

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

Test Article: TECHNOSTAT 150 PLUS FILTER MEDIA (T150PLUS) LOT #2010728-148
 Purchase Order: 110081
 Laboratory Number: 566126
 Study Received Date: 04 Feb 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: 30 Liters per minute (LPM)
 Sample Area Tested: ~3.0 inches (75 mm) in diameter

Results:

Unit Number	Total CFU Recovered	Filtration Efficiency (%)
1	7	99.99983
2	1	99.999975
3	6	99.99985
4	<1 ^a	>99.999975
5	4	99.999902

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

Challenge Level: 4.1×10^6 CFU
 Mean Particle Size (MPS): 3.2 μ m


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25 Feb 2011
 Study Completion Date