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# 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 x 10 <sup>8</sup> cfu	99.966675 %	3.15 x 10 <sup>3</sup>
<b>Virus</b> MS-2 Coliphage	3.75 x 10 <sup>8</sup> pfu	99.99335 %	1.51 x 10 <sup>4</sup>

cfu = colony forming units, pfu = plaque forming units

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