

Bacterial Filtration Efficiency Test (BFE) at an Increased Challenge Level Final Report

Test Article: 030-0020_BFE01~03, 030-0024_BFE01~03
 Laboratory Number: 605940
 Study Received Date: 28 Oct 2011
 Test Procedure(s): Standard Test Protocol (STP) Number: STP0009 Rev 03

Summary: This procedure was performed to evaluate the bacterial filtration efficiency (BFE) at an increased challenge level of the test article. A challenge level of greater than 10^6 colony-forming units (CFU) was delivered to each test article to determine filtration efficiency. This test procedure was modified from Nelson Laboratories, Inc., standard BFE procedure in order to employ a more severe challenge than would be expected in normal use. This method was adapted from ASTM F2101. All test method acceptance criteria were met.

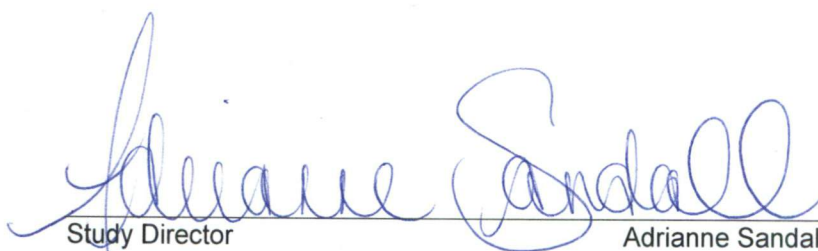
Challenge Flow Rate: 20 Liters per minute (LPM)
 Sample Area Tested: Entire test article

Results:

Test Article	Total CFU Recovered	Filtration Efficiency (%)
030-0020_BFE01	1.4×10^1	99.99948
030-0020_BFE02	9	99.99966
030-0020_BFE03	2.0×10^2	99.9926
030-0024_BFE01	1.8×10^1	99.99933
030-0024_BFE02	<1 ^a	>99.999963
030-0024_BFE03	1.2×10^1	99.99955

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

Challenge Level: 2.7×10^6 CFU
 Mean Particle Size (MPS): 2.7 μ m


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 Study Completion Date