Sample Handling

Vials

Sample Vials

Verex™

Leading in Quality, Delivery and Support

The most critical point of your analysis is when you put your sample in the vial. Verex certified sample vials, inserts, caps and seals are guaranteed to ensure problem-free, reproducible performance with consistent results you can trust.

All Vials, Caps and Kits

- **Advanced manufacturing**
- **Multi-step QA/QC**
- **Cleanroom packaged**
- **Certified**

With the demand for better product stability and performance in glass, septa and caps, we developed Verex HPLC / GC vial products with high quality materials to exceed industry specifications and tolerances. Verex innovative precision products provide air-tight, leak-free seals to safely transfer and store your most important samples. Through extensive testing, we've created guaranteed-fit vial products that offer compatibility with virtually any autosampler for trouble-free operation.

With tightly controlled 100 % traceable manufacturing processes, we re-defined the standards for lot traceability and certification of every Verex product to ensure a uniform product with optimum performance for any application. For those with the most sensitive applications, choose Verex-Certified PLUS for excellent ultra-grade cleanliness. Bottom line, Verex is your sample transfer and storage solution.

Vials and inserts are made of inert, high-purity, chemically-stable borosilicate glass to exacting specifications, individually heat-treated to burn off any impurities, then packaged in a cleanroom environment. Choose from crimp, snap, and screw types or mix and match vials and caps to your application. Most vials are offered with or without write-on marking spot or "patch". For easy selection, purchase convenience, or assembled vial kits ready to go!

Verex caps / seals / closures are made to exacting specifications, giving a tight seal each and every time. The aluminum crimp seals, plastic screw and snap caps come with highly pure septa material and are available in pre-slit and non-slit formats. Economical press-fit and specially formulated bonded-in septa styles are both available. And our NEW mass spec certified screw caps provide you with a state-of-the art solution for your most challenging, sensitive applications.

A variety of convenience complete vial kits are available to meet the most demanding needs of chromatographers, from routine analytical to high-sensitivity work:

- **33 Expansion clear glass (USP Type 1 borosilicate, Class A), 51A amber glass**
- **Limited volume (high sample recovery) vials**
- **Silanized (deactivated) glass**
- **Polypropylene for biocompatibility**
- **Certified and special MS-certified (caps and vials)**

Quality Manufacturing Overview

Eliminate troubleshooting and costly re-work caused by low-quality products

All Verex vial and cap products from Phenomenex are certified and lot traceable using the most advanced methods available and finished in tamper-evident packaging for added quality assurance. Each item is manufactured, processed, and packaged to exacting specifications and must pass a battery of certification tests:

Phenomenex autosampler vials are machine-made from high quality borosilicate glass (Type I Class A), offering the lowest ion content possible. State of the art facilities use the most advanced manufacturing technologies available to deliver the finest product possible. Machine vision cameras at multiple locations inspect several critical dimensions and tolerances, ensuring the manufacture of uniform, defect-free products.

Once formed by high-speed automated machines, the vials are immediately annealed at approximately 1200 °F to improve integrity and to burn off any organic chemical contamination. The result is particulate-, contaminate; and pyrogen-free products. As the vials exit the annealing (Lehr) oven, they pass through a contained cooling station, and into a positive-pressure cleanroom environment where they are robotically packaged contaminate free into pre-cleaned, inert vial trays.

During manufacture, each production lot is sampled using random sampling procedures, following ANSI methods and standards. The internal and external dimensions as well as neck and thread finishes are measured, adhering to tight tolerances to exactly match manufacturer's systems and autosamplers. Then most products are rigorously tested by LC-UV, GC-FID or LC-MS for any possible contamination. No vial or insert is placed in inventory without passing contamination, cleanliness, and performance testing. Certified Verex vials are your assurance and guarantee of reliability and performance.

Septa and cap assemblies are also rigorously tested and inspected for the low particulate and extractables. Headspace GC of the raw and processed materials ensures the lowest possible contamination from silicone polymers and other trace chemicals. Soak time solvent testing of finished goods is performed, as well as shelf life testing by LC to ensure product cleanliness and lack of impurities.

Vials for HPLC/ GC /SFC and MS Analysis

All Verex products are fully lot-tested and certified. The details of product specifications and testing are available at www.phenomenex.com/verex. The "Certified PLUS" rating signifies the highest quality available from Phenomenex. A Certificate of Conformance is included. Depending on the product, Certified PLUS may indicate, for example, special processing or treating and/or testing for low bleed or residual organics. Certified products offer excellent performance, especially for high sensitivity, mass spectrometry applications.

If Verex vials and caps do not perform as well or better than your current vial and cap products of similar type, diameter, and material, send in your comparative data within 45 days and keep the Verex product for FREE.

RIGHT CHOICE

**Certified Plus
MS Quality**

QUALITY MANAGEMENT SYSTEM
CERTIFIED BY DNV
=== **ISO 9001:2008** ===

From the manufacturing of our products to their timely delivery and continued customer support, we are dedicated to continually improving our processes to consistently meet or exceed our customers' expectations.

Vial Neck Finishes

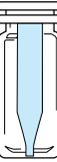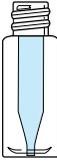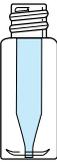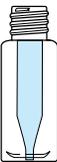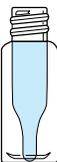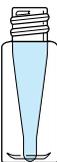| Type	Description
8-425	Varian, Shimadzu
9-425 (or 9 mm)	Most autosamplers, including Agilent, Thermo Scientific, Waters
10-425	Waters Alliance 2690
11 mm	Can use either snap and crimp top seals
13-425	Waters 48 position WISP™, Shimadzu

Vial and Kit Types / Designations

Type	Description
Assembled Kit	Caps are already assembled onto the vials
Bonded Cap	Septa bonded into cap
Certified PLUS	Designated "Cert+". Depends on the product and is defined separately as, e.g., "Low Bleed" (caps), "MSQ", or Mass Spec Quality (caps, vials and kits), etc.
EPA Certified	Meets requirements or follows guidelines of the official EPA Method
Certified MSQ	Certified especially for mass spectrometry (mass spec quality). Designated "Cert+ MSQ"

Septa Compatibility

Material	Compatibility	Incompatibility	Resealability	Max. Temp.
PTFE/Silicone PTFE/Silicone/PTFE	**PTFE:** inert to virtually all chemicals. **Silicone:** acetone, alcohols, DMF, DMSO, ether.	ACN, benzene, chloroform, heptane, hexane, pyridine, THF, toluene	Excellent	200°C
Polypropylene	Excellent resistance to all solvents, weak acids or bases. Unreactive to most chemicals.	Hydrocarbon solvents.	one-time use or rapid multiple use	175°C
Red Rubber (synthetic)	Acetone, alcohols, DMF, DMSO, ether, THF, toluene	ACN, benzene, chloroform, heptane, hexane, pyridine.	Very good	90°C
PTFE/ Natural Rubber	**PTFE:** inert to virtually all chemicals. **Rubber:** acetone, ACN, alcohols, diethylamine, DMF, DMSO, phenol.	Aromatics, carbon disulfide, chlorinated solvents, hydrocarbon solvents.	Very good	90°C
Gray Chlorobutyl	Acids or bases, water solutions, buffer solutions, oxygenated solvents, vegetable oils.	Aliphatic or aromatic hydrocarbons, halogenated solvents, mineral oils, strong acids.	Very good	100°C

Abbreviations: ACN: acetonitrile; DMF: dimethylformamide; DMSO: dimethylsulfoxide; THF: tetrahydrofuran.

Verex™ Vials

12 x 32 mm Specialty Vials

	Type and Description	Finish	Material	Total Volume	Residual Volume	Available as	Page Number	Part Numbers
	CD Vial Center-draining, High-recovery vial	9-425 Screw Thread	Glass	1.5 mL	<20 µL	Kits (certified and regular)	20 19	AR0-9981-13 AR0-9982-13 AR0-9985-13-C AR0-9986-13-C
	Max Recovery CD Vial Center-draining, MAXIMUM-recovery vial	9-425 Screw Thread	Glass	1.5 mL	<2 µL	Kits (certified)	19	AR0-9987-13-C AR0-9988-13-C
	Insert Vial µVial i2V	11 mm Crimp / Snap	Glass	300 µL	<4 µL	Vial and Kits (regular)	18	AR0-3630-13 AR0-3631-13 AR0-3625-13 AR0-9671-13 AR0-9672-13
	Insert Vial µVial i2V	9-425 Screw Thread	Glass	300 µL	<4 µL	Kits (certified and regular)	20 19	AR0-9973-13 AR0-9974-13 AR0-9974-13-C AR0-9978-13-C AR0-9979-13-C
	Insert Vial µVial i3 (Qsert)	11 mm Crimp or 9-425 Screw Thread	Glass	475 µL	<2 µL	Vials (regular)	17 20	AR0-3725-13 AR0-3726-13 AR0-3920-13 AR0-3921-13
	Insert Vial µVial i3 (Qsert)	10-425 Screw Thread	Glass	450 µL	<2 µL	Vials (regular)	23	AR0-3020-13 AR0-3021-13
	Plastic Vial	9-425 Screw Thread	Polypropylene	700 µL	<5 µL	Kits (certified)	19	AR0-9993-13-C AR0-9994-13-C
	Plastic Vial	9-425 Screw Thread	Polypropylene	300 µL	<2 µL	Kits (certified and regular)	20 19	AR0-9991-13 AR0-9992-13 AR0-9995-13-C
	Micro Vial with Tapered Base v-Vial	11 mm Snap or 9-425 Screw Thread or 10 mm Screw Thread	Glass	1.4 mL	<4 µL	Vials (regular)	18 20 23	AR0-3625-13 AR0-3640-13 AR0-3641-13 AR0-3940-13 AR0-3941-13 AR0-3040-13

ⓘ For example, 9-425 neck finish represents a vial with a diameter of 9 mm across the outside of the threads and a thread style of 425.

Verex™ Vials

12 x 32 mm, 11 mm Crimp-Top Vials and Kits

Complete Kits – Crimp-Top Vials and Seals / Closures

- **Precision formed for autosampler fit**
- **Rigorous quality testing for consistent performance**
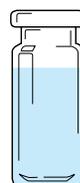- **Precise vial depth provides consistent sample recoveries**

Ordering Information*

Description	1000/pk	Price
Vial Kit, Crimp Cap, 2 mL Clear, w/ Patch + PTFE/Silicone	AR0-9721-13	
Vial Kit, Crimp Cap, 2 mL Clear + PTFE/Silicone, preSlit	AR0-9727-13	

*No write-on patch unless otherwise indicated

Crimp-Top Vials, 2.0 mL

- **Cleaner vials eliminate ghost peaks and contaminants**
- **Used with most autosamplers, including Agilent, Thermo Scientific, Waters**
- **Larger-opening "wide-mouth" style prevents broken needles and system downtime**
- **Precision neck improves crimping**

Ordering Information

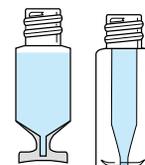| Description	1000/pk	Price
Standard Opening		
Vial, Crimp, 2 mL Clear, No Patch	AR0-3700-13	
Vial, Crimp, 2 mL Clear, w/ Patch	AR0-3710-13	
Vial, Crimp, 2 mL Amber, w/ Patch	AR0-3711-13	

Ordering Information

Description	1000/pk	Price
Wide Mouth Opening		
Vial, Crimp, 2 mL Wide Mouth, Clear, No Patch	AR0-37K0-13	
Vial, Crimp, 2 mL Wide Mouth, Clear, w/ Patch	AR0-37L0-13	
Vial, Crimp, 2 mL Wide Mouth, Amber, No Patch	AR0-37K1-13	
Vial, Crimp, 2 mL Wide Mouth, Amber, w/ Patch	AR0-37L1-13	

Specialty Crimp-Top Vials

- **Microsampling (center-draining vials)**

Ordering Information

Description	100/pk	Price	1000/pk	Price
Vial, Crimp, v-Vial Clear, No Patch	—	—	AR0-3740-13	
Vial, Crimp, v-Vial Amber, No Patch	—	—	AR0-3741-13	
Vial, Crimp, µVial i3 (Qsert), Clear, w/ Patch	AR0-3725-12		AR0-3725-13	
Vial, Crimp, µVial i3 (Qsert), Amber, w/ Patch	AR0-3726-12		AR0-3726-13	

Seals / Closures for Crimp-Top Vials

- **Excellent for volatile samples**
- **Extra clean to eliminate contamination**
- **Colored aluminum**

Ordering Information

Description	1000/pk	Price
Seal, 11mm Diameter, Crimp, PTFE/Silicone, silver	AR0-5780-13	
Seal, 11mm Diameter, Crimp, PTFE/Silicone/PTFE, silver	AR0-5760-13	
Seal, 11mm Diameter, Crimp, PTFE/Rubber, silver	AR0-5740-13	
Seal, 11mm Diameter, Crimp, PTFE/Rubber, blue	AR0-5742-13	
Seal, 11mm Diameter, Crimp, PTFE/Rubber, red	AR0-5741-13	
Seal, 11mm Diameter, Crimp, PTFE/Rubber, green	AR0-5743-13	
Seal, 11mm Diameter, Crimp, PTFE/Rubber, gold	AR0-574G-13	
Seal, 11mm Diameter, Crimp, PTFE, silver	AR0-5710-13	

Save Money. Bulk discounts available. Timely delivery. Excellent support.

Request a Quote. Want to make sure you're getting the best pricing on vials? Visit Phenomenex.com/Verex

Verex™ Vials

12 x 32 mm, 11 mm Snap-Top Vials and Kits

Complete Kits – Specialty Snap-Top Vials and Seals/ Closures

- **Microsampling (fused insert vials)**
- **Cleaner vials eliminate ghost peaks and contaminants**
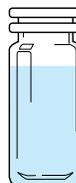
Ordering Information

Description	100/pk	Price	1000/pk	Price
Vial Kit, Snap, µVial i3 (Qsert), Clear w/ Patch + PTFE/Silicone	AR0-9671-12		AR0-9671-13	
Vial Kit, Snap, µVial i3 (Qsert), Clear w/ Patch + PTFE/Silicone, preSlit	AR0-9672-12		AR0-9672-13	

Snap-Top Vials*, 2.0 mL

- **Convenient and easy of use**
- **Great for less volatile samples or high-throughput labs**
- **Save time, without crimping or twisting**

Ordering Information

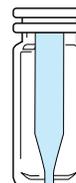| Description	1000/pk	Price
Vial, Snap, 2 mL Clear, No Patch	AR0-3600-13	
Vial, Snap, 2 mL Clear, w/ Patch	AR0-3610-13	
Vial, Snap, 2 mL Amber, w/ Patch	AR0-3611-13	
Vial, Snap, 2 mL Clear, w/ Patch, Silanized	AR0-3613-13	
Vial, Snap, 2 mL Amber, No Patch, Silanized	AR0-3651-13	
Vial, Snap, 2 mL Amber, w/ Patch, Silanized	AR0-3614-13	

* Vials can accept snap or crimp tops to effectively seal the vial

Snap-Top Vials, Specialty

- **For small volume microsamples**
- **One piece vial with fused insert**

Ordering Information

Description	100/pk	Price	1000/pk	Price
Vial, Snap, v-Vial i2V Clear, No Patch	AR0-3640-12		AR0-3640-13	
Vial, Snap, v-Vial i2V Amber, No Patch	AR0-3641-12		AR0-3641-13	
Vial, Snap, µVial i2V Clear, No Patch	AR0-3630-12		AR0-3630-13	
Vial, Snap, µVial i2V Amber, No Patch	AR0-3631-12		AR0-3631-13	
Vial, Snap, µVial i3 (Qsert), Clear, w/ Patch	AR0-3625-12		AR0-3625-13	

Seals / Closures for Snap-Top Vials

- **Specially designed for secure fit**
- **Most efficient way to produce a secure seal**
- **Easily snap cap onto vial and pull cap off**

Ordering Information

Description	1000/pk	Price
Seal, 11 mm Diameter, Snap, PTFE/Silicone, blue	AR0-5652-13	
Seal, 11 mm Diameter, Snap, PTFE/Silicone, natural	AR0-5656-13	
Seal, 11 mm Diameter, Snap, PTFE/Silicone preSlit, blue	AR0-5672-13	
Seal, 11 mm Diameter, Snap, PTFE/Silicone preSlit, natural	AR0-5676-13	
Seal, 11 mm Diameter, Snap, PTFE/Rubber, natural	AR0-5646-13	
Seal, 11 mm Diameter, Snap, PTFE, blue	AR0-5612-13	
Seal, 11 mm Diameter, Snap, PTFE, natural	AR0-5616-13	

Verex™ Vials

12 x 32 mm, 9-425 (9 mm) Screw-Top Vials and Kits

Complete Kits – Certified PLUS (Cert+) Mass Spec Quality (MSQ) 9-425 Screw-Top Vials and Caps

- **For your most demanding analysis; high sensitive detectors**
- **HPLC and LC/MS tested and certified**
- **State-of-the-art design and manufacture**

Ordering Information

Description	1000/pk	Price
Cert+ MSQ Vial Kit, 9 mm, 2 mL Clear w/ Patch + MSQ PTFE/Silicone	AR0-992A-13-M	
Cert+ MSQ Vial Kit, 9 mm, 2 mL Amber w/ Patch + MSQ PTFE/Silicone	AR0-992B-13-M	

Complete Kits – Certified PLUS 9-425 Screw-Top Vials and Caps

- **Certified for cleanliness and enhanced quality**
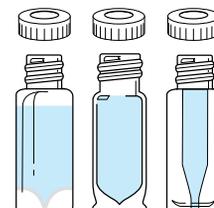- **Polyethylene-Starburst cap is an excellent choice for inertness**

Ordering Information

Description	1000/pk	Price
Cert+ Vial Kit, 9 mm, 2 mL Clear w/ Patch + PTFE/Silicone cap	AR0-9921-13-C	
Cert+ Vial Kit, 9 mm, 2 mL Clear w/ Patch + PE-Starburst cap	AR0-9927-13-C	
Cert+ Vial Kit, 9 mm, 2 mL Amber w/ Patch + PTFE/Silicone, preSlit cap	AR0-9926-13-C	
Cert+ Vial Kit, 9 mm, 2 mL Amber w/ Patch + PE-Starburst cap	AR0-9928-13-C	

Complete Kits – Certified PLUS Specialty 9-425 Screw-Top Vials and Caps

- **Kits for microsampling (center-draining and fused insert vials)**
- **Lower trace contaminants for higher sensitivity work**
- **Inert Polypropylene (PP) vials for biochromatography pH-sensitive applications**

Ordering Information*

Description	100/pk	Price	1000/pk	Price
Cert+ Vial Kit, 9 mm, Maximum Recovery (CD) Clear + PTFE/Silicone cap	AR0-9987-12-C		AR0-9987-13-C	
Cert+ Vial Kit, 9 mm, Maximum Recovery (CD) Clear + PTFE/Silicone, preSlit cap	AR0-9988-12-C		AR0-9988-13-C	
Cert+ Vial Kit, 9 mm, High Recovery (CD) Clear + PE-Starburst cap	AR0-9985-12-C		AR0-9985-13-C	
Cert+ Vial Kit, 9 mm, High Recovery (CD) Amber + PE-Starburst cap	AR0-9986-12-C		AR0-9986-13-C	
Cert+ Vial Kit, 9 mm, µVial i3(Qsert) Clear w/ Patch + PTFE/Silicone, preSlit cap	AR0-9974-12-C		AR0-9974-13-C	
Cert+ Vial Kit, 9 mm, µVial i3(Qsert) Clear + PE-Starburst cap	AR0-9978-12-C		AR0-9978-13-C	
Cert+ Vial Kit, 9 mm, µVial i3(Qsert) Amber + PE-Starburst cap	AR0-9979-12-C		AR0-9979-13-C	
Cert+ Vial Kit, 9 mm, PP, 300 µL + PE-Starburst cap	—	—	AR0-9995-13-C	
Cert+ Vial Kit, 9 mm, PP, 700 µL + PTFE/Silicone cap	—	—	AR0-9993-13-C	
Cert+ Vial Kit, 9 mm, PP, 700 µL + PTFE/Silicone, preSlit cap	—	—	AR0-9994-13-C	

*No write-on patch unless otherwise indicated

Complete Kits – 9-425 Screw-Top Vials and Caps

- **Sample volume range from 0.2 to 1.5 mL**

best seller

Ordering Information

Description	1000/pk	Price
Vial Kit, 9 mm, 2 mL Clear + PTFE/Silicone	AR0-9901-13	
Vial Kit, 9 mm, 2 mL Clear + PTFE/Silicone, preSlit	AR0-9903-13	
Vial Kit, 9 mm, 2 mL Clear w/ Patch + PTFE/Silicone	AR0-9921-13	
Vial Kit, 9 mm, 2 mL Clear w/ Patch + PTFE/Silicone, preSlit	AR0-9925-13	
Vial Kit, 9 mm, 2 mL Clear + PTFE/Silicone/PTFE	AR0-9905-13	
Vial Kit, 9 mm, 2 mL Clear + PTFE/Rubber	AR0-9907-13	
Vial Kit, 9 mm, 2 mL Clear w/ Patch + PTFE/Rubber, preSlit	AR0-9914-13	
Vial Kit, 9 mm, 2 mL Amber w/ Patch + PTFE/Silicone	AR0-9922-13	
Vial Kit, 9 mm, 2 mL Amber w/ Patch + PTFE/Silicone, preSlit	AR0-9926-13	
Vial Kit, 9 mm, 2 mL Amber w/ Patch + PTFE/Silicone/PTFE	AR0-9923-13	
Vial Kit, 9 mm, 2 mL Amber w/ Patch + PTFE/Rubber	AR0-9912-13	
Vial Kit, 9 mm, 2 mL Amber w/ Patch + PTFE/Rubber, preSlit	AR0-9913-13	

RIGHT CHOICE
Certified Plus MS Quality

Request a Quote. Visit Phenomenex.com/Verex for additional product selection and detailed information.

Verex™ Vials

12 x 32 mm, 9-425 (9 mm) Screw-Top Vials and Kits *(cont'd)*
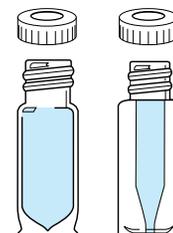
Complete Kits – Specialty 9-425 Screw-Top Vials and Caps

- **Kits for microsampling (center-draining and fused insert vials)**
- **CD and Qsert vials offer superior performance over vials with loose inserts**
- **Polypropylene (PP) vial kits for bio- or ion-chromatography, or pH-sensitive samples**

Ordering Information*

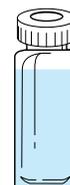| Description	100/pk	Price	1000/pk	Price
Vial Kit, 9 mm, High Recovery (CD) Clear + PTFE/Silicone	AR0-9981-12		AR0-9981-13	
Vial Kit, 9 mm, High Recovery (CD) Clear + PTFE/Silicone, preSlit	AR0-9982-12		AR0-9982-13	
Vial Kit, 9 mm, µVial i3 (Qsert) Clear w/ Patch + PTFE/Silicone	AR0-9973-12		AR0-9973-13	
Vial Kit, 9 mm, µVial i3 (Qsert) Clear w/ Patch + PTFE/Silicone, preSlit	AR0-9974-12		AR0-9974-13	
Vial Kit, 9 mm, PP, 300 µL + PTFE/Silicone	—	—	AR0-9991-13	
Vial Kit, 9 mm, PP, 300 µL + PTFE/Silicone, preSlit	—	—	AR0-9992-13	

*No write-on patch unless otherwise indicated

Complete Kits – Assembled 9-425 Screw-Top Vials and Caps

- **Cap and septa attached to vials**
- **Ready to use**
- **Save time and labor**

Ordering Information

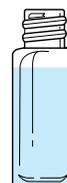| Description	1000/pk	Price
Vial Kit, 9 mm, 2 mL Clear w/ Patch + PTFE/Silicone, preSlit	AR0-9925-13-A	
Vial Kit, 9 mm, 2 mL Amber w/ Patch + PTFE/Silicone, preSlit	AR0-9926-13-A	
Vial Kit, 9 mm, 2 mL Clear, w/ Patch + PTFE/Rubber, Silanized	AR0-9915-13-A	

9-425 Screw-Top Vials, 2.0 mL

- **Used with most autosamplers, including Agilent, Thermo Scientific, Waters and many others**
- **Performs as well as crimp or snap vials**
- **Offers improved cap convenience and accessibility (easy on, easy off)**

Ordering Information

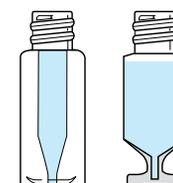| Description	1000/pk	Price
Vial, 9 mm Screw, 2 mL Clear, No Patch	AR0-3900-13	
Vial, 9 mm Screw, 2 mL Amber, No Patch	AR0-3901-13	
Vial, 9 mm Screw, 2 mL Clear, w/ Patch	AR0-3910-13	
Vial, 9 mm Screw, 2 mL Amber, w/ Patch	AR0-3911-13	
Vial, 9 mm Screw, 2 mL Clear, w/ Patch, Silanized	AR0-3960-13	

Specialty 9-425 Screw-Top Vials

- **Microsampling v-Vial center-draining vial**
- **Qsert fused insert vials ensure proper seating of the cap**
- **Extremely low dead volume**

Ordering Information

Description	100/pk	Price	1000/pk	Price
Vial, 9 mm Screw, µVial i3 (Qsert) Clear, No Patch	AR0-3920-12		AR0-3920-13	
Vial, 9 mm Screw, µVial i3 (Qsert) Amber, No Patch	AR0-3921-12		AR0-3921-13	
Vial, 9 mm Screw, v-Vial Clear, No Patch	AR0-3940-12		AR0-3940-13	
Vial, 9 mm Screw, v-Vial Amber, No Patch	AR0-3941-12		AR0-3941-13	

Verex™ Vials

12 x 32 mm, 9-425 (9 mm) Screw-Top Vials and Kits *(cont'd)*

Certified PLUS Mass Spec Quality (MSQ) Caps for 9-425 Screw-Top Vials

- **HPLC and LC/MS tested and certified**
- **For your most demanding analysis; high sensitive detectors**
- **Locked-fit provides a positive physical septa lock into the cap**

MS Quality. Constructed of virgin polymers, siloxanes and trace contaminant free, these caps are the cleanest available from Phenomenex.

RIGHT CHOICE ✓ Certified Plus MS Quality

Ordering Information

Description	1000/pk	Price
Cert+ MSQ Cap (pre-assembled), 9 mm, w/ Locked-fit PTFE/Silicone septa, blue	AR0-8952-13-M	
Cert+ MSQ Cap (pre-assembled), 9 mm, w/ Locked-fit PTFE/Silicone preSlit septa, blue	AR0-8972-13-M	

Certified PLUS Caps for 9-425 Screw-Top Vials

- **Certified ultra-clean**
- **High-grade, preconditioned raw materials**
- **Finished product inspected and LC/MS tested**

Ordering Information

Description	1000/pk	Price
Cert+ Cap (pre-assembled), 9 mm, w/ Bonded-in PTFE/Silicone septa, blue	AR0-8952-13-C	
Cert+ Cap (pre-assembled), 9 mm, w/ Bonded-in PTFE/Silicone preSlit septa, blue	AR0-8972-13-C	
Cert+ Cap (one-piece*), 9 mm PE* w/ Starburst preSlit, natural	AR0-89P6-13-C	

*Cap is one piece, constructed of polyethylene

Bonded-In Caps for 9-425 Screw-Top Vials

- **Bonded septa caps eliminate costly liner/septa fallout**
- **Prevents rework and wasted productivity with perfect-fit septa**
- **Saves instrument downtime**

Ordering Information

Description	1000/pk	Price
Cap (pre-assembled), 9 mm, w/ Bonded-in PTFE/Silicone septa, black	AR0-8957-13-B	
Cap (pre-assembled), 9 mm, w/ Bonded-in PTFE/Silicone septa, blue	AR0-8952-13-B	
Cap (pre-assembled), 9 mm, w/ Bonded-in PTFE/Silicone septa, natural	AR0-8956-13-B	
Cap (pre-assembled), 9 mm, w/ Bonded-in PTFE/Silicone septa, red	AR0-8951-13-B	
Cap (pre-assembled), 9 mm, w/ Bonded-in PTFE/Silicone preSlit septa, black	AR0-8977-13-B	
Cap (pre-assembled), 9 mm, w/ Bonded-in PTFE/Silicone preSlit septa, blue	AR0-8972-13-B	

For a more economical alternative, Press-Fit Caps are available. Contact your Phenomenex technical consultant or distributor.
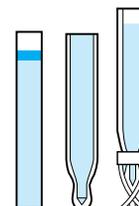
Inserts for 9-425 Screw-Top Vials

- **For limited volume sampling in 2mL sample vials**
- **Virtually no adsorption or pH Effects**
- **Precisely centers and fits vial neck**
- **Offers maximum opening to sampling needle**

Ordering Information*

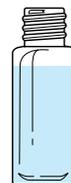| Description	500/pk	Price	1000/pk	Price
Insert, 6 mm Diameter, Flat Bottom, 450 µL	AR0-4610-52		—	—
Insert, 6 mm Diameter, Flat Bottom, 450 µL, Silanized	AR0-4615-52		—	—
Insert, 6 mm Diameter, Conical Bottom, 350 µL	—	—	AR0-4620-13	
Insert, 6 mm Diameter, Conical Bottom, w/ bottom spring, 300 µL	—	—	AR0-4621-13	
Insert, 6 mm Diameter, Conical Bottom w/ bottom spring, 300 µL, Silanized	—	—	AR0-4623-13	

*Approximate useable volume indicated in µL

Verex™ Vials

12 x 32 mm, 8 mm Screw-Top Vials

8-425 Screw-Top Vials, 2.0 mL

- **Standard-neck vials for Varian, Shimadzu**
- **33 Expansion clear glass (USP Type 1 borosilicate, Class A), 51A amber glass**

Ordering Information

Description	1000/pk	Price
Vial, 8 mm Screw, 2 mL Clear, No Patch	AR0-3800-13	
Vial, 8 mm Screw, 2 mL Amber, No Patch	AR0-3801-13	
Vial, 8 mm Screw, 2 mL Clear, w/ Patch	AR0-3810-13	
Vial, 8 mm Screw, 2 mL Amber, w/ Patch	AR0-3811-13	

Caps / Closures
for 8-425 Screw-Top Vials

- **Prevent rework and wasted productivity with perfect fit bonded-in septa**
- **Fewer trace contaminants for higher sensitivity work**

Ordering Information

Description	1000/pk	Price
Cap (pre-assembled), 8-425, w/ Bonded-in PTFE/Silicone septa, black*	AR0-8857-13-B	
Cap (pre-assembled), 8-425, w/ Bonded-in PTFE/Silicone preSlit septa, black*	AR0-8877-13-B	
Cap (pre-assembled), 8-425, w/ PTFE/Silicone septa, black**	AR0-8857-13	
Cap (pre-assembled), 8-425, w/ PTFE/Silicone preSlit septa, black**	AR0-8877-13	
Cap (pre-assembled), 8-425, w/ PTFE/Silicone/PTFE septa, black**	AR0-8867-13	
Cap (pre-assembled), 8-425, w/ Open-top cap (w/o septa)	AR0-8897-13	
Cap (pre-assembled), 8-425, w/ Open-top cap (w/o septa, flanged lip)	AR0-88A7-13	

*-B = Bonded-in Septa
**Press-Fit-Septa

Septa
for 8-425 Screw Caps

- **Preconditioned and tested**
- **For caps / closures without septa (AR0-8897-13 and AR0-88A7-13)**

Ordering Information

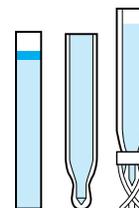| Description	1000/pk	Price
Septa, 8 mm Diameter, PTFE/Silicone 0.060 in	AR0-6853-13	
Septa, 8 mm Diameter, PTFE/Silicone/PTFE 0.060 in	AR0-6863-13	
Septa, 8 mm Diameter, PTFE 0.010 in	AR0-6817-13	

Inserts
for 8-425 Screw-Top Vials

- **For limited volume sampling**
- **Precisely centers and fits vial neck**
- **Transforms full capacity vials to micro sample vials**

Ordering Information*

Description	500/pk	Price	1000/pk	Price
Insert, 5 mm Diameter, Flat Bottom, 200 µL	AR0-4510-52		AR0-4510-13	
Insert, 5 mm Diameter, Flat Bottom w/ bottom spring 200 µL, Kimshield deactivated	AR0-4514-52		AR0-4514-13	
Insert, 5 mm Diameter, Conical Bottom, 100 µL	—	—	AR0-4520-13	
Insert, 5 mm Diameter, Conical Bottom, w/ bottom spring, 175 µL	—	—	AR0-4521-13	

*Approximate useable volume indicated in µL

Verex™ Vials

12 x 32 mm, 10 mm Screw-Top Vials and Kits

Complete Kits – 10-425 Screw-Top Vials and Caps

- **Available in assembled ready to use kits**
- **Offered with silanization**

Ordering Information

Description	100/pk	Price	1000/pk	Price
Vial Kit, 10 mm, 2 mL Clear, No Patch + PTFE/Silicone, preSlit	—	—	AR0-9003-13	
Vial Kit, 10 mm, 2 mL Clear, No Patch + PTFE/Silicone, Silanized	AR0-9005-12		—	—
Vial Kit, 10 mm, 2 mL Clear, No Patch, PTFE/Silicone + preSlit, Silanized	AR0-9006-12		—	—
Vial Kit, 10 mm, 2 mL Clear, w/ Patch + PTFE/Silicone*	—	—	AR0-9021-13-A	
Vial Kit, 10 mm, 2 mL Amber, w/ Patch + PTFE/Silicone*	—	—	AR0-9022-13-A	

*-A = Assembled

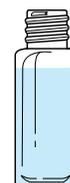### 10-425 Screw-Top Vials, 2.0 mL

- **Easy-to-fill wide-neck vials**

Ordering Information

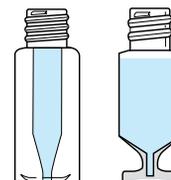| Description	1000/pk	Price
Vial, 10 mm Screw, 2 mL Clear, No Patch	AR0-3000-13	
Vial, 10 mm Screw, 2 mL Clear, w/ Patch	AR0-3010-13	
Vial, 10 mm Screw, 2 mL Clear, No Patch, Silanized	AR0-3003-13	
Vial, 10 mm Screw, 2 mL Amber, No Patch	AR0-3001-13	
Vial, 10 mm Screw, 2 mL Amber, w/ Patch	AR0-3011-13	

Specialty 10-425 Screw-Top Vials

- **Microsampling Qsert center-draining vial**
- **Extremely low dead volume**

Ordering Information

Description	100/pk	Price	1000/pk	Price
Vial, 10 mm Screw, µVial i3 (Qsert) Clear, No Patch	AR0-3020-12		AR0-3020-13	
Vial, 10 mm Screw, µVial i3 (Qsert) Amber, No Patch	AR0-3021-12		AR0-3021-13	
Vial, 10 mm Screw, v-Vial, Clear, No Patch	AR0-3040-12		AR0-3040-13	

Caps/ Closures for 10-425 Screw-Top Vials

- **High quality preconditioned septa**
- **Bonded-in or press fit**
- **Prevent rework and wasted productivity with perfect fit bonded-in septa**

Ordering Information

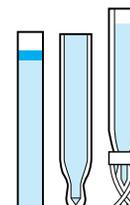| Description	1000/pk	Price
Cap (pre-assembled), 10-425, w/ Bonded-in PTFE/Silicone septa, black*	AR0-8057-13-B	
Cap (pre-assembled), 10-425, w/ Bonded-in PTFE/Silicone preSlit septa, black*	AR0-8077-13-B	
Cap (pre-assembled), 10-425, w/ PTFE/Silicone septa, black**	AR0-8057-13	
Cap (pre-assembled), 10-425, w/ PTFE/Silicone preSlit septa, black**	AR0-8077-13	

*-B = Bonded-in Septa
**Press-fit Septa

Inserts for 10-425 Screw-Top Vials

- **For limited volume sampling**
- **Precisely centers and fits vial neck**

Ordering Information

Description	500/pk	Price	1000/pk	Price
Insert, 6 mm Diameter, Flat Bottom, 450 µL	AR0-4610-52		—	—
Insert, 6 mm Diameter, Flat Bottom, 450 µL, Silanized	AR0-4615-52		—	—
Insert, 6 mm Diameter, Conical Bottom, 350 µL	—	—	AR0-4620-13	
Insert, 6 mm Diameter, Conical Bottom, w/ bottom spring, 300 µL	—	—	AR0-4621-13	
Insert, 6 mm Diameter, Conical Bottom w/ bottom spring, 300 µL, Silanized	—	—	AR0-4623-13	

*Approximate useable volume indicated in µL

Verex™ Vials

15 x 45 mm, 13 mm Screw-Top Vials and Kits

Complete Kits – 13-425 Screw-Top Vials and Caps

- Original Waters® 4 mL WISP™ autosampler vial
- General purpose sample / standard storage vial

Ordering Information

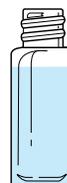| Description	1000/pk	Price
Vial Kit, 4 mL Clear w/ Patch + screw caps 13-425, PTFE/Silicone*	AR0-9321-13-A	
Vial Kit, 4 mL Clear w/ Patch + screw caps 13-425, PTFE 0.01 in.*	AR0-9391-13-A	
Vial Kit, 4 mL, Amber w/Patch + screw caps 13-425, PTFE/Silicone*	AR0-9422-13-A	
Vial Kit, 4 mL Amber w/ Patch + screw caps 13-425, PTFE 0.01 in.*	AR0-9392-13-A	

*-A = Assembled

13-425 Screw-Top Vials, 4.0 mL

Ordering Information

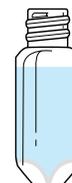| Description	1000/pk	Price
Vial, 4 mL Screw Clear, No Patch	AR0-3300-13	
Vial, 4 mL Screw Clear, w/ Patch	AR0-3310-13	
Vial, 4 mL Screw Amber, No Patch	AR0-3301-13	

Specialty 13-425 Screw-Top Vials

- For low volume samples

Ordering Information

Description	100/pk	Price	1000/pk	Price
Vial, 4 mL Screw High Recovery (CD) Clear, No Patch	AR0-3370-12		AR0-3370-13	

Caps / Closures for 13-425 Screw Top Vials

- High quality, pre-conditioned septa
- Available with bonded-in septa

Ordering Information

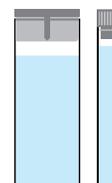| Description	1000/pk	Price
Cap (pre-assembled), 13-425, w/ Bonded-in PTFE/Silicone septa, black*	AR0-8357-13-B	
Cap (pre-assembled), 13-425, w/ PTFE/Silicone septa, black	AR0-8357-13	

*-B = Bonded-in Septa

Shell Vials

- Original 1 mL and 4 mL shell vials for Waters® 96- and 48-position autosampler trays
- Kits include high-quality borosilicate glass vials with convenient push-in polyethylene cap

Complete Kits – Shell Vials, 1.0 and 4.0 mL

Ordering Information

Description	1000/pk	Price
Shell Vial, 8 x 40 mm, 1 mL Flat Bottom, Clear	AR0-3110-13	
Shell Vial, 15 x 45 mm, 4 mL Flat Bottom, Clear	AR0-3170-13	

Complete Kits – Certified PLUS Shell Vials, 1.0 mL
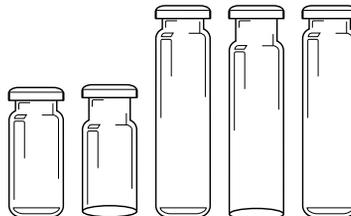
Ordering Information

Description	200/pk	Price
Cert+ Shell Vial, 8 x 40 mm, 1mL Flat Bottom, Clear	AR0-3110-22-C	
Cert+ Shell Vial, 8 x 40 mm, 1mL Flat Bottom, Amber	AR0-3111-22-C	

Verex™ Vials

Headspace Vials

Crimp-Top Headspace Vials

- **10 and 20 mL crimp neck, with rounded or flat bottom**
- **Uniform glass thickness ensures even heating**
- **Reliable quality, exceeds OEM specifications**
- **Lot traceable**

Ordering Information

Description	1000/pk	Price
Headspace Vial, 23 x 46 mm, 10 mL Square Rim, Flat Bottom, Clear, No Patch	AR0-3220-13	
Headspace Vial, 23 x 46 mm, 10 mL Square Rim, Round Bottom, Clear, No Patch	AR0-3230-13	
Headspace Vial, 23 x 75 mm, 20 mL Beveled Rim, Flat Bottom, Clear, No Patch	AR0-3260-13	
Headspace Vial, 23 x 75 mm, 20 mL Beveled Rim, Flat Bottom., Clear, No Patch, Silanized	AR0-3263-13	
Headspace Vial, 23 x 75 mm, 20 mL Square Rim, Flat Bottom, Clear, No Patch	AR0-3290-13	
Headspace Vial, 23 x 75 mm, 20 mL Beveled Rim, Round Bottom, Clear, No Patch	AR0-3270-13	

Autosampler Compatibility
Flat Bottom: HP / Agilent, Carlo Erba, Shimadzu
Round Bottom: PerkinElmer, Tekmar, LEAP Technologies, Varian

Headspace Crimp Top Seals / Closures

- **Variety of styles for any application**
- **Crimp and decrimp with ease**
- **Magnetic caps available**

Ordering Information

Description	1000/pk	Price
Seal, 20 mm Diameter, PTFE/Gray Butyl Rubber, magnetic cap	AR0-52C5-13	
Seal, 20 mm Diameter, PTFE/Gray Butyl Rubber, Pressure Release, silver	AR0-52A0-13	
Seal, 20 mm Diameter, PTFE/Butyl Rubber Pharmafix Molded Septum, silver	AR0-52D0-13	
Seal, 20 mm Diameter, PTFE/Butyl Rubber Pressure Release, Pharmafix Molded Septum, silver	AR0-52B0-13	
Seal, 20 mm Diameter, PTFE/Silicone magnetic cap	AR0-5255-13	
Seal, 20 mm Diameter, PTFE/Silicone silver	AR0-5250-13	
Seal, 20 mm Diameter, PTFE/Silicone Pressure Release, silver	AR0-5220-13	

VOA / ASE Assembled Vial Kits and Storage Vial Kits

- **Convenient assembled kit includes vials with matching seal / closure**
- **Clear or amber, with open top or closed caps**
- **PTFE (Teflon®) faced 0.125 in. silicone septa or PTFE with foam urethane backing**
- **Lot numbered for traceability**

Ordering Information

Description	100/pk	Price	1000/pk	Price
Vial Kit, Storage, 20 mL screw, Clear w/ Caps 24-400 white PTFE/Foam Urethane liner, closed top	AR0-9559-12		AR0-9559-13	
Vial Kit, Storage, 20 mL screw, Amber w/ Caps 24-400 white PTFE/Foam Urethane liner, closed top	AR0-9551-12		AR0-9551-13	
Vial Kit, Storage, 40mL screw, Clear w/ Caps 24-400 white PTFE/Foam Urethane, closed top	AR0-9542-12		AR0-9542-13	
Vial Kit, Storage, 40mL screw, Amber w/Caps 24-400 white PTFE/Foam Urethane, closed top	AR0-9543-12		AR0-9543-13	
Vial Kit, VOA/ASE, 40mL screw, Clear w/Caps 24-400 white PTFE/Silicone, open top	AR0-9540-12		AR0-9540-13	
Vial Kit, VOA/ASE, 40mL screw, Amber w/ Caps 24-400 white PTFE/Silicone, open top	AR0-9541-12		AR0-9541-13	
Vial Kit, VOA/ASE, 20 mL screw, Clear w/ Caps 24-400 white PTFE/Silicone (assembled)*, open top	AR0-9531-12-E		AR0-9531-13-E	

* EPA certified Class 100 vials, caps, and septa are assembled, without processing.

Learn More. Visit Phenomenex.com/Verex for additional product selection and detailed information

Verex™ Vials

Autosampler Compatibility Chart

The compatibility of Verex Vials with various models of autosamplers is indicated in the table. Certain autosamplers require the purchase of optional vial trays and, in a few cases, programming upgrades to use all of the vials listed. An **X** mark indicates that the vials from this category are compatible with the autosampler in most configurations. **Flanged** indicates that a cap having an outer flange is required for the vial to operate properly with the autosampler. **Magnetic** indicates that a magnetic seal is required for use with the autosampler.

Manufacturer	Model	11 mm Crimp	8-425 Screw Thread	9-425 (9 mm) Screw Thread	10-425 Screw Thread	15 x 45 mm 4 mL	Headspace
Products found on page:		17	22	19-21	23	24	25
Agilent Technologies	1050	x		x			
	1090A	x	x	x			
	1100/1200 Wellplate/ NanoFlow	x		x			
	6850ALS	x					
	7673A/7683	x					
	7694E						x
Beckman Coulter	501/507/System Gold	x	x	x		x	
CTC	See Leap Technologies	x	x	x			
Dionex	ASI-100/A550	x	x	x	x	x	
	AS-40			x		x	
	FAMOS	x	x	x			
ESA	540	x	x	x	x	x	
	540-MT	x	x	x	x		
Fisons	A-200S/AS 150/800/8000	x	x	x			
Gerstel	MPS 2	x	x	x	x		Magnetic
	MPS 3	x	x	x	x		
Gilson	234, 235, 250	x	x	x			
	231 XL/232 XL/ 233 XL	x	x	x			
	215	x	x	x	x		
Hitachi	AS-1000, AS-2000	x	x	x			
	AS-4000	x		x			
	Lachrom L-7200/7250	x	x	x			
	Lachrom Elite L-2200	x	x	x			
JASCO	851/AS950/1550/1555		Flanged				
	AS-2059/AS2059Plus		Flanged		x		
	AS-2055/AS/2057		Flanged		x		
LEAP Technologies	CLPAL/GC PAL	x	x	x	x		
	Combi PAL	x	x	x	x		
	HTC PAL/HTS PAL	x	x	x	x		
PerkinElmer	AutoSystem/ AS-2000/XL	x	x	x		x	
	Clarus 500/600	x		x			
	LC Plus	x	x	x	x		
Shimadzu	AOC-8B/9, AOC-14/1400	x	x	x			
	AOC-5000	x	x	x	x		Magnetic
	AOC-20	x		x		x	
	HSS-2B/4B						x
	SIL-10A		x	x	x		
	SIL-HT/10ADVP, LC-2010	x	x	x	x		
Spark-Holland	Symbiosis/ Reliance	x	x	x	x		
Thermo Scientific	Surveyor LC	x	x	x			
	AS-3000/Trace GC/ Focus LC	x		x			
	TriPlus	x	x	x	x		x
Teledyne/Tekmar	7000/7050						x
	HT3A						x
Varian	CP-8410	x	x	x	x	x	
	CombiPAL	x	x	x	x		Magnetic
	8034/8035/8100/8200	x	x	x			
	9095/9100	x	x	x			
	Prostar 400/410/420	x	x	x	x		
	Prostar 430	x	x	x	x		
	Genesis					x	
Waters	WISP 48 position tray					x	
	Alliance 2690		x	x	x		
	Model 2767		x	x	x		
	Model 2777				x		
	ACQUITY	x	x	x	x		
	CapLC	x	x	x			