

VIAL A VIAL IS A VIAL, OR IS IT?

Autosampler vials may seem insignificant when compared to the sophisticated analytical instrumentation most laboratories use, but the incorrect vial, cap or septa can contribute to problems that can decrease productivity and reproducibility.

Potential Problems Caused by Using Incorrect Vial/Cap/Septum:

- Loss of analyte due to evaporation
- Presence of extra peaks in the chromatogram due to solvent/septum interaction
- Mechanical damage to autosampler
- Sample degradation
- Irreproducible injection volumes

WHAT TO CONSIDER WHEN SELECTING AN AUTOSAMPLER VIAL

Autosampler Compatibility

Not all autosamplers are alike. Some utilize robotic arms to pick up a sample vial; Some use tray rotation while others move the sampling needle to the respective vial coordinates. The dimensions of autosampler vials vary. Most autosamplers are equipped with trays that use 12x32mm vial configurations, but some like the Waters Wisp require a 15x45mm configuration. Consult your autosampler's operating manual or manufacturer to determine the vial dimensions required.

Sample Volume

The amount of sample available for analysis is important in choosing the appropriate vial. If only a limited volume of sample is available, you will have to choose among using an insert for your regular autosampler vial, a microvial or a high recovery vial.

Note: Most 12x32 mm autosampler vials hold between 1.5mL to 2.0mL of liquid, depending on where the manufacture measures the vial full. The dimensions for 12x32mm vials are standard among manufacturers, but the length of the neck and width/shape of the vial shoulder may vary. 12x32mm microvials have the same outer dimensions but the inside of the vial may be tapered to reduce volume or contain a fused insert. 12x32mm high recovery vials will have an internal conical bottom that allows for maximum sample recovery.

Sample Compatibility

The analyte and solvent compatibility should be considered in choosing vials and accessories. For example, amber glass is frequently used for light sensitive samples while deactivated glass or plastic vials are used for compounds that are sensitive to glass or stick to the glass itself. Volatile samples require closures that reduce the risk of analyte loss due to evaporation.

Linear Coefficient of Expansion

Refers to the fractional change in the length of glass per degree of change in temperature, in short, the ability of the glass to tolerate rapid thermal changes. The lower the coefficient of expansion, the better the glass can handle temperature change without fracturing.

Classifications for laboratory glass based on its resistance to attack from water were established by the United States Pharmacopoeia, USP.

<u>USP Type 1</u>, <u>Class A</u>, <u>33 Borosilicate Glass</u> is the most inert and chemically resistant glass widely used in laboratories especially for chromatography applications. Type I glass is composed primarily of silicone and oxygen, with trace amounts of boron and sodium. It has the lowest leaching characteristics and a linear coefficient of expansion of 33.

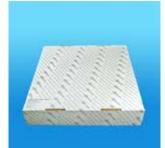
<u>USP Type 1, Class B, 51 Borosilicate Glass</u> which is composed of silicone and oxygen, trace amounts of boron, sodium and other element is more alkaline than Class A glass but still adequate for laboratory use. All amber borosilicate glass is made of Class B unless otherwise specified and has an expansion coefficient of 51.

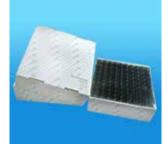
Silanized or Deactivated glass is Borosilicate Glass is borosilicate glass that has undergone further deactivation by treating the surface of the glass with an organosilane. The surface becomes more hydrophobic and inert making the vial suitable for use with pH sensitive compounds, trace analyses and applications requiring long term sample storage.

USP Types II, III and NP Glass are manufactured from soda lime which has less chemical resistance than borosilicate.

<u>Polypropylene</u> is a rigid and translucent material, which also comes in a variety of colours and has good chemical resistance for short term storage of most common laboratory chemicals. Resistance decreases over time when using aromatic and halogenated hydrocarbons. Polypropylene vials are often used for ion chromatography because of the extremely low metal content and excellent cleanability with dilute acid followed by deionized water rinse. Polypropylene vials limit the exposure to hazardous materials since they can be incinerated while sealed.

Polymethylpentene (TPX) is a rigid transparent material, which has a relatively high melting point with a temperature range of 0°-170°C. TPX vials can be used as alternative to opaque polypropylene vials because













they provide maximum clarity. Their chemical resistance is similar to that of polypropylene vials. TPX vials should be used for applications where visual clarity is required or repetitive exposure to higher temperatures such as autoclaving. TPX vials tend to be more brittle at room temperature.

Type of Vial Finish and Closures

Autosampler vials are available in a variety of neck finishes and opening diameters. Large mouth or wide ID vials have approximately a 40% wider mouth opening than standard ones. The large opening reduces the risk of bent autosampler needles during sampling.

Screw thread vials and caps provide low evaporation, reusability, less hand injury during manipulation than crimp seals and require no special tools. All screw threads vials and caps are differentiated by their thread finish as defined by the Glass Packaging Institute, GPI. For screw thread vials, a two part number is assigned. For example, 8-425 neck finish represents a vial with a diameter of 8 mm across the outside of the threads and a thread style of 425. Screw thread vials and caps are more expensive than crimp seals.

Caps for screw thread vials are available with either an open hole for autosampler use and standard addition or with a solid top for sample storage. One piece polypropylene cap and membrane are also available. These pierceable screw thread caps are designed for one time use and reduce sample preparation time as there is no cap and seal to assemble.

Crimp top vials require lacquered aluminum crimp seals which are relatively inexpensive and, when properly assembled, provide the best seal for long term storage. Crimp seals are not reusable.

A crimping tool is required to seal caps and a decrimper or decapper is required to remove the seals. Several types of hand crimpers are available including the adjustable precision crimpers that Chromatographic Specialties offers. Adjustable hand crimpers feature an adjustable stop on the handle to provide consistent seal tightness every time. Adjusting the hex screw inside the steel crimper jaws will also alter the amount of crimp. Achieving a good crimp is crucial because overcrimping can cause septum coring, bent needles and create a larger hole in the Teflon septum layer than a properly crimped seal. Undercrimping can result in loosing seals and sample evaporation.

Hand decrimpers quickly and safely remove seals with just a single squeeze of the handle. Decappers are similar in design to pliers and provide an inexpensive alternative to decrimpers. Decrimpers should be used for applications involving hazardous samples because there is less chance of spillage.

Snap seal vials are less prone to breakage during decapping because more glass is used in the neck of the vial. The snap seal neck finish is compatible with either crimp and/or snap seals and no special tools are required to remove the cap. These vials are recommended for short term sample storage and non-volatile samples because the seal is not as secure as a crimp or screw thread seal.

Shell Vials are an economical alternative to screw thread vials for Water's HPLC autosamplers or any other autosampler that doesn't use a robotic arm to move the vials. Most shells vials are sold with a polyethylene cap which has a starburst design for easy needle penetration.

SEPTA SELECTION GUIDE

Optimise performance and results by choosing the right septum for your application:

- Excellent resealing capabilities highly recommended for multiple injections and sample storage
- Autoclavable and excellent resistance to coring
- PTFE chemical resistance until pierced then the septa will have the compatibility of silicone
- Temperature range -40°C to 200°C"

PTFE/Silicone/PTFE:

- Recommended for multiple injections due to above average resealing capabilities
- Autoclavable and excellent resistance to coring
- Recommended for demanding applications such as internal standards, trace analysis or applications where there will be a long time between injections
- Temperature range -40°C to 200°C"

PTFE/Silicone:

- Excellent resealing capabilities highly recommended for multiple injections and sample storage
- · Autoclavable and excellent resistance to coring
- PTFE chemical resistance until pierced then the septa will have the compatibility of silicone
- Temperature range -40°C to 200°C"

PTFE/Red Rubber:

- The most economical septa used in routine analysis
- · Easy to pierce with moderate resealability
- · PTFE chemical resistance until pierced then the septa will have the compatibility of rubber
- Not recommended when retaining samples for further analysis or for multiple injections
- Temperature range -40°C to 110°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"

Moulded Polypropylene:

- Only suitable for single injection use not recommended for sample storage before or after injection
- Not resealable
- Temperature range 0°C to 130°C"



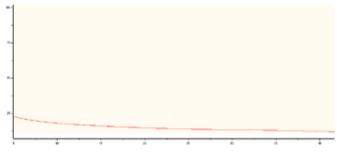




The characteristics of CNW vials and septa

The characteristics of CNW glass vials:

- All products made from borosilicate TYPE I glass tubing, the key indicators just like ID, OD, mouse size, thread specification conform to international standard.
- The thread specification is very accurately, ensure autosampler can grasp the vials accurate and easy.
- The product manufacture and packed in cleaning room, all the packing material made from special materials, ensure non-pollution.
- The brand and marking spot we used ceramic printing process, ensure non-heavy etals like Pb, Cr etc. meet European RoHs standard. And the printing difficult to be fall of, ensure keep identity for a long time.



The characteristics of CNW Septa:

- All septa made from high-purity PTFE and high quality silicone rubber or ultrapure silicone, ensure the product nontoxicity.
- The products used the new tech to avoid the adhesive, this made the septa soft then before, ensure to provide better protection for the needle of the autosampler.
- The products made in the cleaning room, the customer can be use the product directly not through cleaning operation.
- We offer the COA for each lot of the septa, this will help customer know which will caused the problem when they use this lot products, save times for the customers and avoid the problem

Test Conditions:

Column: CNW CD-1 (1.120312.0001), 30m×0.25mm×0.25um

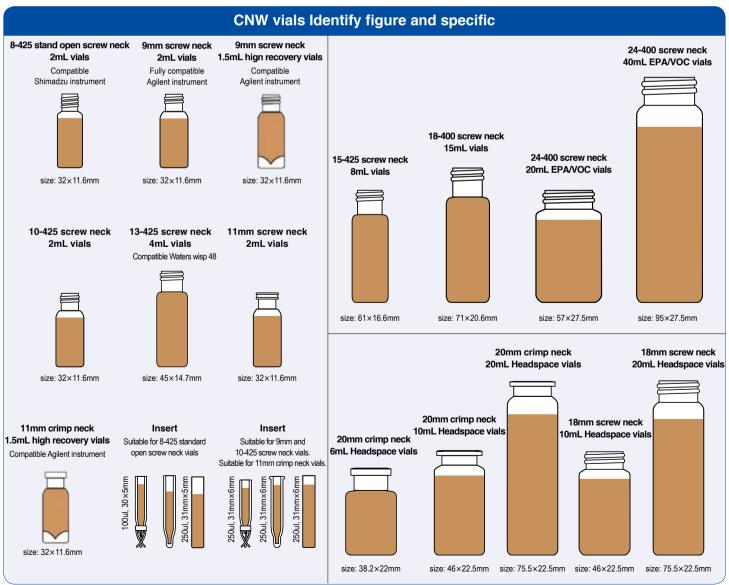
Injection: 300°C, 0.5 uL (splitless)

Pressure: 25 psi

Oven: 50 °C hold for 5 minutes,50-100 °C @25 °C / min,100-250 °C

@10°C/min,250-300°C @5°C/min(hold for 10 minutes)

Detector: 320 °C , FID
H2 flow: 30mL/min
Air flow: 400mL/min
Makeup flow: 25mL/min, Helium

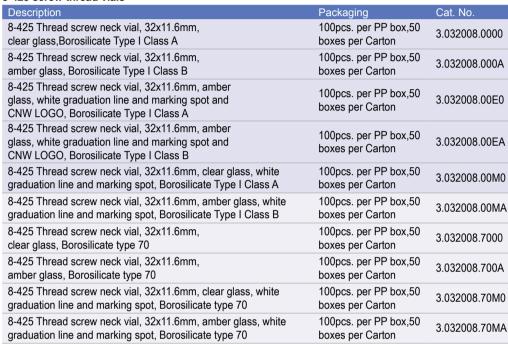


Screw thread vials

8-425 screw thread vials, caps and septa

- 8-425 screw thread vials are the original smaller opening autosampler vials.
- They are designed to work in a variety of autosamplers requiring narrow neck vials, you can use them on below brand instrument: Beckman, CTC, Gilson, Knauer, Shimadzu, Spark, Varian, VWR(Merck)/Hitachi, etc.

8-425 screw thread vials







8-425 screw cap

Description	Packaging	Cat. No.
8-425 Screw thread cap, made from PP, black, centre hole	100pcs. per PE bag	3.005310.0800
8-425 Screw thread cap, made from PP, black, closed	100pcs. per PE bag	3.005320.0800
8-425 Screw thread cap, made from PP, white, centre hole	100pcs. per PE bag	3.W05310.0800
8-425 Screw thread cap, made from PP, white, closed	100pcs. per PE bag	3.W05320.0800

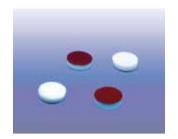
8-425 preassembled cap

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Description	Packaging	Cat. No.
Preassembled cap and septa for 8-425 thread screw, PP cap,	100 051	0.005004.0000
black, centre hole, Red rubber/White PTFE, 0.060" thick	100pcs. per PE bag	3.005394.0800
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Preassembled cap and septa for 8-425 thread screw, PP cap,	100pcs. per PE bag	3.0F5394.0800
black, centre hole, Red Butyl/Grey PTFE, 0.050" thick	roopee. per r = bag	0.01 000 1.0000
Preassembled cap and septa for 8-425 thread screw, PP cap,	400	3.005395.0800
black, centre hole, White silicone/Red PTFE, 0.060" thick	100pcs. per PE bag	
Preassembled cap and septa for 8-425 thread screw, PP cap, black,	100pcs. per PE bag	3.005396.0800
centre hole, Red PTFE/White silicone/Red PTFE, 0.040" thick	roopoo. por r = bag	0.000000.0000
Preassembled cap and septa for 8-425 thread screw, PP cap,		3.005397.0800
black, centre hole, White silicone/Red PTFE, 0.075" thick, slitted	100pcs. per PE bag	
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Preassembled cap and septa for 8-425 thread	100pcs. per PE bag	3.005360.0800
screw, PP cap, black, closed, F217 line	roopee. per r = bag	0.000000.0000
Preassembled cap and septa for 8-425 thread screw, PP	100	
cap, black, closed, Red Butyl/Grey PTFE, 0.050" thick	100pcs. per PE bag	3.0F5360.0800
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Preassembled cap and septa for 8-425 thread screw,	100pcs. per PE bag	3.CS5360.0800
PP cap, black, closed, White sillcone/Red PTFE	roopoo. por r L bag	0.000000.0000









Septa for 8-425 screw cap

Description	Packaging	Cat. No.
Septa for 8-425 screw thread cap, white PTFE only, 0.010" thick	100pcs. per PE bag	3.601010.0800
Septa for 8-425 screw thread cap, Red Butyl/Grey PTFE, 0.050" thick	100pcs. per PE bag	3.605040.080F
Septa for 8-425 screw thread cap, White PTFE/red Rubber , 0.060" thick	100pcs. per PE bag	3.606040.0800
Septa for 8-425 screw thread cap, White silicone/Red PTFE, 0.060" thick	100pcs. per PE bag	3.606050.0800
Septa for 8-425 screw thread cap, White silicone/Red PTFE, 0.075" thick	100pcs. per PE bag	3.607550.0800
Septa for 8-425 screw thread cap, White silicone/	100pcs. per PE bag	3.607570.0800
Red PTFE, 0.075" thick, slitted	roupes, per PE bag	3.007370.0000

9mm screw thread vials, caps and septa

- 9mm screw thread vials and closure is dimensionally equivalent to 11mm crimp neck vials. This means that they can be used in any autosampler that uses 11mm crimp neck vials.
- Large open mouse help reduce the damage for the autosampler needles, this design also can ask customer use economic glass insert, to reduce their cost
- relative to 11mm crimp neck vials, 9mm screw thread vials can easily used by hand without tools
- This size can be used on almost all the new austosamplers. Especially used on Agilent, HTA, Shimadzu, thermo, Varian and Waters etc.



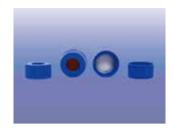
9mm screw thread vials

Description	Packaging	Cat. No.
9mm Thread screw neck vial, 32x11.6mm, clear glass, Borosilicate Type I Class A	100pcs. per PP box,50 boxes per Carton	3.032009.0000
9mm Thread screw neck vial, 32x11.6mm, amber glass, Borosilicate Type I Class B	100pcs. per PP box,50 boxes per Carton	3.032009.000A
9mm Thread screw neck vial, 32x11.6mm, clear glass, white graduation line and marking spot and CNW LOGO, Borosilicate Type I Class A	100pcs. per PP box,50 boxes per Carton	3.032009.00E0
9mm Thread screw neck vial, 32x11.6mm, amber glass, white graduation line and marking spot and CNW LOGO, Borosilicate Type I Class B	100pcs. per PP box,50 boxes per Carton	3.032009.00EA
9mm Thread screw neck vial, 32x11.6mm, clear glass, white graduation line and marking spot and CNW LOGO, Borosilicate Type I Class A, The inner diameter of the bottle mouth greater than 6.15mm	100pcs. per PP box,50 boxes per Carton	3.L32009.00E0
9mm Thread screw neck vial, 32x11.6mm, amber glass, white graduation line and marking spot andCNW LOGO, Borosilicate Type I Class B, The inner diameter of the bottle mouth greater than 6.15mm	100pcs. per PP box,50 boxes per Carton	3.L32009.00EA
9mm Thread screw neck vial, 32x11.6mm, clear glass, white graduation line and marking spot, Borosilicate Type I Class A	100pcs. per PP box,50 boxes per Carton	3.032009.00M0
9mm Thread screw neck vial, 32x11.6mm, amber glass, white graduation line and marking spot, Borosilicate Type I Class B	100pcs. per PP box,50 boxes per Carton	3.032009.00MA
9mm Thread screw neck vial, 32x11.6mm, clear glass, Borosilicate type 70	100pcs. per PP box,50 boxes per Carton	3.032009.7000
9mm Thread screw neck vial, 32x11.6mm, amber glass, Borosilicate type 70	100pcs. per PP box,50 boxes per Carton	3.032009.700A
9mm Thread screw neck vial, 32x11.6mm, clear glass, white graduation line and marking spot, Borosilicate type 70	100pcs. per PP box,50 boxes per Carton	3.032009.70M0
9mm Thread screw neck vial, 32x11.6mm, amber glass, white graduation line and marking spot, Borosilicate type 70	100pcs. per PP box,50 boxes per Carton	3.032009.70MA



9mm screw cap

Description	Packaging	Cat. No.
9mm Screw thread cap(Royal), made from PP, blue, centre hole	100pcs. per PE bag	3.B05310.09FR
9mm Screw thread cap(Royal), made from PP, red, centre hole	100pcs. per PE bag	3.R05310.09FR
9mm Screw thread cap(Royal), made from PP, green, centre hole	100pcs. per PE bag	3.G05310.09FR
Preassembled cap and septa for 9mm thread screw, design for MS, no bleed, septa no required	100pcs. per PE bag	3.005330.09FR



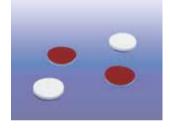
9mm preassembled cap

Description	Packaging	Cat. No.
Preassembled cap and septa for 9mm thread screw, PP cap, blue, centre hole, White PTFE/red Rubber, 0.040" thick	100pcs. per PE bag	3.B05394.0900
Preassembled cap and septa for 9mm thread screw, PP cap, blue, centre hole, White silicone/Red PTFE, 0.040" thick	100pcs. per PE bag	3.B05395.0900
Preassembled cap and septa for 9mm thread screw, PP cap(Royal), blue, centre hole, White silicone/Red PTFE, 0.040" thick, slitted	100pcs. per PE bag	3.B05397.0900
Preassembled cap and septa for 9mm thread screw, PP cap, blue, centre hole, White Silicone/Red PTFE, 0.040" thick, bonded	100pcs. per PE bag	3.B05398.0900
Preassembled cap and septa for 9mm thread screw, PP cap, blue, centre hole, Red Butyl/Grey PTFE, 0.050" thick	100pcs. per PE bag	3.BF5394.0900
Preassembled cap and septa for 9mm thread screw, PP cap(Royal), blue, centre hole, White PTFE/red Rubber, 0.040" thick, BONDED	100pcs. per PE bag	3.B05394.09FR
Preassembled cap and septa for 9mm thread screw, PP cap(Royal), blue, centre hole, White silicone/Red PTFE, 0.040" thick, BONDED	100pcs. per PE bag	3.B05395.09FR
Preassembled cap and septa for 9mm thread screw, PP cap(Royal), blue, centre hole, Red PTFE/White silicone/Red PTFE, 0.040" thick	100pcs. per PE bag	3.B05396.09FR
Preassembled cap and septa for 9mm thread screw, PP cap(Royal), blue, centre hole, White silicone/Red PTFE, 0.040" thick, slitted, BONDED	100pcs. per PE bag	3.B05397.09FR
Preassembled cap and septa for 9mm thread screw, PP cap(Royal), blue, centre hole, White silicone/Red PTFE, 0.040" thick, slitted, BONDED	100pcs. per PE bag	3.R05397.09FR
Preassembled cap and septa for 9mm thread screw, PP cap, black, closed, F217 line	100pcs. per PE bag	3.005360.0900

Other colours caps with preassembled septa are on require.

Septa for 9mm screw cap

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Description	Packaging	Cat. No.
Septa for 9mm Royal screw thread cap, white PTFE only, 0.010" thick	100pcs. per PE bag	3.601010.09FR
Septa for 9mm Royal screw thread cap, White PTFE/red Rubber , 0.040" thick	100pcs. per PE bag	3.604040.09FR
Septa for 9mm Royal screw thread cap, White silicone/Red PTFE, 0.040" thick	100pcs. per PE bag	3.604050.09FR
Septa for 9mm Royal screw thread cap, Red PTFE/ White Silicone/Red PTFE, 0.040" thick	100pcs. per PE bag	3.604060.09FR
Septa for 9mm Royal screw thread cap, White silicone/Red PTFE, 0.040" thick, slitted	100pcs. per PE bag	3.604070.09FR
Septa for 9mm Royal screw thread cap, White silicone/Red PTFE, 0.040" thick, partial slitted	100pcs. per PE bag	3.604080.09FR
Septa for 9mm popular screw thread cap, White PTFE/red Rubber , 0.040" thick	100pcs. per PE bag	3.604040.0900
Septa for 9mm popular screw thread cap, White silicone/Red PTFE, 0.040" thick	100pcs. per PE bag	3.604050.0900
Septa for 9mm popular screw thread cap, Red PTFE/ White Silicone/Red PTFE, 0.040" thick	100pcs. per PE bag	3.604060.0900
Septa for 9mm popular screw thread cap, White silicone/Red PTFE, 0.040" thick, slitted	100pcs. per PE bag	3.604070.0900
Septa for 9mm popular screw thread cap, Red Butyl/Grey PTFE, 0.050" thick	100pcs. per PE bag	6.605040.09FF





- 10-425 screw thread vials feature a wider opening than other screw thread vials. This increased target area makes samples preparation easier. It also reduces the chances of bent or broken needles during sampling.
- You can use them on below brand instrument: Jasco, Perkin Elmer, Shimadzu, Varian, Waters, etc.

10-425 screw thread vials

Description	Packaging	Cat. No.
10-425 Thread screw neck vial, 32x11.6mm, clear glass, Borosilicate Type I Class A	100pcs. per PPbox,50 boxes per Carton	3.032010.0000
10-425 Thread screw neck vial, 32x11.6mm, amber glass, Borosilicate Type I Class B	100pcs. per PPbox,50 boxes per Carton	3.032010.000A
10-425 Thread screw neck vial, 32x11.6mm, clear glass, white graduation line and marking spotand CNW LOGO, Borosilicate Type I Class A	100pcs. per PPbox,50 boxes per Carton	3.032010.00E0
10-425 Thread screw neck vial, 32x11.6mm, amber glass, white graduation line and marking spot and CNW LOGO, Borosilicate Type I Class B	100pcs. per PPbox,50 boxes per Carton	3.032010.00EA



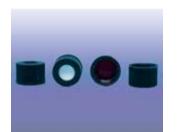




Description	Packaging	Cat. No.
10-425 Thread screw neck vial, 32x11.6mm, clear glass, white graduation line and marking spot, Borosilicate Type I Class A	100pcs. per PPbox,50 boxes per Carton	3.032010.00M0
10-425 Thread screw neck vial, 32x11.6mm, amber glass, white graduation line and marking spot, Borosilicate Type I Class B	100pcs. per PPbox,50 boxes per Carton	3.032010.00MA
10-425 Thread screw neck vial, 32x11.6mm, clear glass, Borosilicate type 70	100pcs. per PPbox,50 boxes per Carton	3.032010.7000
10-425 Thread screw neck vial, 32x11.6mm, amber glass, Borosilicate type 70	100pcs. per PPbox,50 boxes per Carton	3.032010.700A
10-425 Thread screw neck vial, 32x11.6mm, clear glass, white graduation line and marking spot, Borosilicate type 70	100pcs. per PPbox,50 boxes per Carton	3.032010.70M0
10-425 Thread screw neck vial, 32x11.6mm, amber glass, white graduation line and marking spot, Borosilicate type 70	100pcs. per PPbox,50 boxes per Carton	3.032010.70MA

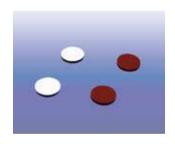
10-425 screw cap

Description	Packaging	Cat. No.
10-425 Screw thread cap, made from PP, black, centre hole	100pcs. per PE bag	3.005310.1000
10-425 Screw thread cap, made from PP, black, closed	100pcs. per PE bag	3.005320.1000



10-425 preassembled cap

Description	Packaging	Cat. No.
Preassembled cap and septa for 10-425 thread screw, PP cap, black, centre hole, Red rubber/White PTFE, 0.060" thick	100pcs. per PE bag	3.005394.1000
Preassembled cap and septa for 10-425 thread screw, PP cap, black, centre hole, White silicone/Red PTFE, 0.060" thick	100pcs. per PE bag	3.005395.1000
Preassembled cap and septa for 10-425 thread screw, PP cap, black, centre hole, White silicone/Red PTFE, 0.040" thick, slitted	100pcs. per PE bag	3.005397.1000
Preassembled cap and septa for 10-425 thread screw, PP cap, black, centre hole, Red Butyl/Grey PTFE, 0.050" thick	100pcs. per PE bag	3.0F5394.1000
Preassembled cap and septa for 10-425 thread screw, PP cap, black, closed, Red Butyl/Grey PTFE, 0.050" thick	100pcs. per PE bag	3.0F5360.1000
Preassembled cap and septa for 10-425 thread screw, PP cap, black, closed, White sillcone/Red PTFE	100pcs. per PE bag	3.CS5360.1000



Septa for 10-425 screw cap

Description	Packaging	Cat. No.
Septa for 10-425 screw thread cap, white PTFE only, 0.010" thick	100pcs. per PE bag	3.601010.1000
Septa for 10-425 screw thread cap, Red Butyl/Grey PTFE, 0.050" thick	100pcs. per PE bag	3.605040.100F
Septa for 10-425 screw thread cap, White PTFE/red Rubber , 0.060" thick	100pcs. per PE bag	3.606040.1000
Septa for 10-425 screw thread cap, White silicone/Red PTFE, 0.060" thick	100pcs. per PE bag	3.606050.1000
Septa for 10-425 screw thread cap, White silicone/ Red PTFE, 0.060" thick, slitted	100pcs. per PE bag	3.606070.1000
Septa for 10-425 screw thread cap, White silicone/Red PTFE, 0.075" thick	100pcs. per PE bag	3.607550.1000

13-425 screw thread vials, caps and septa

- Precise screw seal consistent security
- Can be used for cleaning, storage waste or sample
- You can use them on below brand instrument: Dionex, Shimadzu, Spark, Varian, VWR(MERCK)/ HITACHI, WATERS(Wisp 48 position carousel), etc.



13-425 screw thread vials

10 420 301CW till Cuu Vidio		
Description	Packaging	Cat. No.
13-425 Thread screw neck vial, 45x14.7mm, clear glass, Borosilicate Type I Class A	100pcs. per PP box, 30 boxes per Carton	3.034013.0000
13-425 Thread screw neck vial, 45x14.7mm, amber glass, Borosilicate Type I Class B	100pcs. per PP box, 30 boxes per Carton	3.034013.000A
13-425 Thread screw neck vial, 45x14.7mm, clear glass, white graduation line and marking spotand CNW LOGO, Borosilicate Type I Class A	100pcs. per PP box, 30 boxes per Carton	3.034013.00E0
13-425 Thread screw neck vial, $45x14.7$ mm, amber glass, white graduation line and marking spot and CNW LOGO, Borosilicate Type I Class B	100pcs. per PP box, 30 boxes per Carton	3.034013.00EA
13-425 Thread screw neck vial, 45x14.7mm, clear glass, white graduation line and marking spot, Borosilicate Type I Class A	100pcs. per PP box, 30 boxes per Carton	3.034013.00M0

Screw thread vials / Crimp neck vials

Description	Packaging	Cat. No.
13-425 Thread screw neck vial, 45x14.7mm, amber glass, white graduation line and marking spot, Borosilicate Type I Class B	100pcs. per PP box, 30 boxes per Carton	3.034013.00MA
13-425 Thread screw neck vial, 45x14.7mm, clear glass, Borosilicate type 70	100pcs. per PP box, 30 boxes per Carton	3.034013.7000
13-425 Thread screw neck vial, 45x14.7mm, amber glass, Borosilicate type 70	100pcs. per PP box, 30 boxes per Carton	3.034013.700A
13-425 Thread screw neck vial, 45x14.7mm, clear glass, white graduation line and marking spot, Borosilicate type 70	100pcs. per PP box, 30 boxes per Carton	3.034013.70M0
13-425 Thread screw neck vial, 45x14.7mm, amber glass, white graduation line and marking spot, Borosilicate type 70	100pcs. per PP box, 30 boxes per Carton	3.034013.70MA

13-425 screw cap

Description	Packaging	Cat. No.
13-425 Screw thread cap, made from PP, black, centre hole	100pcs. per PE bag	3.005310.1300
13-425 Screw thread cap, made from PP, black, closed	100pcs. per PE bag	3.005320.1300



10 120 produced sup		
Description	Packaging	Cat. No.
Preassembled cap and septa for 13-425 thread screw, PP cap, black, centre hole, Red rubber/White PTFE, 0.050" thick	100pcs. per PE bag	3.005394.1300
Preassembled cap and septa for 13-425 thread screw, PP cap, black, centre hole, White silicone/Red PTFE, 0.060" thick	100pcs. per PE bag	3.005395.1300
Preassembled cap and septa for 13-425 thread screw, PP cap, black, centre hole, Red Butyl/Grey PTFE, 0.050" thick	100pcs. per PE bag	3.0F5394.1300
Preassembled cap and septa for 13-425 thread screw, PP cap, black, closed, White sillcone/Red PTFE	100pcs. per PE bag	3.CS5360.1300
Preassembled cap and septa for 13-425 thread screw, PP cap, black, closed, F217 line	100pcs. per PE bag	3.W05360.1300

Septa for 13-425 screw cap

Description	Packaging	Cat. No.
Septa for 13-425 screw thread cap, white PTFE only, 0.010" thick	100pcs. per PE bag	3.601010.1300
Septa for 13-425 screw thread cap, Red Butyl/Grey PTFE, 0.050" thick	100pcs. per PE bag	3.605040.130F
Septa for 13-425 screw thread cap, White PTFE/red Rubber , 0.050" thick	100pcs. per PE bag	3.605040.1300
Septa for 13-425 screw thread cap, White silicone/Red PTFE, 0.060" thick	100pcs. per PE bag	3.606050.1300
Septa for 13-425 screw thread cap, White silicone/Red PTFE, 0.075" thick	100pcs. per PE bag	3.607550.1300

Crimp neck vials

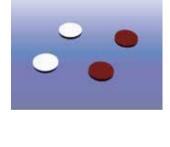
11mm large open crimp neck vials, caps and septa

- crimp neck vials provide the tightest seal, reducing the chance of sample evaporation.
- The 12 x 32 mm crimp neck vials and 11mm aluminum crimp caps are enconomical and easy to use with crimp tools.
- You can use them on below brand instrument: Agilent, Carlo Erba, CTC, Dani, Fisons, Gerstel, Jasco, Perkin Elmer, Shimdzu, Spark, Thermo, Varian, etc.

11mm crimp neck vials

Time of the free trains		
Description	Packaging	Cat. No.
11mm Crimp neck vial, 32x11.6mm, clear glass, Borosilicate Type I Class A	100pcs. per PP box,50 boxes per Carton	3.L32011.0000
11mm Crimp neck vial, 32x11.6mm, amber glass, Borosilicate Type I Class B	100pcs. per PP box,50 boxes per Carton	3.L32011.000A
11mm Crimp neck vial, 32x11.6mm, clear glass, white graduation line and marking spot and CNWLOGO, Borosilicate Type I Class A	100pcs. per PP box,50 boxes per Carton	3.L32011.00E0
11mm Crimp neck vial, 32x11.6mm, amber glass, white graduation line and marking spot and CNWLOGO, Borosilicate Type I Class B	100pcs. per PP box,50 boxes per Carton	3.L32011.00EA





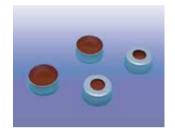






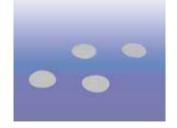


Description	Packaging	Cat. No.
11mm Crimp neck vial, 32x11.6mm, clear glass, white graduation line and marking spot, Borosilicate Type I Class A	100pcs. per PP box,50 boxes per Carton	3.L32011.00M0
11mm Crimp neck vial, 32x11.6mm, amber glass, white graduation line and marking spot, Borosilicate Type I Class B	100pcs. per PP box,50 boxes per Carton	3.L32011.00MA
11mm Crimp neck vial, 32x11.6mm, clear glass, Borosilicate type 70	100pcs. per PP box,50 boxes per Carton	3.L32011.7000
11mm Crimp neck vial, 32x11.6mm, amber glass, Borosilicate type 70	100pcs. per PP box,50 boxes per Carton	3.L32011.700A
11mm Crimp neck vial, 32x11.6mm, clear glass, white graduation line and marking spot, Borosilicate type 70	100pcs. per PP box,50 boxes per Carton	3.L32011.70M0
11mm Crimp neck vial, 32x11.6mm, amber glass, white graduation line and marking spot, Borosilicate type 70	100pcs. per PP box,50 boxes per Carton	3.L32011.70MA



11mm preassembled crimp cap

Description	Packaging	Cat. No.
Preassembled cap and septa for 11mm Crimp neck, Aluminum cap, clear, centre hole, white PTFE septa, 0.010" thick	100pcs. per PE bag	3.005110.1100
Preassembled cap and septa for 11mm Crimp neck, Aluminum cap, clear, centre hole, Clear PTFE/Orange Silicone, 0.040" thick	100pcs. per PE bag	3.005140.1100
Preassembled cap and septa for 11mm Crimp neck, Aluminum cap, clear, centre hole, Clear PTFE/Orange Silicone, 0.040" thick	500pcs. per PET jar	3.005140.1100.G
Preassembled cap and septa for 11mm Crimp neck, magnetic cap, Silver, centre hole, Clear PTFE/Orange Silicone, 0.040" thick	100pcs. per PE bag	3.005140.11MS
Preassembled cap and septa for 11mm Crimp neck, Aluminum cap, blue, centre hole, Natural Rubber red- orange/Butyl red/TEF transparent, 0.040" thick	100pcs. per PE bag	3.B05140.1100
Preassembled cap and septa for 11mm Crimp neck, Aluminum cap, green, centre hole, Natural Rubber red- orange/Butyl red/TEF transparent, 0.040" thick	100pcs. per PE bag	3.G05140.1100
Preassembled cap and septa for 11mm Crimp neck, Aluminum cap, Red, centre hole, Natural Rubber red- orange/Butyl red/TEF transparent, 0.040" thick	100pcs. per PE bag	3.R05140.1100
Preassembled cap and septa for 11mm Crimp neck, Aluminum cap, black, centre hole, White silicone/Red PTFE, 0.040" thick	100pcs. per PE bag	3.SW5150.1100
Preassembled cap and septa for 11mm Crimp neck, Aluminum cap, clear, centre hole, Red Butyl/Transparent PTFE, 0.040" thick	100pcs. per PE bag	3.X05140.1100
Preassembled cap and septa for 8-425 thread screw, PP cap, black, centre hole, Red PTFE/White silicone/Red PTFE, 0.040" thick	500pcs. per PET jar	3.X05140.1100.G
Preassembled cap and septa for 11mm Crimp neck, Aluminum cap, Blue, centre hole, Red Butyl/Transparent PTFE, 0.040" thick	100pcs. per PE bag	3.XB5140.1100
Preassembled cap and septa for 11mm Crimp neck, Aluminum cap, Blue, centre hole, Red Butyl/Transparent PTFE, 0.040" thick	500pcs. per PET jar	3.XB5140.1100.G
Preassembled cap and septa for 11mm Crimp neck, Aluminum cap, Green, centre hole, Red Butyl/Transparent PTFE, 0.040" thick	100pcs. per PE bag	3.XG5140.1100
Preassembled cap and septa for 11mm Crimp neck, Aluminum cap, Green, centre hole, Red Butyl/Transparent PTFE, 0.040" thick	500pcs. per PET jar	3.XG5140.1100.G
Preassembled cap and septa for 11mm Crimp neck, Aluminum cap, Red, centre hole, Red Butyl/Transparent PTFE, 0.040" thick	100pcs. per PE bag	3.XR5140.1100
Preassembled cap and septa for 11mm Crimp neck, Aluminum cap, Red, centre hole, Red Butyl/Transparent PTFE, 0.040" thick	500pcs. per PET jar	3.XR5140.1100.G
Preassembled cap and septa for 11mm Crimp neck, Aluminum cap, Yellow, centre hole, Red Butyl/Transparent PTFE, 0.040" thick	100pcs. per PE bag	3.XY5140.1100
Preassembled cap and septa for 11mm Crimp neck, Aluminum cap, Yellow, centre hole, Red Butyl/Transparent PTFE, 0.040" thick	500pcs. per PET jar	3.XY5140.1100.G



Septa for 11mm crimp cap

Description	Packaging	Cat. No.
Septa for 11mm crimp cap, white PTFE only, 0.010" thick	100pcs. per PE bag	3.601010.1100

Snap neck vials

11 mm Snap neck vials, caps and septa

- minimizes evaporation, even with volatile samples.
- 11 mm snap caps are often more convenient than crimp caps as they can be easily applied and remove by hand.
- An audible click ensures a secure seal has been formed and that cap is correctly aligned.
- 11 mm snap neck vials provide a secure seal that 11 mm snap vials can be closed with either snap caps or crimp caps.
 - You can use them on below brand instrument: Agilent, CTC, Dani, Dionex, Jasco, Shimdzu, Spark, Thermo, Varian, VWR(Merck)/Hitachi, Waters, etc.



11mm snap neck vials

Description	Packaging	Cat. No.
11mm Snap neck vial, 32x11.6mm, clear glass, Borosilicate Type I Class A	100pcs. per PP box,50 boxes per Carton	3.S32011.0000
11mm Snap neck vial, 32x11.6mm, amber glass, Borosilicate Type I Class B	100pcs. per PP box,50 boxes per Carton	3.S32011.000A
11mm Snap neck vial, 32x11.6mm, clear glass, white graduation line and marking spot and CNWLOGO, Borosilicate Type I Class A	100pcs. per PP box,50 boxes per Carton	3.S32011.00E0
11mm Snap neck vial, 32x11.6mm, amber glass, white graduation line and marking spot and CNWLOGO, Borosilicate Type I Class B	100pcs. per PP box,50 boxes per Carton	3.S32011.00EA
11mm Snap neck vial, 32x11.6mm, clear glass, white graduation line and marking spot, Borosilicate Type I Class A	100pcs. per PP box,50 boxes per Carton	3.S32011.00M0
11mm Snap neck vial, 32x11.6mm, amber glass, white graduation line and marking spot, Borosilicate Type I Class B	100pcs. per PP box,50 boxes per Carton	3.S32011.00MA



11mm preassembled crimp cap

Description	Packaging	Cat. No.
Preassembled cap and septa for 11mm Snap neck, PE cap, transparent, centre hole, molded septum	100pcs. per PE bag	3.005500.1100
Preassembled cap and septa for 11mm Snap neck, PE cap, transparent, centre hole, White silicone/Red PTFE	100pcs. per PE bag	3.005550.1100
Preassembled cap and septa for 11mm Snap neck, PE cap, transparent, centre hole, Red PTFE/White silicone/Red PTFE	100pcs. per PE bag	3.005560.1100
Preassembled cap and septa for 11mm Snap neck, PE cap, transparent, centre hole, White silicone/Blue PTFE, slitted	100pcs. per PE bag	3.005570.1100
Preassembled cap and septa for 11mm Snap neck, PE cap, blue, centre hole, White PTFE/red Rubber	100pcs. per PE bag	3.B05540.1100
Preassembled cap and septa for 11mm Snap neck, PE cap, blue, centre hole, White silicone/Red PTFE	100pcs. per PE bag	3.B05550.1100
Preassembled cap and septa for 11mm Snap neck, PE cap, blue, centre hole, Red PTFE/White silicone/Red PTFE	100pcs. per PE bag	3.B05560.1100
Preassembled cap and septa for 11mm Snap neck, PE cap, blue, centre hole, White silicone/Blue PTFE, slitted	100pcs. per PE bag	3.B05570.1100
Preassembled cap and septa for 11mm Snap neck, PE cap, red, centre hole, White silicone/Red PTFE	100pcs. per PE bag	3.R05550.1100
Preassembled cap and septa for 11mm Snap neck, PE cap, red, centre hole, Red PTFE/White silicone/Red PTFE	100pcs. per PE bag	3.R05560.1100
Preassembled cap and septa for 11mm Snap neck, PE cap, red, centre hole, White silicone/Blue PTFE, slitted	100pcs. per PE bag	3.R05570.1100
Preassembled cap and septa for 11mm Snap neck, PE cap, black, centre hole, White PTFE/red Rubber	100pcs. per PE bag	3.SW5540.1100
Preassembled cap and septa for 11mm Snap neck, PE cap, black, centre hole, White silicone/Red PTFE	100pcs. per PE bag	3.SW5550.1100
Preassembled cap and septa for 11mm Snap neck, PE cap, black, centre hole, Red PTFE/White silicone/Red PTFE	100pcs. per PE bag	3.SW5560.1100
Preassembled cap and septa for 11mm Snap neck, PE cap, black, centre hole, White silicone/Blue PTFE, slitted	100pcs. per PE bag	3.SW5570.1100
Preassembled cap and septa for 11mm Snap neck, PE cap, yellow, centre hole, White PTFE/red Rubber	100pcs. per PE bag	3.Y05540.1100

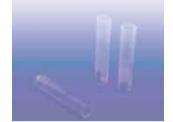




Description	Packaging	Cat. No.
Preassembled cap and septa for 11mm Snap neck, PE cap, yellow, centre hole, White silicone/Red PTFE	100pcs. per PE bag	3.Y05550.1100
Preassembled cap and septa for 11mm Snap neck, PE cap, yellow, centre hole, Red PTFE/White silicone/Red PTFE	100pcs. per PE bag	3.Y05560.1100
Preassembled cap and septa for 11mm Snap neck, PE cap, yellow, centre hole, White silicone/Blue PTFE, slitted	100pcs. per PE bag	3.Y05570.1100

Shell vials

- Shell vials feature thicker walls for safer sample handling.
- All the shell vials are supplied with polyethylene plug closures.
- You can use them on below brand instrument: Alcott, Gilson, Shimadzu, Waters(WISP 48 and 96 style autosamplers), etc.



1ml shell vials and plug

Description	Packaging	Cat. No.
1ml shell vial, 40x8.2mm, clear glass, Borosilicate Type I Class A	100pcs. per PP box	3.004100.0800
1ml shell vial, 40x8.2mm, amber glass, Borosilicate Type I Class B	100pcs. per PP box	3.004100.080A
8mm transparent PE-plug for shell vial	100pcs. per PP box	3.SB5400.0800

2ml shell vials and plug

Description	Packaging	Cat. No.
2ml shell vial, 31.5x11.6mm, clear glass, Borosilicate Type I Class A	100pcs. per PP box	3.004100.1200
2ml shell vial, 31.5x11.6mm, amber glass, Borosilicate Type I Class B	100pcs. per PP box	3.004100.120A
12mm transparent PE-plug for shell vial	100pcs. per PP box	3.SB5400.1200



4ml shell vials and plug

Description	Packaging	Cat. No.
4ml shell vial, 44.6x14.65mm, clear glass, Borosilicate Type I Class A	100pcs. per PP box	3.004100.1500
4ml shell vial, 44.6x14.65mm, amber glass, Borosilicate Type I Class B	100pcs. per PP box	3.004100.150A
15mm transparent PE-plug for shell vial	100pcs. per PP box	3.SB5400.1500

Special specifications vials



Conical bottom vials

Conical bottom vials can be supplier small remained reagent when the sampling not need use insert.

8-425 screw thread neck conical bottom vials

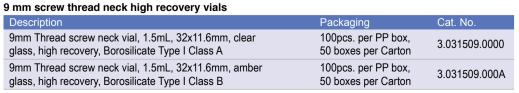
Description	Packaging	Cat. No.
8-425 Thread screw neck Micro vial, 1.1ml, 32x11.6mm, clear glass, conical bottom, Borosilicate Type I Class A	100pcs. per PP box, 50 boxes per Carton	3.031108.0000

11 mm crimp neck conical bottom vials

Description	Packaging	Cat. No.
11mm Crimp neck micro vial, 1.1ml, 32x11.6mm, clear glass, conical bottom, Borosilicate Type I Class A	100pcs. per PP box, 50 boxes per Carton	3.031111.0000

High recovery vials

1.5mL vials with 30uL reservoir are for sample concentration and injection without transferring to microvolume inserts.





Special specifications vials / Limited Volume insert

11 mm crimp neck high recovery vials

Description	Packaging	Cat. No.
11mm Crimp neck vial, 32x11.6mm, clear glass, high recovery, Borosilicate Type I Class A	100pcs. per PP box, 50 boxes per Carton	3.031511.0000
11mm Crimp neck vial, 32x11.6mm, amber glass, high recovery, Borosilicate Type I Class B	100pcs. per PP box, 50 boxes per Carton	3.031511.000A

Silanized vials

- For polar compounds, volatile compounds and the compounds can interaction with OH, we can sue silanized vials to get the best recovery;
 - Silanized vials are especially suitable for analysis flow matter: phenolic compound, protein, antibody, amine, metabolite, herbicide and insecticide etc.



9 mm Silanized screw thread neck vials

Description	Packaging	Cat. No.
9mm Thread screw neck vial, 32x11.6mm, clear glass, white graduation line and marking spot and CNW LOGO, Borosilicate Type I Class A, Silanized	100pcs. per PP box, 50 boxes per Carton	3.032009.0ZE0
9mm Thread screw neck vial, 32x11.6mm, amber glass, white graduation line and marking spot and CNW LOGO, Borosilicate Type I Class A, Silanized	100pcs. per PP box, 50 boxes per Carton	3.032009.0ZEA

11 mm Silanized crimp neck vials

Description	Packaging	Cat. No.
11mm Crimp neck vial, 32x11.6mm, clear glass, white graduation line and marking spot and CNW LOGO, Silanized	100pcs. per PP box, 50 boxes per Carton	3.L32011.0ZE0
11mm Crimp neck vial, 32x11.6mm, amber glass, white graduation line and marking spot and CNW LOGO, Silanized	100pcs. per PP box, 50 boxes per Carton	3.L32011.0ZEA



Polypropylene vials

- Polypropylene material with high resistance for most of chemical regents. Also without heavy metal ion, this material is very suitable for ion chromatography, atomic absorption and CE+CE/MS customers.
- The adsorption capacity for the internal surface of polypropylene vials is much lower, so when used in HPLC analysis. it's better for protein and amino acid analysis.

9mm screw thread neck plastic vials

Description	Packaging	Cat. No.
9mm Thread screw neck vial, 32x11.6mm, transparent PP, with graduation line, slightly concave shaped bottom	100pcs. per PE bag	3.P32009.0000
9mm Thread screw neck vial, 32x11.6mm, amber PP, with graduation line, slightly concave shaped bottom	100pcs. per PE bag	3.P32009.000A

Limited Volume insert

- The insert is to reduce the amount of solvent and small volume injection of an economic program;
- The insert with polymer spring can ensure the insert perpendicular in the vials, to maintain alignment injection
 direction. Polymer spring also play a role of buffer, so you can suck out all the samples. If the autosampler
 settings are correct, these insert virtually no dead volume, syringe needle can be inserted into the bottom of the
 insert without injured.
- Conical bottom insert do not need springs, its most economical choice for micro sampling.
- Flat-bottomed insert economic alternatives for finite volume vials.
- · Appropriate choice of insert can optimize the performance of the instrument and experimental results

1ml shell vials and plug



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Description	Packaging	MEMO	Cat. No.
Insert for small open vial, 31x5mm, clear glass, plastic spring not required, Economic, Borosilicate Type I Class A	100pcs. per PE bag		3.000401.050E
Insert for small open vial, 30x5mm, clear glass, preassembled plastic spring, Borosilicate Type I Class A	100pcs. per PE bag	Suitable for 8-425 screw neck vials	3.000401.05BS
Insert for small open vial, 31x5mm, clear glass, flat bottom, heavy wall, Borosilicate Type I Class A	100pcs. per PE bag		3.004025.0500



