



Microlab Autosampler Vials

Microlab Scientific offer a complete range of consumables for GC, HPLC and Headspace analysis. This comprises vials, caps, and septas. Microlab vials, caps and septa are manufactured with highly-sophisticated production technology out of high quality raw materials under strict standards of cleanliness. The vials are almost all made out of Type I, 33 expansion glasses. The flared end of the vial makes loading a liquid sample much easier since the flare helps guide the syringe needle into the vial. The flared end also makes the vial much stronger so that vials can easily be inserted and removed from the end of the probe using tweezers without breaking the glass. Microlab sample vials improve your laboratory productivity, by reducing costs and saving time.

Selection Guide of vials, caps and septa

Step 1, distinguish raw materials

Vials



Clear glass vials

- Made from Type 1 Class A Borosilicate glass of ASTM E438
- Most chemically inert composition of glass readily available for today's laboratories
- Has an expansion coefficient of approximately $33 \times 10^{-7}^{\circ} \text{C}$



Amber glass vials

- Made from Type 1 Class B Borosilicate glass of ASTM E438
- This mixture is more alkaline than Class A glass, but is adequate for many uses in the laboratory
- All amber borosilicate glass is made of Class B unless otherwise specified
- Has an expansion coefficient of $51 \times 10^{-7}^{\circ} \text{C}$

Caps for vials

8-425	9-425	crimp	13-425	Snap	headspace	24-400





Septa



PTFE/Silicone

- Excellent resealing capabilities
- Highly recommended for multiple injections and sample storage
- Resists coring and is autoclavable
- PTFE chemical resistance until punctured then the septa/liner will have the compatibility of silicone
- Temperature range -40° C to 200° C



Pre-slit PTFE/Silicone

- Reduces the possibility of coring with blunt tipped needles or for applications using a thin gauge needle
- Used to prevent vacuum from forming inside the vial
- Temperature range -40° C to 200° C

Step 2, how to measure for vial, cap and septa

Vials and caps are described with a two-part number system referred to as the Finish. (Example: 13-425). The first number represents the neck size of the vial or cap in millimeters.

The vial is measured from the outside edge of the threads on one side to the outer edge of the threads on the opposite side (Figure 1). The cap is measured from one side of the inner wall to the opposite side of the inner wall (Figure 2).

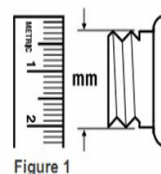


Figure 1

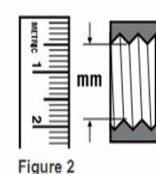


Figure 2

The second number describes the thread pattern and assures the bottle and cap will fit together (Figure 3).

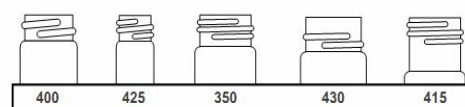


Figure 3

Septum size can be determined by comparing septa or crimp seals to the measured circles (Figure 4).



Figure 4





Microlab 2ml and 4ml Autosampler Vials

Features:

- Tightest dimensional tolerances in industry
- MS scan on certificate in every pack
- Raw Material: Glass tubing, Borosilicate, Type 1, Class A from Schott.
- Computerized camera system for quality control throughout the manufacturing process to test critical dimensions, including Height, Diameter, Bottom Thickness and Neck/Thread.
- Only vial/cap/septum combination tested by LCMS for cleanliness
- Cap/Septum - tested by head space GC to ensure proper curing of silicone polymer

2ml 8-425 Standard Mouth Screw Thread Vials, 12*32mm



- The original, standard opening vial with an 8-425 thread size screw cap.
- Work with a variety of autosamplers requiring narrow neck vials.
- Available with black caps and a variety of septa to meet the needs of your application.

Order Information

Vials, 100pcs/pk

Description	Microlab Scientific	Agilent	Crouns	La-pha-pack
2ml Clear vial, 8-425 screw top	SV0802C	5183-4428	VZS-0208C-100	11 09 0210
2ml Clear vial, 8-425 screw top, graduated with writing area	SV0812C		VZS-0208C-100	11 09 0419
2ml Amber vial, 8-425 screw top	SV0802A	5183-4429	VZS-0208A-100	11 09 0259
2ml Amber vial, 8-425 screw top, graduated with writing area	SV0812A		VZS-0208A-100	11 09 0382

Caps+Septa for 8-425 screw top vials, 100pcs/pk

Description	Part#
Caps+Septa preassembled	
White PTFE/red silicone septa + Black screw cap with hole, for 8-425	SV0801CS
Red PTFE/white silicone septa + Black screw cap with hole, for 8-425	SV0802CS
Blue PTFE/White silicone septa, Pre-slit+ Black screw cap with hole, for 8-425	SV0803CS





2ml 9-425 Wide Mouth Screw Thread Vials, 12*32mm



- 40% larger opening than standard narrow opening vials.
- The Universal Autosampler Vial:
Compared with 11mm crimp top type, the 9-425 screw one can be much applied as hand removing convenient.

The vials can be used on all common autosamplers due to their technical geometry, preferentially they are found on Agilent, HTA, Shimadzu, Thermo, Varian, Waters, etc.

Order Information

Vials, 100pcs/pk

Description	Microlab Scientific	Agilent	Crouns	La-pha-pack
2ml Clear vial, 9-425 screw top	SV0902C	5182-0714	VZS-0209C-100	11 09 0500
2ml Clear vial, 9-425 screw top, graduated with writing area	SV0912C	5182-0715	VZS-0209C-100	11 09 0519
2ml Amber vial, 9-425 screw top	SV0902A	5188-6535	VZS-0209A-100	
2ml Amber vial, 9-425 screw top, graduated with writing area	SV0912A	5182-0716	VZS-0209A-100	11 09 0520

Caps+Septa for 9-425 screw top vials, 100pcs/pk

Description	Part#
Caps+Septa preassembled	
White PTFE/red silicone septa + Blue screw cap with hole, for 9-425	SV0901CS
Red PTFE/white silicone septa + Blue screw cap with hole, for 9-425	SV0902CS
Blue PTFE/white silicone septa, Pre-slit + Blue screw cap with hole, for 9-425	SV0903CS

2ml 11mm Wide Mouth Crimp Top Vials, 12*32mm



- Standard vials for GC and HPLC
- 40% larger opening than standard narrow opening vials enables easy filling and improves auto-sampler needle accuracy.
- Provides the tightest seal, needs crimping tool.
- Precision-formed neck for improved autosampler handling





Order Information

Vials, 100pcs/pk

Description	Microlab Scientific	Agilent	Crouns	La-pha-pack
2ml Clear vial, 11mm crimp top	SV0902C	5181-3375	VZS-02CC-100	11 09 0356
2ml Clear vial, 11mm crimp top, graduated with writing area	SV0912C	5182-0543	VZS-02CC-100	11 09 0476
2ml Amber vial, 11mm crimp top	SV0902A			
2ml Amber vial, 11mm crimp top, graduated with writing area	SV0912A	5181-3376	VZS-02CA-100	11 09 0477

Caps+Septa for 11mm crimp top vials, 100pcs/pk

Description	Part#
Caps+Septa preassembled	
White PTFE/red silicone septa+ Aluminium cap, for 11mm crimp top vial	SV1101CS
Red PTFE/white silicone septa+ Aluminium cap, for 11mm crimp top vial	SV1102CS

2ml Wide Mouth Snap Ring Vials, 12*32mm



- 40% larger target area which makes it much safer for the autosampler needle.
- Use Snap or crimp cap.
- Unique design allows secure seal.
- Precision-formed neck improves autosampler handling.

Order Information

Vials, 100pcs/pk

Description	Microlab Scientific	Agilent	Crouns	La-pha-pack
2ml Clear vial, snap top, 12*32mm	SV0902C	5182-0544	VZS-02SC-100	11 09 0627
2ml Clear vial, snap top, graduated with writing area, 12*32mm	SV0912C	5182-0546	VZS-02SC-100	11 09 0644
2ml Amber vial, snap top, 12*32mm	SV0902A			
2ml Amber vial, snap top, graduated with writing area, 12*32mm	SV0912A	5182-0545	VZS-02SA-100	11 09 0645





Caps+Septa for 11mm crimp top vials, 100pcs/pk

Description	Part#
Caps+Septa preassembled	
White PTFE/Red silicone septa + snap cap with hole, for 2ml snap top vial	SV1201CS
Red PTFE/White silicone septa + snap cap with hole, for 2ml snap top vial	SV1202CS

4ml 13-425 Screw Thread Vials, 45*15mm



- 15x45mm vials have a 13-425 GPI thread and can hold up to 4ml of sample.
- Use the 13 x 425 caps with septa for use as sample vials and with diffusion caps for wash vials. With closed top screw seals, these vials can also be used as storage vials.
- The vials are preferentially used on instruments of the following manufacturers: Dionex, Shimadzu(AOC-14/1400, LC-10A and the SIL-2AS), Spark, Varian, VWR (MERCK®)/ Agilent 6850 autosampler tray (G2880A), Perkin-Elmer Autosystem GC, Waters 48 position tray autosampler, etc.

Order Information

Vials, 100pcs/pk

Description	Microlab Scientific	Agilent	Crouns	La-pha-pack
4ml Clear vial, 13-425 screw top	SV1304C	5183-4448	VZS-0415C-100	13 09 0222
4ml Clear vial, 13-425 screw top, graduated with writing area	SV1314C		VZS-0415C-100	13 09 1335
4ml Amber vial, 13-425 screw top	SV1304A	5183-4450	VZS-0415A-100	13 09 0280
4ml Amber vial, 13-425 screw top, graduated with writing area	SV1314A		VZS-0415A-100	13 09 1336

Caps+Septa for 11mm crimp top vials, 100pcs/pk

Description	Part#
Caps+Septa preassembled	
Red PTFE/White silicone septa + Black cap with hole, for 4ml screw top vial	SV014CS
Red PTFE/White silicone septa + Black cap without hole, for 4ml screw top vial	SV104CS





Microlab Headspace Vials

In headspace analysis, the sample is sealed into the vial and heated until the concentration in the gas phase (headspace) is in equilibrium with the concentration in the liquid phase. An aliquot from the headspace is then analyzed. These beveled neck vials are available in both 10 ml and 20 ml capacities, flat or rounded bottom. The 20 mm crimp caps provide a consistently secure seal.



Flat Top,
Flat Bottom



Flat Top,
Round Bottom,



Bevel Top,
Flat Bottom



Bevel Top,
Round Bottom



Screw Top,
Flat Bottom,



Screw Top,
Round Bottom

Feature

- Headspace vials made of Type I, 33 expansion glasses
- Choice of crimp or screw top vials, two vial sizes, 10/20ml
- Six finish styles available, available in flat or rounded bottom designs
- Choice of a pressure safety release cap at 45 psi

Order Information

Vials

Description	Part#
10ml Clear vial, 22.5×46mm, 20mm crimp top, flat bottom	SV010C
20ml Clear vial, 22.5×75mm, 20mm crimp top, flat bottom	SV020C
20ml Clear vial, 22.5×75mm, 20mm crimp top, round bottom	SV120C
10ml Clear vial, 22.5×46mm, 18mm screw top, round bottom	SV110C
20ml Clear vial, 22.5×75mm, 18mm screw top, round bottom	SV220C

Caps+Septa for 11mm crimp top vials, 100pcs/pk

Description	Part#
Caps+Septa preassembled	
White PTFE/White Silicone septa + Aluminium cap with hole, for 10ml/20ml crimp top vial	SV020CS
Red PTFE/White Silicone septa+ Aluminium cap with hole, for 10ml/20ml crimp top vial	SV120CS
Blue PTFE/ White silicone septa + Silver screw cap with hole, for 18mm screw top vial	SV220CS





Microlab Screw Vials for Storage/VOA Vails



- Recommended by EPA CFR Part 136 and under EPA 40 CFR 141
- Manufactured of Clear or Amber borosilicate glass
- Vials, caps and septa are available as separate components or as kits
- Temperature range -40°C to 125°C

24-400 Vials for Storage, 100pcs/pk

Description	Part#
20ml Clear vial, 24-400 screw top	SV320C
20ml Amber vial, 24-400 screw top	SV320A
40ml Clear vial, 24-400 screw top	SV040C
40ml Amber vial, 24-400 screw top	SV040A

Caps and Septa for Storage Vials, 100pcs/pk

Description	Part#
Caps+Septa preassembled	
Nature PTFE/Nature silicone septa + Black screw cap without hole, for 24-400 screw top vial	SV024CS
Nature PTFE/Nature silicone septa + Black screw cap with hole, for 24-400 screw top vial	SV124CS

For General Questions, pls contact: info@microlabscientific.com

For Technique Questions, pls contact: support@microlabscientific.com

