NELSON LABORATORIES

Sponsor:

M&M Pure Air Systems LLC

Bacterial Filtration Efficiency (BFE) Final Report

Test Article: WoodyKnows Nasal Filters White MLM Foam 123-2 / Lot 1302

Study Received Date: 11 Mar 2013

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.

BFE Area Tested: ~9.6 cm^2
BFE Flow Rate: 28.3 Liters per minute (L/min)

Results:

Test Article Number	Percent BFE (%)
1	88
2	87
3	93.1
4	89
5	90.6

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

Mean Positive Control Count: 2,114 colony forming units (CFU)
Negative Control Count: <1 CFU
Mean Particle Size (MPS): 3.1 µm

Sarah Smit

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25 Mar 2013

Study Completion Date

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