

Results:

Test Article Number	Corrected ^a Airflow Resistance (mm H ₂ O)	Particle Penetration (%)	Filtration Efficiency (%)
1	0.1	2.36	97.64
2	0.1	6.52	93.48
3	0.1	2.64	97.36
4	0.1	2.87	97.13
5	0.1	1.82	98.18
6	0.1	3.04	96.96
7	0.1	4.32	95.68
8	0.1	2.86	97.14
9	0.1	1.52	98.48
10	0.1	2.35	97.65

^a The final airflow resistance value for each test article was determined by subtracting out the background resistance from the system.

Test Method Acceptance Criteria: The filter tester must pass the "Tester Set Up" procedure. The airflow resistance and particle penetration of the reference material must be within the limits set by the manufacturer.

Procedure:

Test Set-Up: The reservoir was filled with a 2% NaCl solution and the instrument allowed a minimum warm-up time of 10 minutes. The main regulator pressure was set to 75 ± 5 pounds per square inch (psi). The filter holder regulator pressure was set to approximately 35 psi. The NaCl aerosol generator pressure was set to approximately 30 psi and the make-up airflow rate was set to approximately 70 L/min.

With the filter holder empty, the transducer and photometer zeros, the aerosol concentration level and the photometer correlation factor (CF) were checked and determined to be acceptable. The CF is used to correlate upstream photometer measurements with those made downstream.

Filter Test: The NaCl concentration of the test aerosol was determined in mg/m³ by a gravimetric method prior to the load test assessment.

Each test article was placed into the filter holder and the NaCl aerosol passed through the test article at an airflow rate of approximately 6 L/min. Instantaneous airflow resistance and particle penetration results for each test article were generated.