



## Gelatin Filter Disposables

for Quantification and Differentiation of Airborne Organisms



Gelantine Filter Disposables



MD8 airscan Air Sampler with  
Gelatin Filter Disposable

In combination with the Sartorius MD8 airscan Air Sampler, gelatin filter disposables allow a series of air samples to be taken rapidly.

### **Gelatin filter disposables are easy to use**

You only need to remove the disposable from the packaging, place it on the aluminum holder (17801), attach the holder to the MD8 and begin sampling.

Gelatin filter disposables are individually packaged, presterilized and ready-to-connect units, each consisting of a gelatin membrane filter and a holder. Gelatin filters in conjunction with the MD8 airscan Air Sampler (gelatin filter method) are used for collection of airborne microbes and viruses.

### **The gelatin filter method provides the following benefits for airborne organism sampling:**

- Absolute retention of organisms since the filters capture all bacteria laden particles in the sample regardless of particle size.
- The filters prevent dessication of the retained organisms due to the filters' residual moisture content.
- Very low bacteria counts can be measured, because the high flow rates allow sampling of large volumes in short time, 1 m<sup>3</sup> in < 8 minutes. This makes the method ideal for validating and monitoring the most critical sterile areas in pharmaceutical plants.
- Isokinetic sampling is possible in laminar-flow areas.
- The system is suitable for clean rooms because the disposables may be mounted inside the clean room with the sampling device mounted outside the room.
- The system can be calibrated by an accessory calibration unit.

## Specifications

|                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|-------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Technical Specifications of the Disposables           | Filter holder: sized to accommodate 80 mm filters   Filtration area: 38.5 cm <sup>2</sup><br>Material: recyclable Cyrolite   Thermal resistance: 85°C   Dimensions: 93 × 16 mm                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Technical Specifications of the Gelatin Filters       | Material: gelatin   Pore size: 3 µm   Filter diameter: 80 mm   Reaction to water: soluble   Thickness: approx. 250 µm   Flow rate per cm <sup>2</sup> : 2.2–3.2 l/min at Δp = 0.05 bar (15 kPa)   Thermal resistance: 60°C max.                                                                                                                                                                                                                                                                                                                                                                                             |
| Maximum Working Conditions for the Gelatin Filters    | Temperature: 30°C   Humidity: 85%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Sterilization                                         | Gelatin filter disposables are supplied sterile by gamma irradiation.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Retentive Capacity of the Gelatin Filter for Bacteria | 99.9995% at an inlet velocity of 0.25 m/s.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Retentive Capacity of the Gelatin Filter for Viruses  | 99.9% for T1 phages (coli phages) at a relative humidity of 50% and an inlet velocity of 0.3 m/s   99.94% for T3 phages (coli phages) at a relative humidity of 80% and an inlet velocity of 0.3 m/s.                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Order numbers                                         | 175-28-080-ACD, disposables (with incorporated gelatin filter) each sealed in a single polyethylene bag (box of 10)   175-28-080-BZD, disposables (with incorporated gelatin filter) for critical applications (e.g., isolators or clean rooms in the pharmaceutical industry), each sealed in three polyethylene bags (box of 10)   175-28-080-VPD, disposables (with incorporated gelatin filter) with label on innermost bag for better traceability   17801 filter holder for gelatin disposables.                                                                                                                      |
| Reference Literature                                  | 1. Product Information brochure on the MD8 airscan Air Sampler (SLF3001-e).<br>2. Data Sheet: Calibration Unit (SL-2028-e).<br>3. Application Notes: Detecting Airborne Influenza Virus A (H3N2)...(SM-4018-e).<br>4. Application Notes: Collecting Airborne Viruses and Phages Using the Sartorius Gelatin Membrane Filter Method (SLF4028-e).<br>5. Four translated special reprints from "Bio Tec" on the subject of sampling virus aerosols using the gelatin membrane filter (SM-8030-e, SM-8031-e, SM-8032-e, SM-8034-a).<br>6. Test Report of the Public Health Laboratory Service, England 1993, Report No. 201/93. |

Sartorius Stedim Biotech GmbH  
August-Spindler-Strasse 11  
37079 Goettingen, Germany  
Phone +49.551.308.0  
Fax +49.551.308.3289  
www.sartorius-stedim.com  
USA Toll-Free +1.800.368.7178  
UK +44.1372.737159  
France +33.442.845600  
Italy +39.055.63.40.41  
Spain +34.90.2110935  
Japan +81.3.3740.5407

Specifications subject to change without notice. Printed and copyrighted by Sartorius Stedim Biotech GmbH. | W  
Publication No.: SM-3011-e11098  
Order No.: 85030-506-76  
Ver. 09 | 2011