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

for Quantification and Differentiation of Airborne Organisms

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 m³ 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 cm²
Material: recyclable Cyrolite | Thermal resistance: 85°C | Dimensions: 93 x 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 cm²: 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).
2. Data Sheet: Calibration Unit (SL-2028-e).
3. Application Notes: Detecting Airborne Influenza Virus A (H3N2)...(SM-4018-e).
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).