Health Protection Agency Microbiology Services Porton Down Salisbury Wiltshire SP4 0JG United Kingdom



Certificate of Filtration Efficiencies

Evaluation of Filtration Efficiencies Against Bacterial and Viral Aerosol Challenges

Report No. 79-10

Report prepared for: Atlas Copco Airpower n.v.

Issue Date of Certificate: 25th July 2011

Test Summary

The efficiencies of four Atlas Copco Airpower n.v. PDp filters were determined against aerosols of micro-organisms at 240 litres min⁻¹. Two filters were challenged with bacterial aerosols of *Bacillus atrophaeus* and two filters were challenged with viral aerosols of MS-2 coliphage.

Challenge aerosol	Average Challenge	Average Removal Efficiency	Average Titre Reduction
<u>Bacteria</u> Bacillus atrophaeus	4.91 x 10 ⁸ cfu	99.966675 %	3.15 x 10 ³
<u>Virus</u> MS-2 Coliphage	3.75 x 10 ⁸ pfu	99.99335 %	1.51 x10 ⁴

cfu = colony forming units, pfu = plaque forming units

Report Written By

Report Authorised By