

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: 25<sup>th</sup> 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<sup>-1</sup>. 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
<b>Bacteria</b> <i>Bacillus atrophaeus</i>	$4.91 \times 10^8$ cfu	99.966675 %	$3.15 \times 10^3$
<b>Virus</b> MS-2 Coliphage	$3.75 \times 10^8$ pfu	99.99335 %	$1.51 \times 10^4$

cfu = colony forming units, pfu = plaque forming units

Report Written By

Anna May

Report Authorised By

Lydia