



## About Hawach Scientific

Hawach is a modern enterprise, contains well integration of R&D, production, sales and after-sales service. Hawach located at Xi'an High-Tech development Zone, which is one of the five national level High-Tech development Zones with plant covers a production workshop area of 8000 m<sup>2</sup>, with 4000 m<sup>2</sup> of clean room. Hawach mainly produces and exports laboratory consumables to the global market over a decade. The product range mainly refers to Sample Preparation of LC/GC Chromatography, Microporous Filtration, Molecular Diagnostics, Cell culture as well as other scientific supply fields, etc.

Hawach Scientific never stop upgrading our technique, corporate with many famous universities including Northwestern Polytechnical Universities, Xi'an University of Technology, and Shaanxi University of Science and Technology. Hawach has established laboratory analysis institute, research and development center.

In Hawach Scientific, quality always comes first, in the very beginning, Hawach started to learn world advanced production technology and experience, especially quality control testing laboratory. We have ultraviolet absorption detector (UVD), liquid chromatography, integrity tester, flow rate tester, dielectric strength tester, heating plate, laser particle counter etc. After production, all articles are delivered to QC center, only qualified products can be to the next procedure.

Today, we are happy to see our products exported to the United States, Korea, Japan, UK, Germany, Dubai, Israel and Mexico. The quality and service of our products receive consistent approval from customers. Our prospect is to be leader and century enterprise, Provide superior products, service and solution to global laboratories and factories. Hawach Scientific's mission is "Accomplish Sciences, help employee realized their dreams.", By joint efforts of Hawach's employee, business partners and customers, we believe Hawach can be a leader of laboratory industry.



# Sample Vial, Septa & Cap

## HPLC Auto-sampler Vials Review

Picture			
Cap type	Screw Thread Top	Snap Top	Crimp Top
Volume	2 ml	2ml	2ml
Caliber	8 mm, 9 mm	11mm	11mm
Color	Clear, Amber		
Septa	Pre-slit and No Pre-slit PTFE/silicone Septa		
Cap	Blue&Black PP Cap		

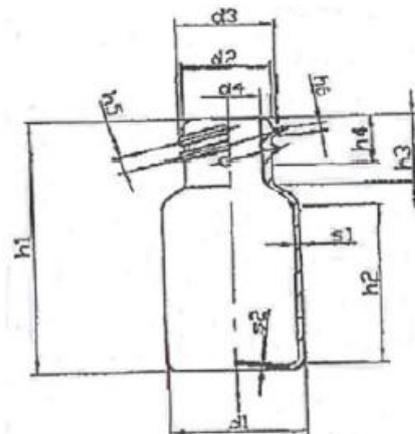
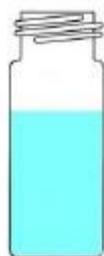
### 8mm Screw Top Vials

8mm (8-425) screw thread vials are the original smaller opening auto-sampler vials. They are designed to work in a variety of auto-sampler requiring narrow neck vials. Clear and Amber vials with or without graduated writing area. Both pre-slit and non pre-slit caps are available. All of Hawach vials are excellent fitted for auto-samplers.

### Features

- \*2 ml, 12 x 32 mm, 8 mm diameter, big volume also available
- \*Color: Clear & Amber
- \*Packaged in a unique box designed to reduce vial breakage
- \*Unique thread design for consistently secure seal
- \*Precision-formed neck for optimal robotic arm handling
- \*Rigorous quality assurance for dimensional consistency from lot-to-lot
- \*Optional ceramic write-on spot with fill marks
- \*Certified for full warranted compatibility with autosampler

## Instruction Drawing



2ml Screw Top Vial(8-425)

d1	$11.6 \pm 0.25$
d2	$\leq 8.0$
d4	$5.0 \pm 0.3$
h1	$32.0 \pm 0.50$
d3	$8.8 \pm 0.30$
h3	$\approx 7.8$
h5	1.6

## Ordering Information

Part No.	Description	Qty/pk
SVS202C	2ml Clear vial, 12×32mm, DN8mm, screw top, USP1 Borosilicate Glass	100
SVS212C	2ml Clear vial, 12×32mm, DN8mm, screw top, graduated with writing area, USP1 Borosilicate Glass	100
SVS202A	2ml Amber vial, 12×32mm, DN8mm, screw top, USP1 Borosilicate Glass	100
SVS212A	2ml Amber vial, 12×32mm, DN8mm, screw top graduated with writing area, USP1 Borosilicate Glass	100
SVS202C-2	2ml Clear vial, 12×32mm, DN8mm, Precise 7.0 Borosilicate Glass, screw top	100
SVS212C-2	2ml Clear vial, 12×32mm, DN8mm, screw top, graduated with writing area, Precise 7.0 Borosilicate Glass	100
SVS201A-2	2ml Amber vial, 12×32mm, DN9mm, Screw top, Precise 7.0 Borosilicate Glass, screw top	100
SVS211A-2	2ml Amber vial, 12×32mm, DN9mm, Screw top graduated with writing area, Precise 7.0 Borosilicate Glass, screw top	100

## 8mm Assembled Caps and Septa for Screw Top Vial

Pre-assembled caps and septa reduce the chance of contamination of the septa during sample preparation. These caps are manufactured from high quality polypropylene and fit all of the 8mm screw top vials.

### Features

- \*Compatible with 12x32mm 8mm screw cap vials
- \*Both Pre-slit and No pre-slit septa are available
- \*PTFE/Silicone/PTFE septa are autoclavable and offer excellent resistance to coring
- \*Pre-assembled caps save you time and reduce contamination

### Septum Selection Guide

Septum Material	Compatible with	Incompatible with	Resealability	Max. Temperature
PTFE/Silicone, PTFE/Silicone/PTFE	PTFE resistance until punctured, then septa will have compatibility of silicone	----	Average	< 200°C
Silicone/Silicone Rubber	Alcohol, acetone, ether, DMF, DMSO	ACN, THF, benzene chloroform, pyridine, toluene, hexane, heptane	Excellent	< 200°C
PTFE/Natural or Butyl Rubber	PTFE resistance until punctured, then septa will have compatibility of rubber	----	Good	< 100°C
Rubber (Natural or Butyl)	ACN, acetone, DMF, alcohols, diethylamine, DMSO, phenols	Chlorinated solvents, aromatics, hydrocarbons, carbon disulfide	Excellent	< 100°C

### Ordering Information

Part No.	Description	Qty/pk
SLSSC001S	Preassemble, No pre-silt PTFE/silicone septa + Black screw cap, for 8-425 Screw Vials	100
SLSSC001SP	Preassemble, Pre-slit PTFE/silicone septa + Black screw cap, for 8-425 Screw Vials	100

## 9mm Screw Top Vials

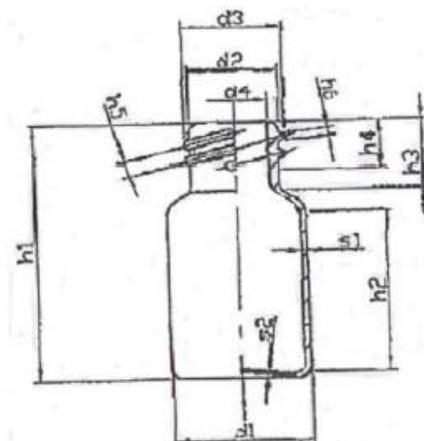
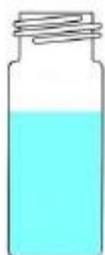
9mm screw thread vials have a 9-425GPI thread and the closure is dimensionally equivalent to 11mm crimp cap vials. This means that they can be used in any autosampler that use 11mm crimp vials. 9mm screw caps have an advantage over 11mm crimp caps because 9mm screw caps can easily be applied and removed by hand and be reused. Clear and Amber vials with or without graduated writing area. Both pre-slit and non pre-slit caps are available. All of Hawach vials are excellent fitted for autosamplers.



## Features

- \*2 ml, 12 x 32 mm, 9 mm diameter, big volume also available
- \*Color: Clear & Amber
- \*Packaged in a unique box designed to reduce vial breakage
- \*40% larger opening than standard narrow opening vials
- \*Precision-formed neck for optimal robotic arm handling
- \*Rigorous quality assurance for dimensional consistency from lot-to-lot
- \*Optional ceramic write-on spot with fill marks
- \*Certified for full warranted compatibility with autosampler

## Instruction Drawing



2ml Screw Top Vial(9-425)

d1	11.6±0.2
d2	8.1-8.5
d4	6.0±0.2
h1	32.0±0.5
d3	9.4±0.25
h3	7.3-7.9
h5	≈1.2

## Ordering Information

Part No.	Description	Qty/pk
SVS201C	2ml Clear vial, 12×32mm, DN9mm, screw top	100
SVS211C	2ml Clear vial, 12×32mm, DN9mm, screw top, graduated with writing area	100
SVS201A	2ml Amber vial, 12×32mm, DN9mm, screw top	100
SVS211A	2ml Amber vial, 12×32mm, DN9mm, screw top graduated with writing area	100
SVS201C-2	2ml Clear vial, 12×32mm, DN9mm, Precise 7.0 Borosilicate Glass, screw top	100
SVS211C-2	2ml Clear vial, 12×32mm, DN9mm, screw top, graduated with writing area, Precise 7.0 Borosilicate Glass	100

## 9mm Assembled Caps and Septa for Screw Top Vial

9-425 thread closures have the profile of a crimp or snap cap so are compatible with robotic autosamplers. These caps are manufactured from high quality polypropylene and fit all 9mm screw cap vials.

### Features

- \*Compatible with 12x32mm 9mm screw cap vials
- \*Both Pre-slit and No pre-slit septa are available
- \*PTFE/Silicone/PTFE septa are autoclavable and offer excellent resistance to coring
- \*With a temperature range of -40°C to 200°C
- \*Pre-assembled caps save you time and reduce contamination

### Septum Selection Guide

Septum Material	Compatible with	Incompatible with	Resealability	Max. Temperature
PTFE/Silicone, PTFE/Silicone/PTFE	PTFE resistance until punctured, then septa will have compatibility of silicone	----	Average	< 200°C
Silicone/Silicone Rubber	Alcohol, acetone, ether, DMF, DMSO	ACN, THF, benzene chloroform, pyridine, toluene, hexane, heptane	Excellent	< 200°C
PTFE/Natural	PTFE resistance until punctured,	----	Good	< 100°C

or Butyl Rubber	then septa will have compatibility of rubber			
Rubber (Natural or Butyl)	ACN, acetone, DMF, alcohols, diethylamine, DMSO, phenols	Chlorinated solvents, aromatics, hydrocarbons, carbon disulfide	Excellent	< 100°C

## Ordering Information

### General Cap for vials 9-425

Part No.	Description	Qty/pk
SLSSC002S	Preassemble, No pre-silt PTFE/silicone septa + Blue screw cap, for 9-425 Screw Vials	100
SLSSC002SP	Preassemble, Pre-slit PTFE/silicone septa + Blue screw cap, for 9-425 Screw Vials	100

### New Super Bonded Caps for vials 9-425

Part No.	Description	Qty/pk
SLSSC002SR	Super Bonded Red No pre-slit PTFE/silicone septa into a 9mm Blue screw cap	100
SLSSC002SPR	Super Bonded Red Pre-slit PTFE/silicone septa into a 9mm Blue screw cap	100
SLSSC002SPB	Super Bonded Blue Pre-slit PTFE/silicone septa into a 9mm Blue screw cap	100

## Micro-Inserts & Shell Vials

We also offer customer micro-insert and shell vials as below by glass material.

Cat. No.	Description	Dimension(mm)	Qty/ Pack
<b>SLMI1502S</b>	0.15 ml glass insert for 8 mm vials, clear, Conical with plastic bottom spring	29×5	100
<b>SLMI2502C</b>	0.25 ml glass insert for 8 mm vials, clear, Conical point	31×5	100
<b>SLMI2501S</b>	0.25 ml glass insert for 9 mm vials, clear, Conical with plastic bottom spring	29×5.7	100
<b>SLMI3001F</b>	0.3 ml glass insert for 9 mm vials, clear, Flat bottom	31×6	100
<b>SLMI1000V</b>	1 ml shell vial, clear, Flat bottom	40×8.2	100

## Snap Top Vials

Snap Vials in 11mm size provide a secure seal that minimize evaporation, even with volatile samples. Snap caps are often more convenient than crimp caps they can easily be applied and remove by hand. An audible click ensures a secure seal has been formed and that the cap is correctly aligned. Both snap and crimp vials can be closed with either snap caps or crimp caps. Clear and amber vials with or without graduated writing area in available. Both pre-slit and non pre-slit caps are in supplied. All of Hawach vials are excellent fitted for autosamplers.



## Features

- \*2ml, 12 x 32 mm, 11mm mouth
- \*Color: Clear & Amber
- \*Packaged in a unique box designed to reduce vial breakage
- \*Unique snap design for easily operation
- \*Optional ceramic write-on spot with fill marks
- \*Precision-formed neck for optimal robotic arm handling

## Ordering Information

Part No.	Description	Qty/pk
SSVN201C	2ml Clear vial, 12×32mm, Snap Top(11 mm mouth)	100
SSVN211C	2ml Clear vial, 12×32mm, Snap Top(11 mm mouth), graduated with writing area	100
SSVN201A	2ml Amber vial, 12×32mm, Snap Top(11 mm mouth)	100
SSVN211A	2ml Amber vial, 12×32mm, Snap Top(11 mm mouth), graduated with writing area	100
SSVN201C-2	2ml Clear vial, 12×32mm, Precise 7.0 Borosilicate Glass, Snap Top(11 mm mouth)	100
SSVN211C-2	2ml Clear vial, 12×32mm, Precise 7.0 Borosilicate Glass, Snap Top(11 mm mouth), graduated with writing area	100

## 11mm Assembled Snap Cap and Septa

The plastic caps used are made of high quality polypropylene to exact manufacturing tolerances and lined in a controlled environment. Available cap colors are black, blue, and clear. Other colors are available upon request. The septa are manufactured using the finest and purest silicone rubber and highest quality PTFE film. We utilize proprietary laminating/bonding and conditioning technology to produce them with ease needle penetration.

### Features

- \*Pre-assembled 11mm clear snap cap with 1mm PTFE/Silicone septum
- \*Snap caps provide a secure seal that minimize evaporation, even with volatile samples
- \*Snap caps can be applied and removed by hand
- \*Compatible with 12x32mm snap/crimp vials
- \*PTFE/Silicone septa offer excellent resealing capabilities
- \*Temperature range of -40°C to 200°C
- \*Pre-assembled caps save you time and reduce contamination

### Septum Selection Guide

Septum Material	Compatible with	Incompatible with	Resealability	Max. Temperature
PTFE/Silicone, PTFE/Silicone/PTFE	PTFE resistance until punctured, then septa will have compatibility of silicone	----	Average	< 200°C
Silicone/Silicone Rubber	Alcohol, acetone, ether, DMF, DMSO	ACN, THF, benzene chloroform, pyridine, toluene, hexane, heptane	Excellent	< 200°C
PTFE/Natural or Butyl Rubber	PTFE resistance until punctured, then septa will have compatibility of rubber	----	Good	< 100°C
Rubber (Natural or Butyl)	ACN, acetone, DMF, alcohols, diethylamine, DMSO, phenols	Chlorinated solvents, aromatics, hydrocarbon carbon disulfide	Excellent	< 100°C

### Ordering Information

Part No.	Description	Qty/pk
SLSNC002S	Preassemble, No pre-slit PTFE/silicone septa + White plastic snap cap, for Snap Vials	100
SLSNC002SP	Preassemble, Pre-slit PTFE/silicone septa + White plastic snap cap, for Snap Vials	100

## Crimp Top Vials

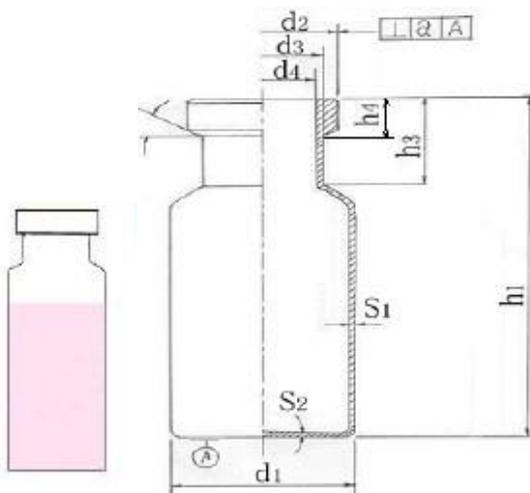
Crimp cap provides a larger target area for improved autosampler needle accuracy. We recommends using Certified crimp caps with PTFE/silicone septa to ensure seamless operation with your autosampler. And our crimp caps are guaranteed to work with your instrument to reduce autosampler malfunctioning and contamination. We have 2ml 12x32mm vials with 11mm mouth, Clear and Amber vials with or without graduated writing area in available. Both pre-slit and non pre-slit caps are in supplied. All of Hawach vials are excellent fitted for autosamplers.



## Features

- \*2 ml, 12 x 32 mm
- \*Color: Clear & Amber
- \*Available in unique packaging designed to reduce vial breakage
- \*Tightly controlled crown for improved crimping
- \*Precision-formed neck for improved autosampler handling
- \*Rigorous quality assurance provides dimensional consistency from lot-to-lot
- \*Optional ceramic write-on spot with fill marks
- \*Certified for full warranted compatibility with autosampler

## Instruction Drawing



2ml Crimp Top Vial

d1	11.6±0.3
h1	32.0±0.5
d2	10.7±0.2
d4	6.0±0.2
h4	3.6±0.2
d3	8.3±0.3



## Ordering Information

Part No.	Description	Qty/pk
SVC201C	2ml Clear vial, 12×32mm, crimp top(11 mm mouth)	100
SVC211C	2ml Clear vial, 12×32mm, crimp top(11 mm mouth), graduated with writing area	100
SVC201A	2ml Amber vial, 12×32mm, crimp top(11 mm mouth)	100
SVC211A	2ml Amber vial, 12×32mm, crimp top(11 mm mouth), graduated with writing area	100
SVC201C-2	2ml Clear vial, 12×32mm, Precise 7.0 Borosilicate Glass, crimp top(11 mm mouth)	100
SVC211C-2	2ml Clear vial, 12×32mm, Precise 7.0 Borosilicate Glass, crimp top(11 mm mouth), graduated with writing area	100

## 11mm Assembled Crimp Cap and Septa

Crimp caps provide the tightest seal, reducing the chance of sample evaporation. The 12x32mm crimp vials and 11mm aluminium crimp caps are economical and easy to use with Hawach vial crimping tools.

### Features

- \*11mm silver aluminum crimp cap and 1mm PTFE/silicone/PTFE septum
- \*Crimp caps provide the tightest seal reducing the chance of sample evaporation
- \*Compatible with wide opening and standard opening 12x32mm snap/crimp cap vials
- \*PTFE/Silicone/PTFE septa are autoclavable and offer excellent resistance to coring

### Septum Selection Guide

Septum Material	Compatible with	Incompatible with	Repeatability	Max. Temperature
PTFE/Silicone, PTFE/Silicone/PTFE	PTFE resistance until punctured, then septa will have compatibility of silicone	----	Average	< 200°C
Silicone/Silicone Rubber	Alcohol, acetone, ether, DMF, DMSO	ACN, THF, benzene chloroform, pyridine, toluene, hexane, heptane	Excellent	< 200°C
PTFE/Natural or Butyl Rubber	PTFE resistance until punctured, then septa will have compatibility of rubber	----	Good	< 100°C
Rubber (Natural or Butyl)	ACN, acetone, DMF, alcohols, diethylamine, DMSO, phenols	Chlorinated solvents, aromatics, hydrocarbon carbon disulfide	Excellent	< 100°C

## Ordering Information

Part No.	Description	Qty/pk
SLSSC003S	Preassemble, No pre-slit PTFE/silicone septa + Aluminum cap, for crimp top 2ml vial(11 mm mouth)	100
SLSSC003SP	Preassemble, Pre-slit PTFE/silicone septa + Aluminum cap, for crimp top 2ml vial (11 mm mouth)	100
SLSSC003SD	Dotting, No pre-slit PTFE/silicone septa + Aluminum cap, for Crimp top 2ml vial (11 mm mouth)	100
SLSSC003SPD	Dotting, Pre-slit PTFE/silicone septa + Aluminum cap, for Crimp top 2ml vial (11 mm mouth)	100

## Storage Vials and Volatile Organic Analysis (VOA)Vials

Hawach Scientific offer full range of Volatile Organic Analysis Vials in 20ml, 40ml, etc. These are available in clear and amber glass, screw top, PP cap with PTFE/silicone septa and have a temperature range of -40°C to 125°C. 40ml VOA vials have high quality polypropylene caps with a 24-400 GPI thread top. As open top closures, they allow for sampling through a septum.



## Features

- \*Large volume 20ml, 40ml
- \*PTFE/Silicone Septa
- \* 24-400 GPI thread top
- \*Screw thread top with Clear and Amber Borosilicate glass

## Specification

Item code	Vial Finish	Vial Type	Vial Dimension	Sample Volume	Material	Color	Bottom Profile
20ml	24mm Screw	Storage	27.5x57mm	20ml	Borosilicate Glass	Clear/Amber	Flat
40ml	24mm Screw	Storage	27.5x95mm	40ml	Borosilicate Glass	Clear/Amber	Flat

## Ordering Information

Part No.	Description	Qty/pk
SLV20C	20ml Clear Sample vial, Screw top, D27.5 X H57, First Class Borosilicate Glass	100
SLV202C	20ml Clear Sample Vial, Screw top, D27.5 X H57, Second Class Borosilicate Glass	100
SLV20A	20 ml Amber Sample vial, Screw top, D27.5 X H57, First Class Borosilicate Glass	100
SLV202A	20ml Amber Sample Vial, Screw top, D27.5 X H57, Second Class Borosilicate Glass	100
SLV40C	40ml Clear Sample vial, Screw top, D27.5 X H95, First Class Borosilicate Glass	100
SLV402C	40ml Clear Sample Vial, Screw top, D27.5 X H95, Second Class Borosilicate Glass	100
SLV40A	40ml Amber Sample vial, Screw top, D27.5 X H95, First Class Borosilicate Glass	100
SLV402A	40ml Amber Sample Vial, Screw top, D27.5 X H95, Second Class, Borosilicate Glass	100
SLV20SCH	PTFE/silicone Septa + White/Black Screw Cap With Hole, for 20ml/40ml Vial	100
SLV20SCS	PTFE/silicone Septa + White/Black Screw Cap Without Hole, For 20ml/40ml Vial	100
SLV20SAS	Aluminum Septa + White/Black Caps Without Hole, For 20ml/40ml Vial	100

## Headspace Vials

Hawach headspace vials have a bevelled neck for a secure seal, uniform glass thickness for even heat distribution and a stable, strong design for ease of use. Available in Clear and Amber USP1 Borosilicate glass with Screw and Crimp top. Round bottom vials distribute the internal pressure created at high temperatures across the glass surface and are more easily handled by robotic arms that lift the vial from the tray. The screw headspace vials has 18mm magnetic cap suitable for autosamplers that use magnetic transportation, while Crimp top vials use together with Aluminium cap.





## Specification

Item code	Vial Finish	Vial Type	Vial Dimension	Sample Volume	Material	Color	Bottom Profile
SLV101M	18mm Screw	Headspace vial	22.5x50mm	10ml	Borosilicate Glass	Clear	Round
SLV201M	18mm Screw	Headspace vial	22.5x70mm	20ml	Borosilicate Glass	Clear	Round
SLC101M	20mm Crimp	Headspace vial	22.5x46mm	10ml	Borosilicate Glass	Clear	Round
SLC201M	20mm Crimp	Headspace vial	22.5x75mm	20ml	Borosilicate Glass	Clear	Round

## Ordering Information

Part No.	Description	Qty/pk
SLV101M	10ml Clear Headspace Screw Vials, D22.5xH50	100
SLV201M	20ml Clear Headspace Screw Vials, D22.5xH75	100
SLV10/20SCM	Screw Magnetic Cap + Septa, Match with SLV101M and SLV201M	100
SLC101M	10ml Clear Headspace Crimp Vials, D22.5xH50	100
SLC201M	20ml Clear Headspace Crimp Vials, D22.5xH75	100
SLC20CM	Crimp Aluminium Cap + Septa, Match with SLC101M/SLC201M	100