

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

Test Article: Spirometry filter TUBE code 30811
 Purchase Order: 30/2010
 Laboratory Number: 530925
 Study Received Date: 02 Jun 2010
 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: 30 Liters per minute (LPM)
 Sample Area Tested: Entire Test Article

Results:

Unit Number	Total CFU Recovered	Filtration Efficiency (%)
1	3.6×10^2	99.9945
2	1.3×10^2	99.9981
3	5.2×10^2	99.9920

Challenge Level: 6.5×10^6 CFU
 Mean Particle Size (MPS): 3.3 μ m


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 Study Completion Date