


GERSTEL


Filtration Option for 4 mm Filters

Specifications

Uses

The Filtration Option for 4 mm filters for the GERSTEL MultiPurpose Sampler (MPS) provides automated sample filtration for up to 98 samples. The filtration step can be inserted into any injection method or any part of a sample preparation sequence using GERSTEL-MAESTRO software. Due to its ease of use, and time savings when compared to manual filtration procedures, this option makes filtration practical for almost any analysis. The routine removal of unwanted components from the sample provides significant improvement in chromatographic column life and instrument maintenance intervals. The GERSTEL filtration option automates widely used 4 mm syringe type filters that are available with many types of membrane materials and pore sizes.

Filtration Steps

- Sample is drawn into the syringe
- Air is drawn into the syringe
- Filter is attached to the syringe
- Sample is passed through the filter and filtrate is collected in a vial
- The filter is discarded or placed back in the filter tray

Characteristics

- Compatible with most standard LC and GC systems
- Compatible with most 4 mm filters
- Automated operation with GERSTEL MultiPurpose Sampler
- Can be operated with both sealed and open vials
- High sample capacity due to 98 positions per filter tray

System Requirements

- GERSTEL MultiPurpose Sampler
- Wash station for syringe clean-up
- Sample tray and tray holder

Components*

- Filter tray for up to 98 × 4 mm diameter syringe filters
- Filtrate collection tray for up 98 × 1.5 mL vials
- Waste container for used filters
- 2.5 mL syringe, syringe holder and gripper

Filtration Volume

- Approximately 1 mL, depending on the particle load

Filter Pore Sizes

- 0.2 μm
- 0.45 μm

Filter Membranes

- PTFE
- Polypropylene
- Regenerated cellulose
- Nylon
- PVDF
- Cellulose acetate

Filtration Velocity

- Approximately 20 μL/s

Materials

- Filter housing: PP
- Stainless steel needle

Syringes

- 1 mL or 2.5 mL, with gas connection
- optional – 5 mL without gas connection



Control

- GERSTEL MAESTRO software, integrated with Agilent® Technologies ChemStation or GC MassHunter software; integrated in the sequence table of Agilent LC MassHunter, AB Sciex Analyst®, or Thermo Scientific® Xcalibur™ Software or in MAESTRO stand-alone mode
- All parameters selectable by mouseclick

Operation Temperature

- 20 ... 35 °C

Storage Temperature

- 5 ... 40 °C

Dimensions (H x W x D)

- Filter tray on adjustable tray holder:
18.5 cm x 15.5 cm x 34.5 cm
- Filtrate tray on standard tray holder
15 cm x 14.5 cm x 34 cm
- Waste container
40 cm x 12 cm x 20 cm

Other Filtration Options

- Universal Filtration Option for up to 12 filters with a maximum filter housing diameter of 40 mm.