

GERSTEL

MultiPurpose Sampler

MPS liquid



MPS liquid



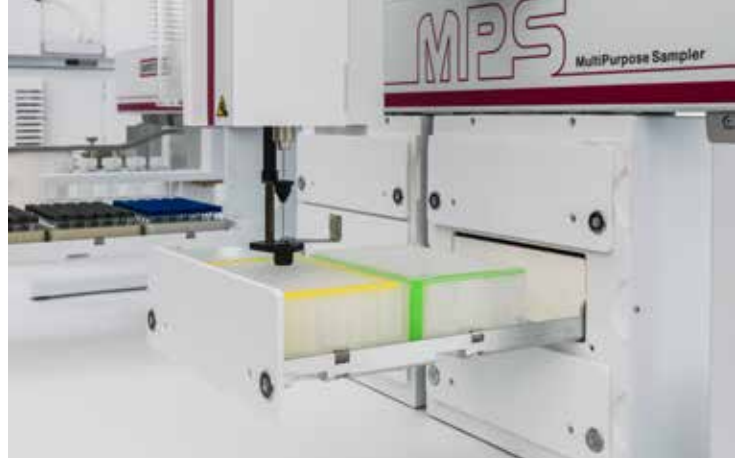
The MPS liquid is a highly efficient liquid autosampler for modern high-throughput GC/MS and LC/MS analysis work. Focusing on the core tasks of an auto-sampler, the MPS liquid offers large sample capacity, modern intuitive software control, as well as the capability to perform key sample preparation steps such as the addition of internal standards or a derivatization reagent. The MPS helps you ensure that your laboratory offers fast, responsive and productive analyses. Last but not least, the MPS liquid helps to ensure that your results are reliable and accurate.

The MPS liquid is controlled by the proven GERSTEL MAESTRO Software in the simplest and most productive manner: By mouse-click. MAESTRO offers a maximum of flexibility without losing any of the simplicity of intuitive control: Priority samples can be added to the running sequence at any point; and sample preparation steps are added with the ease and flexibility of a truly intuitive graphical user interface using MAESTRO Preplets. The built-in context sensitive help functions make generating and setting up methods and sequences a breeze, you never have to wait for an answer or to search through manuals. Equally, out of range entries are not accepted, giving you the assurance that methods and sequence are fully operational.

MPS liquid for LC/MS analysis



The MPS liquid autosampler is compatible with all standard LC- and LC/MS systems. In addition to autosampler vials of all sizes, the MPS liquid can be configured to operate with microwell- and deepwell plates. When tray stacks are configured, the capacity can be increased to more than 1000 samples.



MPS liquid with GC/MS system.

MPS liquid for GC (GC/MS) analysis



MPS liquid is compatible with all standard GC- and GC/MS systems and all standard GC inlets. For liquid sample introduction, the MPS liquid offers:

- Fast injection for discrimination free analyte introduction over a wide boiling range using split/splitless inlets
- Sandwich injection
- Large Volume Injection (LVI)

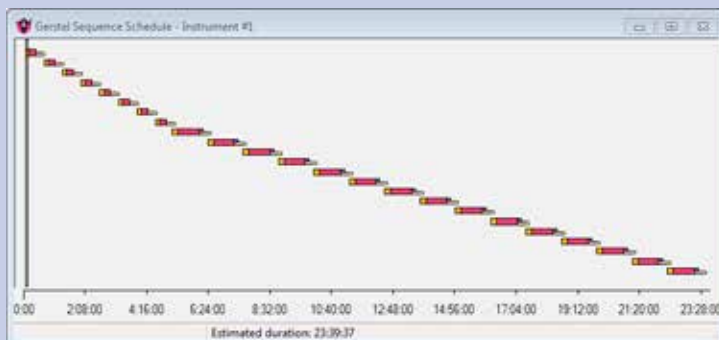
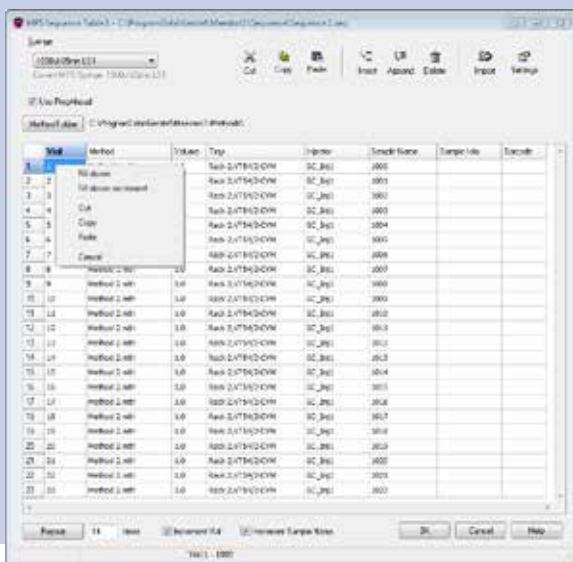
LVI offers a really simple way to improve limits of detection based on increasing the sample volume introduced to the GC inlet. The MAESTRO Large Volume Calculator makes it easy to develop your LVI method even for very large sample volumes with difficult to use solvents.

Depending on the GC/MS system used, the autosampler can be controlled as part of the complete analysis system with one integrated method and one integrated sequence table, simply coupled with the GC/MS sequence table or totally independent of the GC/MS system.

Simple and efficient software control



MAESTRO makes the operation of individual modules highly efficient and almost effortless since they can be integrated as part of the overall system with only one method and one sequence table for the complete analysis system using leading Chromatography Data Systems (CDS) from Agilent Technologies. GERSTEL modules and systems can also be operated coupled with the sequence table for simple setup with other leading manufacturer's CDS, or completely independent of the analysis system in stand-alone operation for added flexibility. MAESTRO provides you maximum productivity and reliability in your daily laboratory operations – all day, every day - and throughout the night.



Intelligent sequence table editor

The sequence table editor offers intelligent fill down functions such as fill down increment, for example, which automatically increments the number following the sample name. This makes it extremely easy to generate the sequence table for your daily workload based on existing methods and/or sequence tables: It only takes a few mouse-clicks to generate and set up a new sequence table with simple selection of methods, trays and GC inlets from pull down menus adapted to the configuration at hand: Only parameters relevant to the actual configuration are displayed making setup and operation as simple as possible. Equally, the method selection is simple and transparent. The system only allows the selection of methods that match the current configuration, invalid sequences cannot be activated and a warning will alert you in time before you can set up the analysis and go home for the day. You won't go wrong with MAESTRO.

Once the system is set up and running, priority samples can be inserted into the running sequence or added at any point without stopping the analysis or halting the sequence. Should a problem arise during the analysis sequence, an email message can alert the user allowing him or her to take corrective action and ensuring that the laboratory work is performed reliably and on time.

MPS liquid performance

MPS liquid is a new member of the MPS family:

- Dedicated liquid autosampler for GC/MS and LC/MS
- Fast, reliable high precision technology from the new MPS robotic series

Proven MAESTRO Software Control

- Unified control of MPS liquid and GERSTEL modules
- Simple and reliable method generation and set up with intuitive user interface and interactive on-screen help
- Fully integrated operation with Agilent Technologies chromatography data systems (CDS), using one method and one sequence table to operate the entire system
- Integrated sequence table with other leading CDSs
- Independently controlled stand-alone operation

Productive, flexible Autosampler

- Priority samples can be inserted into the running sequence without stopping the analysis or halting the sequence
- Modular system, easily adapted to future requirements by adding accessories
- Operates with all standard autosampler vials as well as micro- and deepwell Plates
- Barcode label reader for accurate sample ID
- Reliable results thanks to optimized discrimination-free fast split/splitless injection

Liquid Sample Preparation

- Simple addition of sample preparation steps using the intuitive MAESTRO Software
- Identical treatment of all samples with perfect timing. Analyte derivatization or addition of a standard can be performed immediately prior to sample introduction for each sample.

Optimized tray design

- High sample capacity with up to 156 vials per tray holder
- High capacity: Up to three 96 well plates per tray holder
- Flexible use of different vial sizes with up to three different trays types in every tray holder

Small foot print on the laboratory bench

- No extra bench space required, the MPS liquid mounts completely on top of the GC/MS system
- When mounting on an LC/MS system, the MPS liquid can in many cases be installed across the mass spectrometer

Reliable operation

- Highest reliability provides minimal downtime. The maintenance counter makes it easy to schedule replacement of consumables
- Full traceability of system operation history through log files
- E-mail alert in case of problems, enabling laboratory personnel to take corrective action and deliver results on time
- MAESTRO methods can be set up in 21CFR/11 compliance

MPS

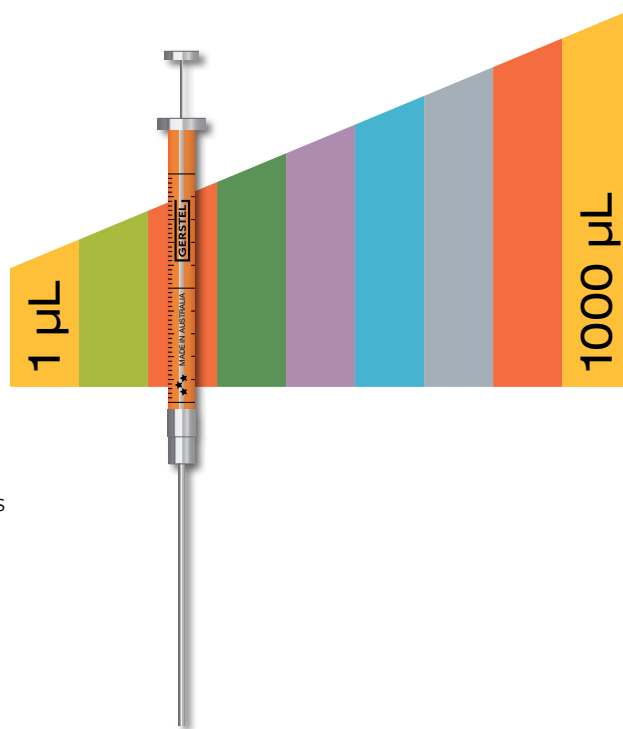
GERSTEL TriStar Syringes

You need an excellent autosampler syringe in order to perform complex sample preparation methods and reliably inject large numbers of samples into a chromatography system. Lowest possible sample to sample carryover and highest accuracy are required GERSTEL TriStar Syringes are designed and produced to meet these demands.

The TriStar syringe series offers several improvements to minimize or eliminate sources of carry-over, such as reduced dead volume and elimination of active sites. The sample is kept clean and uncontaminated, and the needle remains firmly fixed without the risk of solvent attacking the sealant.

The rugged and inert materials used provide resilience to solvents, expanded temperature range and long operating life.

The new design allows TriStar syringes to perform 10 times more injections than standard syringes. Syringes for the GERSTEL MPS are available in all standard sizes.



Benefits of the GERSTEL TriStar Syringes

Color coded

- Easy selection of the correct syringe size through clear and unambiguous color coding
- Reliable analysis, the risk of incorrect syringe selection is minimized

Inert, rugged materials

- Reliable analysis performance with solvent-resistant surfaces
- Extended temperature range for increased ruggedness and application range
- Extended operation life

Minimized background

- Inert surfaces and elimination of contact between sample and sealants

Optimized assembly

- Carry-over minimized through reduced residual volumes in the plunger assembly, improved surfaces and PTFE surface sealing
- Carry over and contamination reduced through improved syringe-to-needle connection, eliminating cavities and contact with sealant
- Active plunger tip provides improved Headspace syringe sealing and reduced temperature equilibration times resulting in improved flexibility and productivity



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GERSTEL

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