Agilent CrossLab

From Insight to Outcome

Agilent Vials and Sample Containment Solutions

# CONSISTENT QUALITY MAXIMUM PRODUCTIVITY


Agilent Technologies

# IT'S MORE THAN JUST A VIAL... IT CAN AFFECT YOUR RESULTS AND RETURN ON INSTRUMENT INVESTMENT

It's easy to think of vials as simple, inexpensive components that don't affect your results. However, substandard vials, caps, and septa can lead to sample loss, contamination, and damaged autosampler needles.

Agilent understands that vials are a critical part of your analytical workflow—no less important than the column or the instrument. That is why Agilent vials are designed to meet the high standards you have come to expect from every Agilent product—including:

- Guaranteed consistent performance from lot-to-lot
- Unsurpassed rigor in quality control and manufacturing
- Better value for your money
- Easy selection based on volume, sample type, and instrument

## Stop unexpected peaks from impacting your results

With Agilent vials, you can rest assured that your *sample* is getting measured—not the indirect effects of the analytical flow path. No other supplier can promise such a comprehensive solution for getting your samples from injection to detection with minimal interference to maximize your productivity.

## Think all vials are created equal? Think again!

Only Agilent vials have these quality and performance statistics:

**30%** Time savings using our full range of short thread screw top vials and caps

**$0** What you pay for technical support, unlike some other suppliers

**30+** Inspection points. So you get the tightest dimensional specifications, every time

**Up to $100K** What some customers have saved annually using Agilent technical support and recommended vials

**100%** Agilent vials inspected under our rigorous vision testing system

**100s of millions** Agilent vials shipped worldwide every year

# Table of Contents



**50%**
Faster crimp speed: Our electric crimper lets you crimp your vial, not your style

**127 (and growing)**
Countries we deliver to across the world, from Albania to Vietnam

**33/51**
Best in glass: All vials are made of type 33-51 coefficient of expansion for top performance

**10+**
Instrument brands with which Agilent vials/caps are compatibility tested

**120 meters**
Vials are small... but are manufactured in a facility as big as an aircraft hangar!

PROVEN VALUE

# SAVE MONEY, AND ELIMINATE DRAINS ON YOUR LAB'S PRODUCTIVITY

## Why gamble with your results?

Using poor-quality vials (or the wrong vials for your application) can cause sequence problems, unnecessary downtime, expensive repairs, and the loss of precious samples

Agilent vials are the only vials that deliver time-saving—and cost-saving—advantages like these:

- **Reduced labor:** Our short-thread screw-top vials make screwing/unscrewing the cap up to 30% faster, while lowering your risk of repetitive strain injury.
- **Less interference:** Agilent vials are made from analytical grades 33 and 51 glass, which will not remove analytes from sample matrixes.
- **Fewer septa issues:** Agilent septa are continually being improved to limit leaching, coring, sticking, push-through, hardness, and adsorption/absorption.
- **Lower risk of breakage:** Thicker glass walls help eliminate cracking during clamping, and a unique packing box keeps vials safe during transit and storage.
- **Easier crimping:** Our high-powered crimper lets you crimp your vials in half the time it takes using a manual crimper.
- **Streamlined ordering:** From vials, to columns, to supplies for any major instrument brand, you can find everything you need from one trusted supplier.
- **Fast delivery:** Our worldwide distribution centers can make sure your vial order reaches your lab within 48 hours.
- **FREE 24/7 technical support:** Our team is always available to provide fast, expert assistance, should any issues arise.

"Bargain" vials can be made from type 70 or 71 COE, which has high metal content that can remove analytes—or destabilize the analyte through alkyl leaching. Agilent vials are made from type 33 and 51 glass, so you can be confident your results will not be compromised.

| ASTM E438 Type I Class A Linear COE | ASTM E438 Type I Class B Linear COE |
|---|---|
| 32 – 33 (+/- 1.5) | 48 - 56 (+/- 2.0) |

Coefficient of expansion (COE) compliance – 0-300C, cm/cm x CX10-7 (acceptable expansions for analytical chromatographic purposes).

To learn more about glass quality, download our free white paper at: **www.agilent.com/chem/vialsresources**

## Agilent Certified Vials: ultimate integrity and consistency

Only Agilent Certified Vials are shipped with a certificate confirming that they are:

- Produced in an ISO 9001 certified environment
- Manufactured and packaged to reduce contamination, which can cause ghost peaks
- Pierce tested with Agilent needles and syringes
- Inspected with automated vision systems
- Compatible with the autosampler's gripping and injection mechanisms

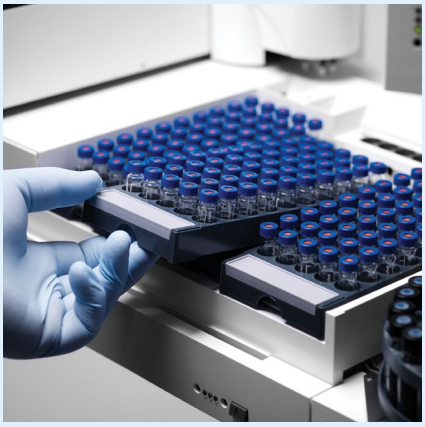
## Better injections, better chromatography

### Agilent GC Autosamplers

From simple dilutions to complicated derivatizations, Agilent GC autosamplers exceed the precision and accuracy required for routine injections. Learn more: **www.agilent.com/chem/GCsampleintro**

### Agilent LC Autosamplers

Agilent 1200 Infinity Series autosamplers meet a wide variety of needs, ranging from general HPLC to high sample throughput. Micro systems, ultra-high-performance systems, preparative systems, and manual injection systems are also part of the portfolio. Learn more: **www.agilent.com/chem/lc-injection-systems**



Agilent 7693A ALS Vials tray.

**Tips & Tools:**

2 mL high-recovery screw-top vials can be used with all autosamplers.

## Don't have an Agilent instrument? No problem.

Agilent vials are manufactured to perform seamlessly with a variety of analytical instruments—regardless of make or model. You also get the benefits of easy ordering, technical support, and fast worldwide delivery.

Use the table on the next page to determine which Agilent vials are compatible with your instrument manufacturer and model.

Agilent vials are suitable for all major instrument brands

## Make productivity happen—regardless of application or instrument vendor

Improve cycle time, eliminate variability, and enhance your results at every step of your workflow.

- **GC, GC/MS, or GC Headspace:** Improve sensitivity and selectivity for complex samples and demanding environments. Go to: **www.agilent.com/chem/productivityGC**

  **Inert GC flow path supplies:** Lower detection limits and quantify active analytes with confidence. Go to: **www.agilent.com/chem/inert**

- **LC and LC/MS**: Confidently perform discovery, quantitation, and target compound analysis. Go to: **www.agilent.com/chem/productivityLC**
- **Spectroscopy:** Get the most from your elemental analysis. Go to: **www.agilent.com/chem/spectro**

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The right vial is just a few clicks away.
Use our online selection tool at **www.agilent.com/chem/selectvials**

## Agilent Vial Compatibility

| Manufacturer | Autosampler | 8 mm Screw Top | 9 mm Screw Top | 15 x 45 mm, 4 mL | 11 mm Crimp Top | Headspace |
|---|---|---|---|---|---|---|
| Waters | 717 Plus | | | | ♦ | |
| | Acquity | ♦ | ♦ | | ♦ | |
| | Alliance 2690 | ♦ | ♦ | | | |
| | CapLC | ♦ | ♦ | | ♦ | |
| | WISP | | | ♦ | | |
| Shimadzu | AOC14/1400 | ♦ | ♦ | | ♦ | |
| | AOC-20 | | ♦ | ♦ | ♦ | |
| | AOC 88/9 | ♦ | ♦ | | ♦ | |
| | AOC-5000 | ♦ | ♦ | | ♦ | Magnetic |
| | HSS-2B/4B | | | | | ♦ |
| | LC 2010 | ♦ | ♦ | | ♦ | |
| | SIL-6A/6B/9A | With flange | | | | |
| | SIL-10A, SIL-10Ai, SIL-10AxL | ♦ | ♦ | | | |
| | SIL-HT/10ADVP | ♦ | ♦ | | ♦ | |
| Thermo Scientific/Dionex | A-200S/AS 150/800/8000 | ♦ | ♦ | | ♦ | |
| | AS 3000/TRACE GC | | ♦ | | ♦ | |
| | ASI-100 | ♦ | ♦ | | ♦ | |
| | SURVEYOR LC | ♦ | ♦ | | ♦ | |
| | TriPlus | | ♦ | | ♦ | |
| | WPS-3000RS | ♦ | ♦ | | ♦ | |
| | WPS-3000SL | ♦ | ♦ | | ♦ | |
| Bruker, Varian* | 8034/8035/8100/8200 | ♦ | ♦ | | ♦ | |
| | 9095/9100 | ♦ | ♦ | | ♦ | |
| | CP-8410 | | ♦ | ♦ | ♦ | |
| | Genesis | | | | | ♦ |
| PerkinElmer | Autosystem GC/XL/AS-2000 | ♦ | ♦ | ♦ | ♦ | |
| | Clarus 500/600 | | ♦ | | ♦ | |
| | HS16/40 | | | | | ♦ |
| | Integral 4000 | ♦ | ♦ | | ♦ | |
| | ISS-100/200 | ♦ | ♦ | | ♦ | |
| | LC 600 42 vial tray | | ♦ | | | |
| | LC Plus | ♦ | ♦ | ♦ | | |
| | TurboMatrix 40/110 | | | | | ♦ |
| CTC Analytics | CombiPal | | ♦ | ♦ | ♦ | Magnetic |

**Formerly Varian systems, now Bruker products*

The right vial is just a few clicks away. Use our online selection tool at **www.agilent.com/chem/selectvials**

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Agilent CrossLab, the world leader in innovative laboratory services, software, and consumables, provides a direct connection to a global team of experts who deliver vital, actionable insights at every level of the lab environment. Our insights drive improved economic, operational, and scientific outcomes. Agilent CrossLab. From insight to outcome.

**www.agilent.com/crosslab**

## From athletic drug testing to ice core analysis... real-life problems, solved

### Active Pharmaceutical Ingredients (APIs) manufacturing company

**Problem:** The customer was experiencing retention time shifting, high RSD, peak tailing, poor resolution, and asymmetric peaks.

**Diagnosis:** Excessive void volume.

**Solution:** Use Agilent vials, tubing, ferrules and filters. We showed the customer how to tighten vials securely, demonstrated proper tube-cutting techniques, and recommended the use of standard tubing to prevent void volume.

**Outcome:** Increased productivity and cost savings.

### High-volume environmental contract lab

**Problem:** Instruments were not completing overnight sample runs—costing the lab $25K in missed deadlines and penalties.

**Diagnosis:** The purchasing department changed the cap supplier without notifying the lab—resulting in septa sticking and autosampler needle failure.

**Solution:** Go back to using Agilent caps and septa.

**Outcome:** No more problems with septa sticking or needle failure.

### Small-molecule pharmaceutical company

**Problem:** Reduced analyte response caused a two-week delay, costing the company $100K, and damaging their reputation.

**Diagnosis:** Poor-quality vials made with glass expansion 70/71, which has a high metal content that can remove compounds from the matrix.

**Solution:** Switch to Agilent vials and caps, which use only analytical grades 33 and 51 glass.

**Outcome:** Improved productivity and more consistent performance.

### Environmental lab

**Problem:** The customer was unable to complete a critical study, because they didn't trust their results. Vial contamination was suspected.

**Diagnosis:** The vials were contaminant-free, but the customer's method needed modification.

**Solution:** Implement a new Agilent-suggested workflow.

**Outcome:** Customer saved $50K in troubleshooting costs—and completed their study with reliable results.

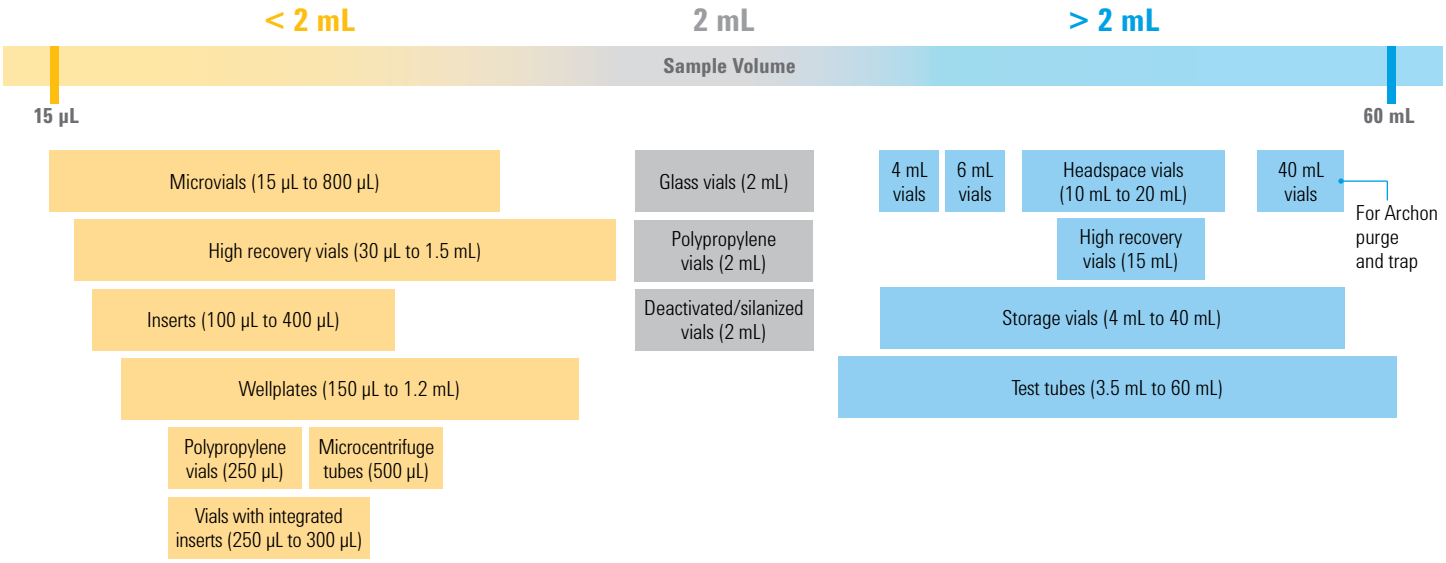
Best of all... the troubleshooting and technical support described here were all performed **free of charge.**

# PROTECT SAMPLE INTEGRITY BY CHOOSING THE BEST VIAL FOR YOUR APPLICATION

By matching our vial to your application, you can contain samples with minimal interference from the surrounding environment, and ensure optimal sample interface with your analytical platform. To help you get started, we've answered the most common questions about vial selection below.

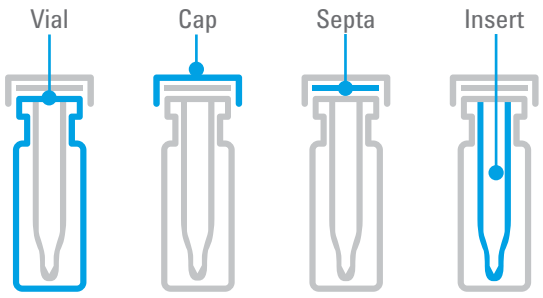
## Which vial is best for my sample size?

There are several factors to consider, including analysis type, analytical platform, and sample availability. Agilent vials offer the same highly consistent performance across the entire size range, from 15 µL up to 60 mL. Use the diagram below as a starting point for choosing the size you need based on your sample volume.




## How do vial components factor in?

Vial caps, septum, and inserts prevent leakage and sample loss due to evaporation. Like Agilent vials, Agilent vial components receive the same high level of attention during design and manufacture. They also work seamlessly with Agilent vials so complex runs proceed smoothly.



## How do I choose the right closure?

There are three major factors to consider when selecting a closure.

### 1. Compatibility of septa and sample

Make sure the septa you choose are chemically compatible with your sample and solvent. Chemical compatibility can vary, based on factors such as solvent concentration, molecular weight, and temperature.

During manufacture, Agilent septa undergo thermal and chemical conditioning to reduce siloxane bleed, which can occur when the septa material is stressed during heating, solvent interaction, or piercing by the autosampler needle.

**Septa Chemical Compatibility**

| | PTFE | PTFE/Silicone | PTFE/Silicone/PTFE* | PTFE/Red Rubber | Fluoroelastomer | PTFE/Butyl |
|---|---|---|---|---|---|---|
| Acetonitrile | ♦ | ♦ | ♦ | ♦ | | ♦ |
| Hydrocarbons (hexane, heptane, methane) | ♦ | | ♦ | ♦ | ♦ | |
| Methanol | ♦ | ♦ | ♦ | ♦ | | ♦ |
| Benzene | ♦ | | ♦ | | ♦ | |
| THF | ♦ | | ♦ | | | |
| Toluene | ♦ | | ♦ | | | |
| DMF | ♦ | ♦ | ♦ | | | ♦ |
| DMSO | ♦ | ♦ | ♦ | | | ♦ |
| Ether | ♦ | ♦ | ♦ | | | |
| Chlorinated Solvents (methylene chloride) | ♦ | | ♦ | | ♦ | |
| Alcohols (ethanol) | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| Acetic Acid | ♦ | ♦ | ♦ | | | ♦ |
| Acetone | ♦ | ♦ | ♦ | | | |
| Phenol | ♦ | ♦ | ♦ | | ♦ | ♦ |
| Cyclohexane | ♦ | | ♦ | ♦ | ♦ | |

*PTFE/silicone/ PTFE has the same chemical compatibility of PTFE ONLY UNTIL PUNCTURED.

**Tips & Tools:**

For highly sensitive samples, we recommend PTFE-lined (“sandwiched”) septa, because the PTFE layers act as a chemically resistant barrier.

## 2. Compatibility of septa and cap

Use the chart below to determine the right cap and septa combination, based on your application. Note: septa that are too thick can prevent the cap from fitting properly on the vial.

If siloxane interference is a concern for your application, we recommend Agilent Certified caps and Agilent Certified bonded caps. They provide the industry's lowest bleed profile for better analytical sensitivity, reduced downtime, and improved productivity.

### Cap and Septa Compatibility

| | High Performance Septa | Thin PTFE | PTFE/Silicone* | PTFE/Silicone/ PTFE* | PTFE/Red Rubber | Fluoroelastomer | Butyl |
|---|---|---|---|---|---|---|---|
| Temperature range | 40 to 300 °C** | Up to 260 °C | -40 °C to 200 °C | -40 °C to 200 °C | -40 °C to 90 °C | -40 °C to 260 °C | -50 °C to 150 °C |
| Use for multiple injections | No | No | Yes | Yes | No | No | No |
| Price | Most expensive | Very economical | Economical | Most expensive | Very economical | Economical | Economical |
| Resistance to coring | Excellent | None | Excellent | Excellent | None | None | None |
| Recommended for storage | No | No | Yes | Yes | No | No | No |
| Best for | High temperature headspace applications | Superior chemical inertness, short cycle times, and single injections | Most common HPLC and GC analyses, not as resistant to coring as P/S/P | Superior performance for ultra analysis, repeat injections, internal standards | Chlorosilanes more economical option for single injections | Chlorinated solvents, higher temperatures | Organic solvents, acetic acids; impermeable to gasses |

*Agilent silicone is peroxide cured, making it more inert and less likely to interact with samples

** For up to one hour

## 3. Crimp cap vs. screw cap

Based on our decades of chromatography experience, crimp-cap vials tend to be best for GC and GC/MS applications, while screw-cap vials are generally used for LC and LC/MS applications. However, your specific application—as well as your personal preference—are also factors to consider.

Although both types of caps deliver a good seal, crimp caps provide additional security for food, forensics, and other applications for which you want to avoid sample tampering. We also recommend a crimp-cap vial if you are working with volatile compounds.

## What about more specialized applications?

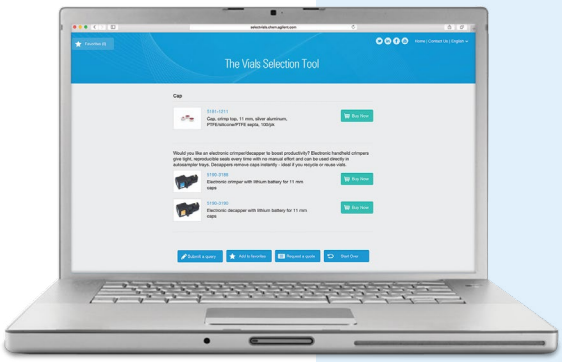
### Deactivated vials

For pesticides, semivolatiles, and other highly sensitive samples—as well as samples that are prone to sudden pH shifts—deactivated vials are best, because their surface is more hydrophobic and inert. We also recommend deactivated vials for exacting applications, such as mass spectrometry, to prevent sample interactions prior to analysis.

### Polypropylene vials

Polypropylene vials are an excellent choice for biological applications, and for applications involving samples with high metal content—such as ion chromatography, AA, or ICP-MS.

Agilent thoroughly tested and evaluated a variety of polypropylene materials prior to selecting the grade used in our polypropylene vials. So you can rest assured that our vials have the lowest levels of extractables to ensure sample integrity.


## Hundreds of choices... one easy guide

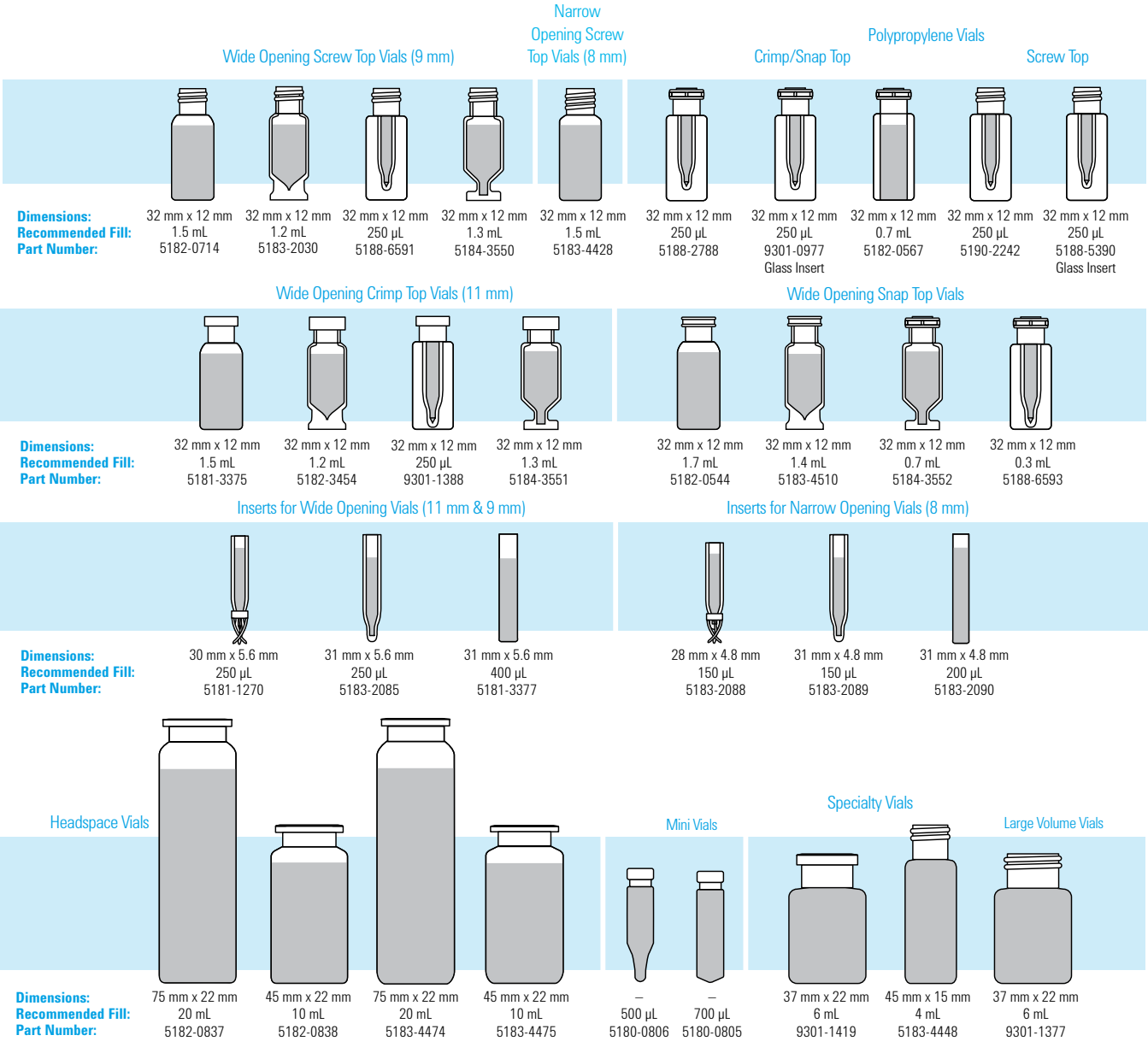
Use our online selection tool to quickly find the right products for complete confidence in your sample containment.

- Answer a few simple questions to identify your best options
- Search by technique, product number, or vial type
- Make a perfect pick from more than 600 vials, caps, and septa

Go to **www.agilent.com/chem/selectvials**

# FIND THE RIGHT PRODUCTS FOR COMPLETE CONFIDENCE IN YOUR SAMPLE CONTAINMENT

Agilent vials, caps, and septa have been engineered and designed with the same superior quality we build into Agilent instruments. When you put our 40 years of innovation and excellence into your vials and caps, you can have complete confidence in your results.




This is a selection of vials, not the entire portfolio.

The tables that follow are conveniently arranged by vial size for easy selection.
You can also use our online selection tool at **www.agilent.com/chem/selectvials**

# Containment Solutions for Sample Volumes <2 mL

### Vials

| Description | Sample volume | Material | Certified | Unit | Part No. |
|---|---|---|---|---|---|
| **Microvials** | | | | | |
| WineGlass shape, 12 x 32 screw top | 15 µL | Glass, clear | | 100/pk | 5184-3550 |
| | 15 µL | Glass, amber | | 100/pk | 5184-3554 |
| WineGlass shape, 12 x 32 crimp top | 15 µL | Glass, clear | | 100/pk | 5184-3551 |
| | 15 µL | Glass, amber | | 100/pk | 5184-3555 |
| Crimp top, tapered, 6 mm | 100 µL | Glass, clear | | 500/pk | 5180-0844 |
| Crimp top, round bottom, 6 mm, for HTS and HTC PAL liquid injection | 300 µL | Glass, clear | | 500/pk | 5180-0841 |
| Crimp/snap top | 700 µL | Polypropylene | | 100/pk | 5182-0567 |
| Crimp top, flat bottom | 800 µL | Glass, amber | | 1,000/pk | 5183-4487 |
| **High recovery vials** | | | | | |
| Crimp top | 1.5 mL with 30 µL reservoir | Glass, clear | | 100/pk | 5182-3454 |
| | 1.5 mL with 30 µL reservoir | Glass, clear (silanized) | | 100/pk | 5183-4497 |
| Screw top | 1.5 mL with 30 µL reservoir | Glass, clear | | 100/pk | 5183-2030 |
| | 1.5 mL with 30 µL reservoir | Glass, amber | | 100/pk | 5183-2073 |
| **Microcentrifuge** | | | | | |
| Microcentrifuge tubes | 500 µL | | | 100/pk | 9301-6384 |
| **Polypropylene Vials** | | | | | |
| Crimp/snap top | 250 µL | Polypropylene | Y | 100/pk | 5188-2788 |
| | 250 µL | Polypropylene | | 1,000/pk | 5190-3155 |
| Screw top | 250 µL | Polypropylene | Y | 100/pk | 5190-2242 |
| | 250 µL | Polypropylene | Y | 1,000/pk | 5190-2243 |
| **Vials with Integrated Inserts** | | | | | |
| Screw top, with glass insert | 250 µL | Polypropylene | | 100/pk | 5188-5390 |
| Crimp/snap top, with glass insert | 250 µL | Polypropylene | | 100/pk | 9301-0977 |
| | 250 µL | Polypropylene | Y | 100/pk | 9301-0978 |
| Screw top, with fixed insert | 300 µL | Glass, clear | | 100/pk | 5188-6591 |
| Crimp top, with fixed insert | 300 µL | Glass, clear | | 100/pk | 9301-1388 |
| Screw top, with fixed insert | 300 µL | Glass, amber | | 100/pk | 5188-6592 |
| Crimp top, with fixed insert | 300 µL | Glass, amber | | 100/pk | 5188-6572 |

5182-0567

5182-3454

## Inserts

| Description | Sample volume | Material | Certified | Unit | Part No. |
|---|---|---|---|---|---|
| Vial insert | 100 µL | | Y | 500/pk | 9301-1387 |
| Vial insert, for 2 mL standard opening (8 mm) screw top vials | 150 µL | Glass with polymer feet | | 100/pk | 5183-2088 |
| Vial insert, 200 µL measured fill (150 µL recommended), for 2 mL standard opening (8 mm) screw top vials | 150 µL | Pulled point glass | | 100/pk | 5183-2089 |
| Vial insert, flat bottom, for 2 mL standard opening (8 mm) screw top vials | 200 µL | Glass | | 100/pk | 5183-2090 |
| Vial insert, with graduations | 250 µL | Polypropylene | | 100/pk | 5190-4073 |
| Vial insert | 250 µL | Glass with polymer feet | Y | 100/pk | 5181-1270 |
| Vial insert | 250 µL | Deactivated glass with polymer feet | Y | 100/pk | 5181-8872 |
| Vial insert, graduated to 300 µL in increments of 100 µL. Do not fill to more than 250 µL | 250 µL | Polypropylene with polymer feet | Y | 100/pk | 5182-0549 |
| Vial insert | 250 µL | Pulled point glass | Y | 100/pk | 5183-2085 |
| Vial insert, conical | 250 µL | Polymer feet | Y | 25,000/pk | 5185-5958 |
| Vial insert, flat bottom | 250 µL | Glass | Y | 50,000/pk | 5067-0212 |
| Vial insert | 350 µL | Glass | | 1,000/pk | 5188-5321 |
| Vial insert, flat bottom | 400 µL | Glass | Y | 500/pk | 5181-3377 |
| Vial insert, flat bottom | 400 µL | Deactivated glass | Y | 500/pk | 5183-2086 |
| Vial insert, flat bottom | 400 µL | Polypropylene | Y | 500/pk | 5183-2087 |
| Cap for 350 µL glass insert | | | | 1,000/pk | 5188-5322 |

5181-8872

5183-2085

5181-3377

## Well Plates and Closing Mats

| Description | Sample volume | Material | Certified | Unit | Part No. |
|---|---|---|---|---|---|
| 384-well plate | 90 µL | Polypropylene | | 30/pk | 5042-1388 |
| 96-well plate, skirted | 150 µL | | | 25/pk | 5042-8502 |
| 96-well plate with glass inserts, caps, septa preassembled | 350 µL | | | 1/pk | 5065-4402 |
| 96-well plate | 500 µL | Polypropylene | | 120/pk | 5042-1385 |
| 96-well plate | 500 µL | Polypropylene | | 10/pk | 5042-1386 |
| 96 deep-well plate | 1 mL | Polypropylene | | 50/pk | 5042-6454 |
| 96 deep-well plate and microplate, round well, 1.0 mL working volume | 1.2 mL | | | 10/pk | SN400042 |
| Insert and cap/septa kit for deep-well collection plates. Includes 350 µL inserts and caps/septa. Ideal for refilling kit 5065-4402. | | | Y | 1,000/pk | 5190-2237 |
| Closing mat, Micro Mat, square, for 96-well plate | | | | 10/pk | SN800220 |
| Closing mat for 96-well plate | | Silicone | | 50/pk | 5042-1389 |

5042-1389

**Tips & Tools:**

You can also use our Vial Selection Tool to search by instrument manufacturer.

Visit **www.agilent.com/chem/selectvials**

# Containment Solutions for Sample Volumes of 2 mL

## Vials

| Description | Certified | 100/pk | 1,000/pk | 10,000/pk | 50,000/pk | 100,000/pk |
|---|---|---|---|---|---|---|
| **Crimp Top** | | | | | | |
| Clear | Y | 5181-3375 | 5183-4491 | | | 5185-5852 |
| Clear with write-on spot | Y | 5182-0543 | 5183-4492 | | | |
| Clear, wide | Y | | | 5190-6116 | 5190-6123 | |
| Clear, wide, with write-on spot | Y | | | 5190-6117 | 5190-6124 | |
| Amber with write-on spot | Y | 5181-3376 | 5183-4493 | 5190-6113 | | |
| **Crimp/Snap Top Polypropylene for CE** | | | | | | |
| Clear | | 5182-9697 | | | | |
| Amber with write-on spot | | 5183-4619 | | | | |
| **Screw Top** | | | | | | |
| Clear, 8-425 | | 5183-4428 | | | | |
| Clear | Y | 5182-0714 | 5183-2067 | | | 5185-5918 |
| Clear with write-on spot | Y | 5182-0715 | 5183-2068 | | 5190-6126 | |
| Clear with write-on spot, 8 mm | | 8010-0010 | | | | |
| Amber, 8-425 | | 5183-4429 | | | | |
| Amber | Y | 5188-6535 | 5188-6536 | 5190-6114 | 5190-6121 | |
| Amber with write-on spot | Y | 5182-0716 | 5183-2069 | 5190-6115 | 5190-6122 | |
| Amber with write-on spot, 8 mm | | 8010-0012 | | | | |
| **Deactivated (Silanized)** | | | | | | |
| **Crimp Top** | | | | | | |
| Clear | Y | 5183-4494 | | | | |
| Clear with write-on spot | Y | 5183-4495 | | | | |
| Amber with write-on spot | Y | 5183-4496 | | | | |
| **Screw Top** | | | | | | |
| Clear | Y | 5183-2070 | | | | |
| Clear, 8-425 | | 5183-4432 | | | | |
| Clear with write-on spot | Y | 5183-2071 | | | | |
| Amber, 8-425 | | 5183-4433 | | | | |
| Amber with write-on spot | Y | 5183-2072 | | | | |

5181-3375

5183-2067

5182-0716

# Caps and Septa for <2 mL and 2 mL Vials

## Septa

| Description | Certified | 100/pk | 500/pk |
|---|---|---|---|
| PTFE/white silicone, pre-slit | Y | 5183-2074 | |
| PTFE/red silicone, for screw top caps | Y | 5182-0731 | |
| PTFE/white silicone, for screw top caps | Y | 5182-0730 | |
| PTFE/white silicone/red PTFE, for screw top caps | Y | 5182-0729 | |
| Red PTFE/white silicone/red PTFE, for 8-425 vials | | 5183-4436 | |
| Red PTFE/white silicone, for 8-425 vials | | 5183-4437 | |
| PTFE-coated butyl rubber, for 8-425 vials | | | 9301-1130 |

## Crimp Caps

| Cap Color | Septa Type | Certified | 25/pk | 100/pk | 500/pk | 1,000/pk | 5,000/pk | 10,000/pk | 100,000/pk |
|---|---|---|---|---|---|---|---|---|---|
| **11 mm Crimp Caps** | | | | | | | | | |
| Blue aluminum | Red PTFE/rubber | | | 5181-1215 | | | | | |
| Blue aluminum | Clear/red PTFE/silicone | | | 5190-9045 | | | | | |
| Blue aluminum | PTFE/silicone/PTFE | Y | | | | 5190-4074 | | | |
| Gold aluminum | Clear/red PTFE/silicone | | | 5190-9052 | | | | | |
| Gold steel, magnetic | White silicone/PTFE | | | 5188-5386 | | | | | |
| Green aluminum | Red PTFE/rubber | | | 5181-1216 | | | | | |
| Green aluminum | Clear/red silicone/PTFE | | | 5190-9046 | | | | | |
| Green aluminum | PTFE/silicone/PTFE | Y | | | | 5190-6096 | | | |
| Red aluminum | Red PTFE/rubber | | | 5181-1217 | | | | | |
| Red aluminum | Clear/red silicone/PTFE | | | 5190-9047 | | | | | |
| Red aluminum | PTFE/silicone/PTFE | Y | | | | 5190-4075 | | | |
| Silver aluminum | Black fluorocarbon | Y | | 5181-1212 | | | | | |
| Silver aluminum | PTFE/ butyl | | | 8010-0051 | | | | | |
| Silver aluminum | Red PTFE/rubber | | | 5181-1210 | 5061-3370 | 5183-4498 | 5190-4053 | | 5185-5851 |
| Silver aluminum | Red PTFE/silicone | | | 5190-9044 | | | | | |
| Silver aluminum | PTFE/silicone | Y | | 5182-0552 | | 5183-4500 | | | |
| Silver aluminum | PTFE/silicone | | | | | | 5190-4052 | 5190-3186 | |
| Silver aluminum | PTFE/silicone/PTFE | Y | | 5181-1211 | | 5183-4499 | | | |
| Silver aluminum | PTFE/silicone/PTFE | | | | | | 5190-4051 | | |
| Silver aluminum | Thin membrane | Y | 5190-6169 | 5182-0871 | | | | | |
| **8 mm Crimp Caps** | | | | | | | | | |
| Silver aluminum | PTFE/silicone/PTFE | | | | 5180-0842 | | | | |

5188-5386

5181-1212

## Screw Caps

| Cap Description | Septa Type | Certified | 100/pk | 250/pk | 500/pk | 1,000/pk | 5,000/pk | 50,000/pk |
|---|---|---|---|---|---|---|---|---|
| Black, 11 mm, 8-425 | Red PTFE/white silicone | | 5183-4442 | | | | | |
| Black, 11 mm, 8-425 | No septa | | 5183-4438 | | | | | |
| Black, 11 mm | PTFE/red silicone | Y | 5185-5838 | | | | | |
| Blue, 11 mm, bonded | Pre-slit PTFE/silicone | | 5185-5824 | | 5040-4649 | | | |
| Blue, 11 mm, bonded | PTFE/silicone | | 5185-5823 | | | | | |
| Blue, 11 mm, bonded | Pre-slit PTFE/white silicone | Y | 5190-7023 | | | | | |
| Blue, 11 mm, bonded | PFTE/red silicone | Y | 5190-7024 | | | | | |
| Blue, 11 mm | Pre-slit PTFE/silicone | Y | 5183-2076 | | 5185-5865 | | | |
| Blue, 11 mm | PTFE-lined solid top | Y | 5183-2075 | | | | | |
| Blue, 11 mm | PTFE/red rubber | Y | | | | | | 5185-5917 |
| Blue, 11 mm | PTFE/red silicone | Y | 5182-0717 | | 5185-5820 | 5190-1599 | | |
| Blue, 11 mm | PTFE/red silicone | | | | | | 5190-4049 | |
| Blue, 11 mm | PTFE/white silicone | Y | 5182-0720 | | | | | |
| Blue, 11 mm | PTFE/white silicone | | | | | | 5190-4050 | |
| Blue, 11 mm | PTFE/silicone | | 5190-3156 | | | | | |
| Blue, 11 mm | PTFE/silicone/PTFE | Y | 5182-0723 | | 5185-5862 | | | |
| Blue, 8 mm | PTFE/silicone/PTFE | | 8010-0063 | | | | | |
| Blue | PTFE/white silicone | Y | | | 5185-5863 | | | |
| Blue, open top | No septa | Y | 5182-0728 | | | | | |
| Green, bonded | PTFE/red silicone | Y | 5190-7025 | | | | | |
| Green, bonded | PTFE/white silicone | Y | 5190-7026 | | | | | |
| Green, bonded | Pre-slit PTFE/red silicone | Y | 5190-7028 | | | | | |
| Green | Pre-slit PTFE/silicone | Y | 5183-2077 | | | | | |
| Green | PTFE/red silicone | Y | 5182-0718 | | 5185-5829 | | | |
| Green | PTFE/white silicone | Y | 5182-0721 | 5040-4682 | 5185-5864 | | | |
| Green | PTFE/silicone/PTFE | Y | 5182-0724 | | 5185-5861 | | | |
| Green, open top | No septa | Y | 5182-0727 | | | | | |
| Purple | PTFE/silicone | Y | 5040-4681 | | | | | |
| Red, bonded | PTFE/red silicone | Y | 5190-7029 | | | | | |
| Red, bonded | PTFE/white silicone | Y | 5190-7030 | | | | | |
| Red, bonded | Pre-slit PTFE/red silicone | Y | 5190-7032 | | | | | |
| Red, 9 mm | PTFE/white silicone/PTFE | | | | | 8010-0188 | | |
| Red, 8 mm | PTFE/silicone/PTFE | | 8010-0068 | | | | | |
| Red, 8 mm | Pre-slit PTFE/silicone | | 8010-0142 | | | | | |
| Red | Pre-slit PTFE/silicone | Y | 5183-2078 | | | | | |
| Red | PTFE/red silicone | Y | 5182-0719 | | | | | |
| Red | PTFE/white silicone | Y | 5182-0722 | | | | | |
| Red | PTFE/silicone/PTFE | Y | 5182-0725 | | | | | |
| Red, open top | No septa | Y | 5182-0726 | | | | | |
| Orange, 9 mm | PTFE/silicone | | | | | 8010-0186 | | |
| Orange, 9 mm | PTFE/silicone/PTFE | | | | | 8010-0187 | | |
| Silver aluminum, 11 mm | Pre-slit PTFE/silicone | | 8010-0582 | | | | | |
| Turquoise | PTFE/silicone | | 5040-4683 | | | | | |

5185-5823

5183-2075

## 2 mL Autosampler Vial Convenience Packs

Convenience packs are an easy way to get 500 of each component using one part number. Packed in our six-drawer, reusable blue plastic cabinet, 500 vials and caps with septa installed are kept handy and dust-free.

| Description | Septa Type | Cap Color | Certified | 500/pk |
|---|---|---|---|---|
| **Crimp Top** | | | | |
| Clear | PTFE/red rubber | Silver | | 5181-3400 |
| Clear with write-on spot | PTFE/red rubber | Silver | Y | 5190-2241 |
| Amber | PTFE/red rubber | Silver | | 5181-8801 |
| **Screw Top** | | | | |
| Clear, bonded | Pre-slit PTFE/silicone | Blue | Y | 5067-0205 |
| Clear | Pre-slit PTFE/silicone | Blue | Y | 5183-2079 |
| Clear | PTFE/red rubber | Blue | Y | 5182-0732 |
| Clear | PTFE/silicone | Blue | Y | 5182-0734 |
| Clear | PTFE/silicone/PTFE | Blue | Y | 5182-0736 |
| Clear with write-on spot | Pre-slit PTFE/silicone | Blue | Y | 5183-2080 |
| Clear with write-on spot | PTFE/red rubber | Blue | Y | 5182-0867 |
| Clear with write-on spot | PTFE/silicone | Blue | Y | 5182-0868 |
| Clear with write-on spot | PTFE/silicone/PTFE | Blue | Y | 5182-0869 |
| Amber with write-on spot | Pre-slit PTFE/silicone | Green | Y | 5183-2081 |
| Amber with write-on spot | PTFE/red rubber | Green | Y | 5182-0733 |
| Amber with write-on spot | PTFE/silicone | Green | Y | 5182-0735 |
| Amber with write-on spot | PTFE/silicone/PTFE | Green | Y | 5182-0737 |

## Pre-assembled Screw Top 2 mL Vial Packs

Pre-assembled packs come ready-to-use with the cap and septum of your choice attached to the vial. A time- and labor-saving product for use with your Agilent autosampler or any rotating tray automatic sampler.

| Description | Septa Type | Cap Color | Certified | 100/pk |
|---|---|---|---|---|
| Clear | Pre-slit PTFE/silicone | Blue | Y | 5183-2082 |
| Clear | PTFE/red silicone | Blue | Y | 5182-0553 |
| Clear | PTFE/silicone/PTFE | Blue | Y | 5182-0555 |
| Clear | PTFE/silicone | Blue | Y | 5182-0557 |
| Clear with write-on spot | Pre-slit PTFE/silicone | Blue | Y | 5183-2083 |
| Clear with write-on spot | PTFE/red rubber | Blue | Y | 5182-0864 |
| Clear with write-on spot | PTFE/silicone | Blue | Y | 5182-0865 |
| Clear with write-on spot | PTFE/silicone/PTFE | Blue | Y | 5182-0866 |
| Amber | PTFE/silicone | Green | Y | 5182-0558 |
| Amber | PTFE/silicone/PTFE | Green | Y | 5182-0556 |
| Amber with write-on spot | PTFE/red rubber | Green | Y | 5182-0554 |

Autosampler vial convenience pack

Pre-assembled screw top vial pack

## 2 mL Vial Kits

2 mL Vial kits are packs of vials with caps. These kits are not pre-assembled and do not come in storage drawers like the convenience pack.

| Vial Description | Septa Type | Cap Color | Certified | 100/pk | 10,000/pk | 50,000/pk | 100,000/pk |
|---|---|---|---|---|---|---|---|
| **Crimp Top** | | | | | | | |
| Clear | PTFE/silicone | Silver | | 8010-0195 | | | |
| Clear glass vial bundle | PTFE/red rubber | Silver | Y | | | 5185-5946 | |
| Amber | PTFE/silicone | Silver | | 8010-0196 | | | |
| Amber | PTFE/red rubber | Silver | Y | | | 5067-0214 | |
| **Screw Top** | | | | | | | |
| Clear | PTFE/red silicone | Blue | Y | | | | 5067-0237 |
| Clear glass vial bundle | PTFE/silicone | Blue | Y | | | 5185-5950 | |
| Clear | | | Y | | 5190-6118 | 5190-6125 | |
| Clear with write-on spot | | | Y | | 5190-6119 | | |
| Clear | PTFE/silicone septa | Orange | | 8010-0198 | | | |
| Clear glass vial and cap pack | Pre-slit PTFE/silicone | Red | | 8010-0425 | | | |
| Clear glass vial and cap pack | PTFE/butyl | Black | | 8010-0426 | | | |
| Clear glass vial and cap pack, standard opening (8 mm) | PTFE/silicone | Black | | 8010-0414 | | | |
| Clear glass with write-on spot, (9 mm). Similar to Waters 186000307C, National Scientific C4000-95W, Chromacol MEL, and La-Pha-Pack 11 23 1051 | Pre-slit PTFE/silicone | Orange | | 8010-0542 | | | |
| Clear glass 8-425 | PTFE-lined solid storage | | | 5183-4518 | | | |
| Amber | PTFE/silicone septa | Orange | | 8010-0199 | | | |
| Amber with write-on spot, 9 mm | Pre-slit PTFE/silicone | Orange | | 8010-0543 | | | |
| Amber glass vial and cap pack, standard opening (8 mm) | PTFE/silicone | Black | | 8010-0415 | | | |

## 2 mL MS Analyzed Vial Kits

Agilent MS Analyzed Vial Kits end the need to pre-test or to re-run samples due to unexpected peaks. All MS Analyzed Vial Kits include a Certificate of Analysis that contains accurate, lot-specific, and fully traceable LC/MS and GC/MS signal traces, as well as critical physical dimensions. Agilent's new MS Analyzed Vial Kits provide lot-specific test results for greater confidence in your results.

| Description | Septa Type | Cap Color | Certified | 100/pk | 1,000/pk |
|---|---|---|---|---|---|
| **Crimp Top** | | | | | |
| Clear with write-on spot | PTFE/silicone | Silver | Y | | 5190-6181 |
| Amber with write-on spot | PTFE/silicone | Silver | Y | | 5190-6182 |
| **Screw Top** | | | | | |
| Clear with write-on spot | PTFE/silicone | Silver | Y | 5190-2282 | 5190-6184 |
| Clear with write-on spot | PTFE/silicone | Blue | Y | 5190-2278 | |
| Amber with write-on spot | PTFE/silicone | Blue | Y | 5190-2280 | 5190-6186 |


8010-0425

5190-2282

5190-2280

# Containment Solutions for Sample Volumes >2 mL

### 4 mL Screw Top Vials

| Description | Size | Unit | Part No. |
|---|---|---|---|
| Clear | 15 x 45 mm | 100/pk | 5183-4448 |
| Clear with write-on spot | 15 x 45 mm | 100/pk | 5067-0246 |
| Amber | 15 x 45 mm | 100/pk | 5183-4450 |
| Amber with write-on spot | 15 x 45 mm | 100/pk | 5067-0247 |

### Screw Caps for 4 mL Vials

| Description | Material | Unit | Part No. |
|---|---|---|---|
| Black | PTFE/silicone septa | 100/pk | 5183-4464 |
| Black | No septa | 100/pk | 5183-4461 |

### 4 mL Vial Kits

| Vial Type | Septa Type | Cap Size/Color | Unit | Part No. |
|---|---|---|---|---|
| Clear glass<br>Similar to Waters 186000838C, Dionex/Thermo 03-375-3G, National Scientific C4015-1 | PTFE/silicone | 13 mm, black | 100/pk | 8010-0553 |
| Clear glass vials | No septa | | 144/pk | 9301-0723 |
| Amber glass vials<br>Similar to Waters 186001133C, Dionex/Thermo 03-375-3P, National Scientific C4015-2 | PTFE/silicone | 13 mm, black | 100/pk | 8010-0554 |
| Wash vials with fill markings | No septa | | 25/pk | 5182-0551 |

### Septa

| Description | Unit | Part No. |
|---|---|---|
| Red PTFE/white silicone | 100/pk | 5183-4460 |
| PTFE/natural rubber | 144/pk | 9301-1031 |
| White virgin PTFE | 1,000/pk | 5183-4459 |

### LC Vials, Caps and Septa

| Description | Certified | 100/pk |
|---|---|---|
| Vial, screw top, clear glass, flat bottom, 6 mL | Y | 9301-1377 |
| Vial, crimp top, clear glass, flat bottom, 6 mL | | 9301-1419 |
| Cap, screw, with pre-slit PTFE/silicone septa, 16 mm | | 8010-0102 |
| Cap, screw, PTFE/silicone septa, 16 mm | | 8010-0101 |
| Septa, pre-slit PTFE/silicone, 16 mm | Y | 5188-2758 |
| Septa for 6 mL vials | Y | 9301-1378 |

9301-1377

### >4-10 mL Caps and Septa

| Description | Material | Unit | Part No. |
|---|---|---|---|
| Screw cap for 6 mL vials | | 100/pk | 9301-1379 |
| Screw cap, 22 mm, black | No septa | 100/pk | 8010-0565 |
| Snap caps and seals for 10 mL wash vials | | 10/pk | G6500-88027 |
| Septa, 22 mm | PTFE/silicone | 100/pk | 8010-0564 |

### Seals

| Description | Unit | Part No. |
|---|---|---|
| Seals for wash and waste vials, 10/20/100 mL | 20/pk | MLAL1000023 |

### Headspace Vials

| Description | Size | Certified | Unit | Flat Bottom | Round Bottom |
|---|---|---|---|---|---|
| **Crimp Top, Glass** | | | | | |
| Clear | 10 mL, 23 x 46 mm | Y | 100/pk | 5182-0838 | 5183-4475 |
| | | | 100/pk | | 5190-6147 |
| | | Y | 1,000/pk | 8010-0179 | |
| Clear with graduation marks and write-on spot | 10 mL, 23 x 46 mm | | 100/pk | 5190-2285 | |
| Clear | 20 mL, 23 x 75 mm | Y | 100/pk | 5182-0837 | 5183-4474 |
| | 20 mL, 23 x 75 mm | Y | 10,000/pk | 5185-5957 | 5067-0235 |
| Clear with graduation marks and write-on spot | 20 mL, 23 x 75 mm | | 100/pk | 5190-2288 | |
| Clear | 22 mL | | 100/pk | | 8010-0152 |
| Amber | 10 mL, 23 x 46 mm | Y | 100/pk | 5067-0227 | 5190-2238 |
| Amber with graduation marks and write-on spot | 10 mL, 23 x 46 mm | | 100/pk | 5190-2287 | |
| Amber | 20 mL, 23 x 75 mm | Y | 100/pk | 5067-0226 | 5190-2239 |
| Amber with graduation marks and write-on spot | 20 mL, 23 x 75 mm | | 100/pk | 5190-2286 | |
| **Screw Top, Glass** | | | | | |
| Clear | 10 mL, 23 x 46 mm | | 100/pk | | 5188-5392 |
| Clear | 20 mL, 23 x 75 mm | | 100/pk | | 5188-2753 |
| | 20 mL, 23 x 75 mm | | 1,000/pk | 8010-0180 | |
| Amber | 10 mL, 23 x 46 mm | | 100/pk | | 5188-6538 |
| Amber | 20 mL, 23 x 75 mm | | 100/pk | | 5188-6537 |

**Agilent 7697A Headspace Sampler**

Ensure an inert sample pathway for superior GC performance without analyte degradation or loss.
Go to: **www.agilent.com/chem/7697A**

## Headspace Caps

| Description | Size | Septa Type | Certified | 100/pk | 1,000/pk | 10,000/pk |
|---|---|---|---|---|---|---|
| **Crimp Caps** | | | | | | |
| Silver aluminum | 20 mm | Molded PTFE/butyl | Y | | | 5190-2258 |
| | 20 mm | PTFE/silicone | Y | 5183-4477 | | 5190-2257 |
| | 20 mm | PTFE/silicone | | 9301-1425 | | |
| | 20 mm | Tan PTFE/white silicone | | | 8010-0191 | |
| | 20 mm | No septa | | 9301-0721 | | |
| Silver aluminum with safety feature | 20 mm | Molded PTFE/butyl | Y | 5183-4479 | | |
| | 20 mm | Molded PTFE/butyl | | 5183-4480 | | |
| | 20 mm | PTFE/silicone | Y | 5183-4478 | | 5067-0236 |
| | 20 mm | No septa | | 9301-0718 | | |
| Bimetal, magnetic | 20 mm | PTFE/silicone | | 8010-0420 | | |
| Steel, magnetic | 20 mm | Tan PTFE/silicone | | 8010-0165 | | |
| | 20 mm | Silicone/PTFE | | 8010-0424 | | |
| | 20 mm | High temperature septa | Y | 5190-3987 | | |
| | 18 mm | PTFE/butyl septa | | 8010-0140 | | |
| **Screw Caps** | | | | | | |
| Steel, magnetic | 18 mm | PTFE/silicone (white top, blue bottom) | | 5188-2759 | | |
| | 18 mm | High temperature septa | | 5190-3986 | | |

## Headspace Septa and Stoppers

| Description | Septa Type | Certified | 100/pk | 1,000/pk | 10,000/pk |
|---|---|---|---|---|---|
| **Septa** | | | | | |
| 18 mm | Blue PTFE/silicone | | | 8010-0418 | |
| 20 mm | Tan PTFE/white silicone | | 9301-0719 | 8010-0192 | |
| 20 mm | Tan PTFE/white silicone | Y | | | 5067-0234 |
| 20 mm | Red molded silicone/white PTFE | | 250-030-DAN | | |
| 20 mm | Gray molded PTFE/black butyl | | 9301-0976 | | |
| **Stoppers** | | | | | |
| Gray butyl stopper, 20mm, -40/120 °C | | Y | 5183-4476 | | |

## Headspace Kits

| Description | Septa Type | Cap Color/Type | Certified | 100/pk |
|---|---|---|---|---|
| **Crimp Top** | | | | |
| 10 mL clear, flat bottom glass vials | PTFE/silicone | Silver | | 8010-0412 |
| 20 mL clear, flat bottom glass vials | PTFE/silicone | Silver | | 8010-0413 |
| 20 mL clear, flat bottom glass vials | PTFE/black butyl | Silver with safety feature | Y | 5182-0839 |
| 20 mL clear, flat bottom glass vials | Molded PTFE/silicone | Silver with safety feature | Y | 5182-0840 |
| **Screw Top** | | | | |
| 20 mL clear, round bottom glass vials | PTFE/silicone | Silver magnetic | | 8010-0417 |

### LC High Recovery Vials

| Description | Size | Certified | 30/pk |
|---|---|---|---|
| Screw top, clear glass | 15 mL | Y | 5188-5369 |

### Vials, Caps, and Septa for Archon purge and trap

| Description | Size | Certified | 24/pk | 60/pk | 72/pk | 100/pk |
|---|---|---|---|---|---|---|
| **Vial Kits** | | | | | | |
| Clear, precleaned vials, caps, and septa | 40 mL | | | | 5183-4741 | |
| Amber, precleaned vials, caps, and septa | 40 mL | | | | 5183-4742 | |
| **Screw Caps** | | | | | | |
| Cap, screw | 40 mL | | 5183-4744 | | | |
| Cap, screw, red | 40 mL | Y | | | | 5190-6172 |
| **Septa** | | | | | | |
| Precleaned for 40 mL vials | | | | | 5183-4743 | |
| EPA low-bleed | 22 mm | | | 5190-3976 | | |
| PTFE/silicone | 22 mm | | | | 5190-3978 | |

### Storage Vials

| Vial Size | Unit | Cap Size | Vial Type | Septa Type | Closed Top | Open Top |
|---|---|---|---|---|---|---|
| 4 mL, 15 x 45 | 100/pk | 13-425 | Clear | PTFE/silicone | 5183-4311 | 5183-4331 |
| | 100/pk | 13-425 | Amber | PTFE/silicone | 5183-4321 | |
| 12 mL, 19 x 65 | 100/pk | 15-425 | Clear | PTFE/silicone | 5183-4312 | 5183-4332 |
| | 100/pk | 15-425 | Amber | PTFE/silicone | 5183-4322 | |
| 22 mL, 23 x 85 | 100/pk | 20-400 | Clear | PTFE/silicone | 5183-4313 | 5183-4333 |
| | 100/pk | 20-400 | Amber | PTFE/silicone | 5183-4323 | |
| 40 mL, 28 x 95 | 100/pk | 24-414 | Clear | PTFE/silicone | 5183-4314 | 5183-4334 |
| | 100/pk | 24-414 | Amber | PTFE/silicone | 5183-4324 | |
| | 100/pk | 24-414 | Amber | | | 5190-4000 |

### Bonded Caps

| Cap Size | Unit | Cap Color | Cap Type | Septa Type | Closed Top | Open Top |
|---|---|---|---|---|---|---|
| 13-425 | 100/pk | White | Polypropylene | PTFE/silicone | 5183-4301 | 5183-4305 |
| 15-425 | 100/pk | White | Polypropylene | PTFE/silicone | 5183-4302 | 5183-4306 |
| 20-400 | 100/pk | White | Polypropylene | PTFE/silicone | 5183-4303 | 5183-4307 |
| 24-414 | 100/pk | White | Polypropylene | PTFE/silicone | 5183-4304 | 5183-4308 |

### Test Tubes

| Description | Size | Certified | 100/pk | 250/pk |
|---|---|---|---|---|
| 12 x 48 mm | 3.5 mL | | 5022-6534 | |
| 16 x 48 mm | 7 mL | | 5022-6533 | |
| 12 x 100 mm | 8.5 mL | | | 5022-6531 |
| 16 x 100 mm | 20 mL | | | 5022-6532 |
| 30 x 48 mm round bottom glass | 20 mL | Y | 5042-6470 | |
| 25 x 100 mm round bottom glass | 40 mL | | 5042-6459 | |
| 30 x 100 mm round bottom glass | 60 mL | | 5042-6458 | |

## Agilent 90-day warranty and money-back guarantee

All Agilent vials are designed and manufactured to stringent standards under the Agilent quality system registered to ISO 9001. If Agilent receives notice of defects during the warranty period, Agilent shall, at its option, either repair or replace products which prove to be defective. If Agilent is unable, within a reasonable time, to repair or replace any product to a condition as warranted, the buyer shall be entitled to a refund of the purchase price upon return of the product to Agilent. The warranty period for each product begins on the day of shipment.

This warranty shall not apply to any defect, failure, or damage caused by improper use or improper or inadequate maintenance or care. This warranty is exclusive and no other warranty, whether written or oral, is expressed or implied. Agilent specifically disclaims the implied warranties of merchantability and fitness for particular purposes. The remedies provided herein are the buyer's sole and exclusive remedies. In no event shall Agilent be liable for direct, indirect, special, incidental, or consequential damages (including loss of profits) whether based on contract, tort, or any other legal theory.

# SAVE TIME AND SIMPLIFY ROUTINE TASKS

## Replace your manual crimpers with the next stage in crimping technology

Agilent handheld electronic crimpers deliver tight, reproducible seals every time. Slim, adjustable steel jaws fit around closely spaced vials, enabling you to crimp vials directly in crowded autosampler trays. Handheld electronic decappers remove caps instantly, and are designed for labs that recycle or reuse vials.

| Description | | Part No. |
|---|---|---|
| **Crimper** | | |
|  | 11 mm electronic crimper with lithium battery | 5190-3188 |
|  | 20 mm electronic crimper with lithium battery | 5190-3189 |
| **Decapper** | | |
|  | 11 mm electronic decapper with lithium battery | 5190-3190 |
|  | 20 mm electronic decapper with lithium battery | 5190-3191 |
| Replacement lithium battery for crimper and decapper | | 5190-3192 |

## Cut your crimping time in half with Agilent high-power electronic crimpers

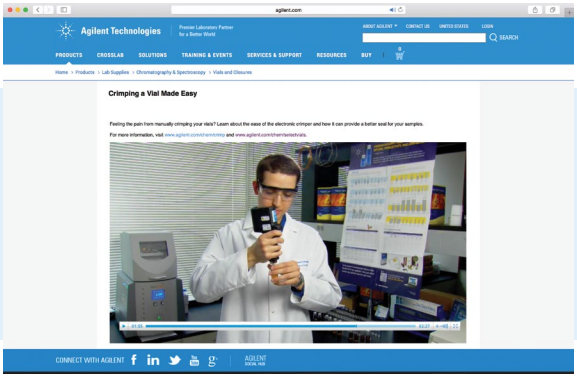
Electronic crimpers give you the power to crimp vials 50% faster than using a manual crimper. We recommend the high-power crimper if you are using steel caps.

| Description | Cap size | Part No. |
|---|---|---|
| High-power electronic crimping tool with power supply | | 5190-4061 |
| Base for electronic crimping tool | | 5190-4066 |
| Crimper jaw set for high-power electric crimper | 11 mm | 5190-4062 |
| Decapper jaw set for high-power electric crimp tool | 11 mm | 5190-4063 |
| Crimper jaw set for high-power electric crimper | 20 mm | 5190-4064 |
| Decapper jaw set for high-power electric crimper | 20 mm | 5190-4065 |
| High-power crimping tool and jaw sets bundle | 20 mm | 5190-4067 |

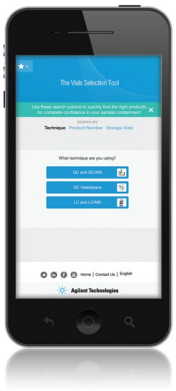
## Stop wrist strain with ergonomic Agilent manual crimpers, for performance on a limited budget

With their lightweight, tailored design, Agilent manual crimpers and decappers help eliminate the problem of sore, pinched hands. Plus, they're built to last: the 11 mm crimper will complete at least 100,000 cappings, and the 20 mm crimper will complete at least 60,000 cappings.


| | Description | Cap size | Part No. |
|---|---|---|---|
|  | **Crimper** | | |
| | Ergonomic manual crimper | 11 mm | 5040-4667 |
| | Ergonomic manual crimper | 20 mm | 5040-4669 |
| | **Decapper** | | |
| | Ergonomic manual decapper | 11 mm | 5040-4668 |
| | Ergonomic manual decapper | 20 mm | 5040-4671 |




Watch our
**"Crimping a Vial Made Easy"** video at
**www.agilent.com/chem/crimpingvideo**



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