

News at Analytica 2008

Analytica 2008 in Munich is taking place next week and it is our pleasure to invite you to our booth A2.185. You will easily spot our Swiss „Tsunami“ booth with the Graefenroda garden gnomes. We share the booth with our friends from Optimize Technologies, USA who are producing high quality HPLC spare parts and columns. Our Swiss visitors will find a representative from infochroma at the booth, and our visitors from Austria representatives from Merz Brothers GmbH. We will answer your questions on all aspects of Chromatography spare parts, consumables and service. Visiting our booth will be worth while for endusers as well as distributors.

We have largely extended our range of vials and put a lot of thought into optimized microsampling. Find the conclusion to our thoughts in the attached article.

We have a new range of Storage and Septum Vials with screw caps that are available in 6 colours for colour coding your samples. These caps plus the high quality cardboard box with grit divider in which they are packed and which can be used for safely storing the vials is making them different to others. This range of vials will keep growing as we are adding new dimensions and threads.

Now we can produce our patented „Vase“ Vial for optimized microsampling in any size. We are working on a standard programme in clear and amber glass and will present the first versions at Analytica.

We have also invested a lot in „additional benefits“ such as identification or numbering of vials with labels or lasermarking with Barcode or 2D-Matrix Code or surface treatment of vials such as silanisation, siliconisation, sterilisation or depyrogenation.

We also have a new Screw-Top Headspace Vial in the pipeline and will be showing you a first version. We have positive response to our Screw-Top Headspace Vial from the market. This product will be available this summer.

We are continually adapting our production possibilities to the needs of the market in order to continually offer you new products to solve current problems. Talk to us, within the bounds of our possibilities, we will develop a solution to your current problem.

Are you in need of a ticket for Analytica 2008? Write to us (see email address below), we will send you an access code with which you can register for free and on-line for Analytica



optimized microsampling with chromatography vials

Autosampler Vials for Chromatography with 12 x 32 mm dimension are used in most instruments. If there is only little sample volume or as much sample as possible should be removed from the vial, an optimized solution is needed.



Chromatography autosamplers use mostly vials which are 12 x 32 mm in size. These vials can take 1 ml sample. However, if there is only a limited sample volume available or as much sample as possible should be removed from the vial, an optimized solution is needed. A vial that stands without support and keeps the outer dimension so that it can still be used in common autosamplers.

We developed three ideal solutions for this problem. To find the right solution for a certain application means to ask one important question. How much sample volume do I have and how much sample do I need for the analysis. The difference between the two, the volume that remains in the vial, we call residual volume. This residual volume defines which vial is needed.

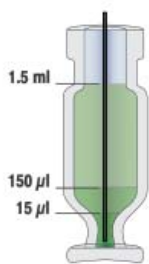
Many vial suppliers advertise the dead volume, the quantity of sample that cannot be withdrawn from the vial; however this volume cannot

be defined as simply as that. The insertion depth of the needle, the geometry of the needle, how well the needle hole is covered with sample so that no air is sucked up, all these factors define the dead volume of an application. We find that the definition of the dead volume without the exact specification of those parameters is useless.

We define the volume in the foot of the vial at 4 mm filling level, with the provision that an autosampler needle inserts down to about 1-2 mm above base and that the needle should be covered with 2 mm sample to guarantee a reliable sampling. The actual dead volume of our vials is usually a lot smaller than the residual volume that we publish, yet if an autosampler with side hole needle is used, the published value can also be too small. A regular 12 x 32 mm standard vial for example has a residual volume of 400 μ l.

Which one of our 3 microvials should be used?

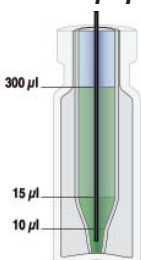
the 1.5 ml V-Vial our vase vial



Our vase vial or V15 μ -Vial has the largest volume. It takes 1.5 ml up to its shoulder and has 15 μ l at the foot. Since our vase vial is the most economic solution, we recommend this vial for all applications that go with a residual volume of 15 μ l. The vase is also the most versatile vial, it is available with all common closure versions including 8-425 screw top which we call „NM“ or „Narrow Mouth“ as these vials have a narrow

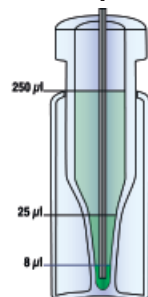
opening. Notabene the vase vial is our very own invention and we patented the form as well as the production process. Now we also produce bigger vase vials, but this will make another news article.

the 350 μ l μ -Vial



Our first microvial, historically speaking, is the i3 μ type with a fused insert that has one base with the outer vial. It's like a vial and insert combination, only that vial and insert are pre-assembled, fused and the insert well centred. The total volume is 350 μ l with 10 μ l at the foot.

the 250 μ l insert Vial iV2 μ



Our latest microvial is the iV2 μ type. It's different because the insert wears the head of the vial so that the insert itself is closed. That means no sample can escape into the outer vial. The body of the vial is a simple tube that is fused with the base of the insert. We produce these vials on a one-station machine, we especially developed, a machine that allows us to draw the insert longer and more narrow than is possible with common techniques. The total volume is 250 μ l with 8 μ l at the foot. The iV2 μ is especially suited for volatile micro samples or gas chromatography applications and rounds our limited volume range off at the bottom.

our service

Part of our service, besides assisting you in the proper choice of vial for your application, is offering a wide selection of closures. Our new 122 page strong catalogue shows a comprehensive programme of glass containers for Chromatography and the day-to-day laboratory use. We are happy to send you samples so that you can test the vials and closures with your application.