies on any of the Andersen sampler plates for this test article.

Mean Positive Control Count: 2,673 colony forming units (CFU)
 Negative Control Count: <1 CFU
 Mean Particle Size (MPS): 2.9 µm

Amendment Justification: At the request of the sponsor, "Product name: Particulate Respirator Code of product: 9500-N95 Manufacturer name: Makrite Industries Inc." was added to the test article.



Study Director

Sarah Smit, B.S.

16 Sep 2013

Amended Report Date

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