

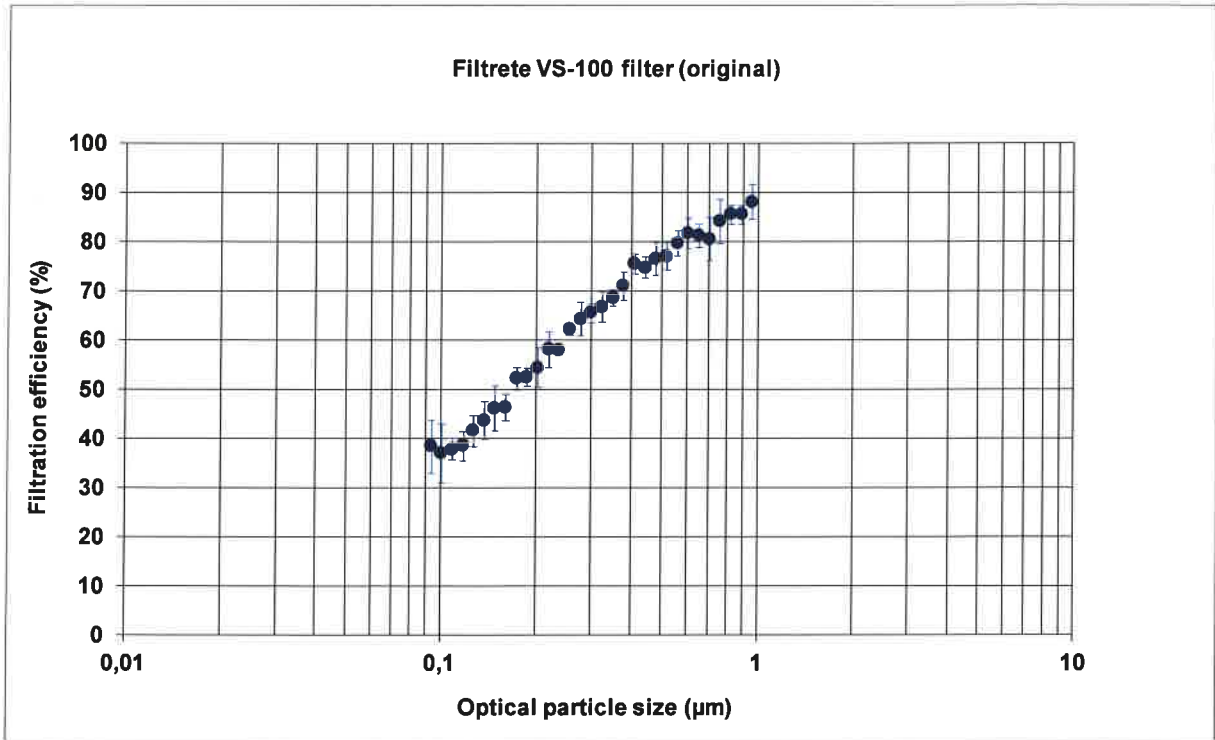
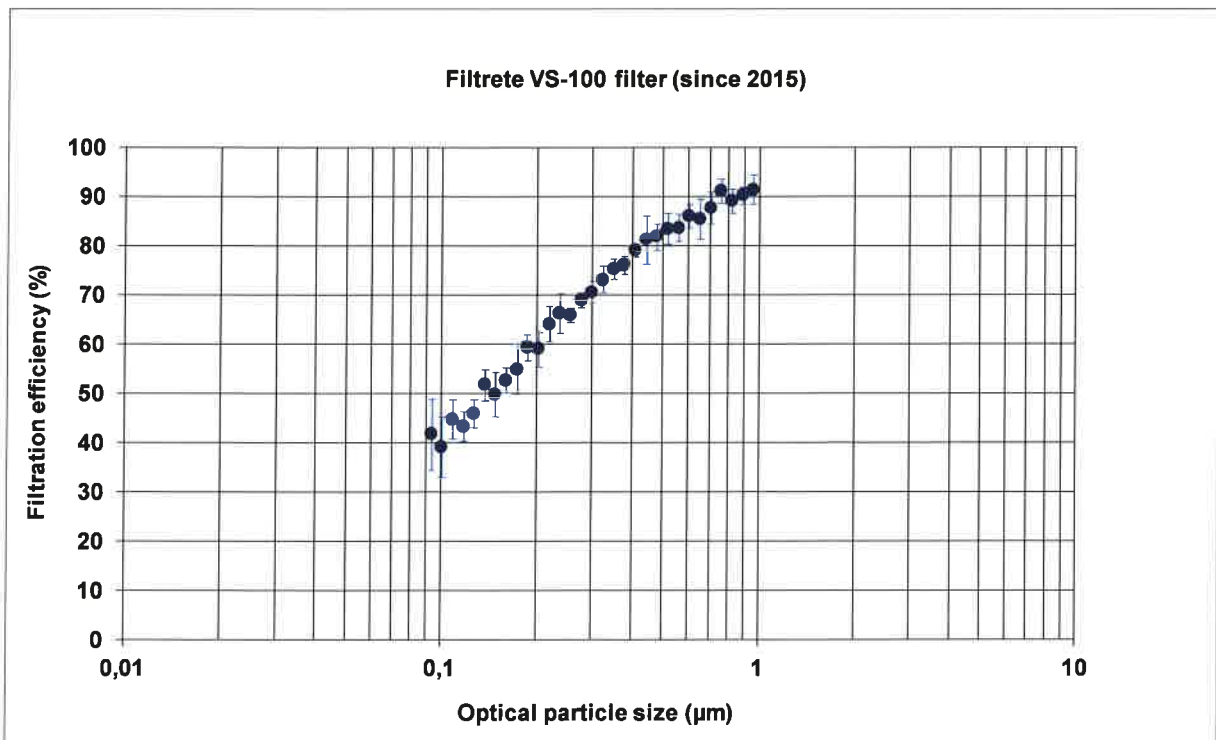


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| <b>Report's title</b>  |                                  |
| The filtration efficiency of the filter materials  |                                  |
| <b>Customer, contact person, address</b>   | <b>Order reference</b>           |
| Suomen Terveysilma Oy<br>Peter Schlauf<br>Konalantie 47 F<br>00390 HELSINKI  | Offer<br>VTT-V-88671-14          |
| <b>Project name</b>  | <b>Project number/Short name</b> |
| Measurements of filter materials   | 102651                           |
| <b>Summary</b>   |                                  |
| <p>The purpose of the commission was to determine air flow and filtration efficiency of filter materials for replacement air valves and window filters. The initial filtration efficiency of the materials was compared to the classification of air filters.</p> <p>The measurement system followed the principles of air filter test standard EN 779. The initial filtration efficiency was measured with DEHS (di-ethyl-hexyl-sebacate) test aerosol. The efficiency was determined by measuring particle concentrations alternately from the air downstream of the filter material and from the unfiltered air of the reference line. The flow rate through the filter material was determined so that it corresponded to 7 l/s stream of air through a whole replacement air valve.</p> <p>Based on the results one can say that the initial efficiency of the filter materials 1 (Filtrete VS-100 filter (original)) and 2 (Filtrete VS-100 filter (since 2015)) fulfil the filtration efficiency requirements of the F7 class filter.</p> |                                  |
| <p>Tampere 17.2.2017</p> <p><b>Written by</b></p>  <p>Inga Mattila<br/>Research Engineer</p> <p><b>Accepted by</b></p>  <p>Aimo Taipale<br/>Team Leader</p>   |                                  |
| <b>VTT's contact address</b>   |                                  |
| Tekniikankatu 1, Tampere, Finland  |                                  |
| <b>Distribution (customer and VTT)</b>   |                                  |
| Peter Schlauf, Terveysilma Oy: 1 copy<br>VTT: 1 copy   |                                  |
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**Appendix 1.**



Picture 1. Filtration efficiency, Filtrete VS-100 filter (original).



Picture 2. Filtration efficiency, Filtrete VS-100 filter (since 2015).