

## Agilent Vials and Sample Containment Solutions

Your essential resource for autosampler vial selection







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# 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. This is why Agilent vials are designed to meet the high standards you expect from every Agilent product. These standards include:

- Consistent lot-to-lot performance
- Rigorous 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

Sometimes, vials measure the indirect effects of the analytical flow path instead of the sample. With Agilent vials, you know that only your sample is being measured, nothing else.

Agilent offers a comprehensive solution for getting your samples from injection to detection with minimal interference to maximize your productivity.

### Facts and Figures

Only Agilent vials have these quality and performance statistics

### 30% time savings

Save time using our full range of short-thread screw top vials and caps.

#### 10+ compatible brands

Agilent vials/caps are compatibility tested with over 10 instrument brands.

#### \$0 for technical support

Unlike some other suppliers, Agilent does not charge you for technical support.

#### Up to \$100K saved anually

by a number of customers, using Agilent technical support and recommended vials.

#### 50% faster crimp speed

Our electric crimper lets you crimp your vial quickly and efficiently.

### 33/51 best in glass

All vials are made of type 33-51 coefficient of expansion for top performance.

# 30+

So you get the tightest dimensional specifications, every time.

### 25% cost savings

Save up to 25% in operating costs with A-Line vials.



# 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 sequencing problems, unnecessary downtime, expensive repairs, and the loss of precious samples

Agilent vials are reliable and consistent, saving time and money.

- Reduced labor: Our short-thread screw top vials make screwing/unscrewing caps up to 30% faster.
- Less interference: Agilent vials are made from analytical grades 33 and 51 glass, which will not remove analytes from sample matrices.
- 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.
- Fast delivery and easy ordering: Everything you need from one trusted supplier, with worldwide distribution centers so 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.



#### Certified integrity and consistency

Agilent Certified Vials are produced in an ISO 9001 certified environment and packaged to reduce contamination. Our vials are pierce tested with Agilent needles and syringes, inspected with automated vision systems, and compatible with autosampler gripping and injection mechanisms.

### Agilent A-Line vials

# The trusted choice for your precious samples and high-precision analyses

- Save time: Dramatically reduce the number of sample reruns.
- Get higher throughput: Surface inertness reduces peak response variability for more accurate results and less rework.
- Attain consistent recoveries: Be confident you're getting the most precise and consistent measurement from vial-to-vial, lot-to-lot, and over time, of low-level analytes.
- Spend less: Save up to 25% on your laboratory spend by significantly reducing unplanned costs (such as troubleshooting, reruns, and downtime).
- Conform with demanding and regulated environments:
  Our Certificate of Analysis provides specific data confirming vial appropriateness.



#### Tips and tools

Acquisition Time [min]

See our case study video on cost reducing: www.agilent.com/chem/switch-vials-video

#### Agilent A-Line Vials Waters TruView Thermo MS Certified (LC/GC) Vials (LC/GC) Vials x103 +ESI TIC SRM +ESI TIC SRM I +ESI TIC SRM x10<sup>3</sup> x10<sup>3</sup> Δ 3 3 Counts 0.25 0.3 0.35 0.4 0.45 0.25 0.3 0.35 0.4 0.45 0.25 0.3 0.35 0.4 0.45

#### Agilent A-Line vials: Better analyte retention over time

The Agilent A-Line vial shows superior analyte retention in this separation of doxepin. Note: Tests were carried out by Agilent.

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For more information on the comparison data, you can download the study at www.agilent.com/chem/a-line-vials-poster

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### Vials Compatibility Chart for Major Worldwide Brands

This is a simplified breakdown of various major branded autosamplers, including legacy and current models. This chart is accurate as of June 2022. Newer autosampler models may be available and some legacy models may no longer be supported after this date.

For a newer, online version, which is updated every three to six months, please visit: http://www.agilent.com/chem/vial-compatibility

| Manufacturer | Model   | Crimp | Snap |       | Sc    | rew    |        |    | Hea | dspace  |         | VOA     |
|--------------|---|-------|------|-------|-------|--------|--------|----|-----|---------|---------|---------|
|              | Vial Septum Seat Diameter (mm)                  | 11    | 11   | 8     | 9     | 10     | 13     | 23 | 23  | 23      | 23      | 28      |
|              | Vial Size (mL)                                  | 2     | 2    | 2     | 2     | 2      | 4      | 10 | 20  | 10 & 20 | 10 & 20 | 20 & 40 |
|              | Vial Thread Style                               |       |      | 8-425 | 9-425 | 10-425 | 13-425 |    |     |         |         | 24-400  |
|              | Bottom (FB – Flat Bottom,<br>RB – Round Bottom) | FB    | FB   | FB    | FB    | FB     | FB     | RB | RB  | RB      | FB      | FB      |
| Agilent      | 8035  |       |      | •     | •     |        |        |    |     |         |         |         |
|              | 1090, 1100, 1200                                | •     | •    |       | •     |        |        |    |     |         |         |         |
|              | 1260, 1290 Infinity                             | •     |      |       | •     |        |        |    |     |         |         |         |
|              | -<br>5880, 5890, 6850 (27 position tray), 6890  | •     |      |       | •     |        |        |    |     |         |         |         |
|              | 6850 (22 position tray)                         |       |      |       |       |        | •      |    |     |         |         |         |
|              | 7673A, 7683A                                    | •     |      |       | •     |        |        |    |     |         |         |         |
|              | 7693A   | •     | •    | •     |       |        | •      |    |     |         |         |         |
|              | 7695A   |       |      |       |       |        |        |    |     |         |         | •       |
|              | 7697A   |       |      |       |       |        |        |    |     |         | •       |         |
|              | 7985A   | •     | •    |       | •     |        |        |    |     |         |         |         |
|              | 8000, 8100, 8200*, 8400,<br>CP-910 to 912       | •     |      | •     | •     | •*     |        |    |     |         |         |         |
|              | 920-LC/940-LC                                   |       | •    | •     |       |        |        |    |     |         |         |         |
| -            | AQUATek 70                                      |       |      |       |       |        |        |    |     |         |         | •       |
|              | Archon purge and trap                           |       |      |       |       |        |        |    |     |         |         | •       |
|              | COMBI PAL SPME<br>mode (32 position tray)       |       |      |       |       |        |        | •  |     | •       |         |         |

\*Specific models are only compatible with certain screw or headspace vial types. Model 8200 is only compatible with the screw format indicated by the asterisk (10 mm, 2 mL, 10-425, FB).

(continued)

#### Did you know?

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

Agilent vials perform seamlessly with many analytical instruments. Use the Vials Compatibility Chart to determine which Agilent vials are compatible with your instrument manufacturer and model.

Did you know: 2 mL high-recovery screw top vials can be used with all autosamplers.

| Manufacturer          | Model   | Crimp Snap Screw |    |       |       |        |        | Headspace |    |         |         | VOA     |
|-----------------------|---|------------------|----|-------|-------|--------|--------|-----------|----|---------|---------|---------|
|                       | Vial Septum Seat Diameter (mm)                              | 11               | 11 | 8     | 9     | 10     | 13     | 23        | 23 | 23      | 23      | 28      |
|                       | Vial Size (mL)  | 2                | 2  | 2     | 2     | 2      | 4      | 10        | 20 | 10 & 20 | 10 & 20 | 20 & 40 |
|                       | Vial Thread Style   |                  |    | 8-425 | 9-425 | 10-425 | 13-425 |           |    |         |         | 24-400  |
|                       | Bottom (FB – Flat Bottom,<br>RB – Round Bottom)             | FB               | FB | FB    | FB    | FB     | FB     | RB        | RB | RB      | FB      | FB      |
| Agilent               | COMBI PAL SPME<br>mode (98 position tray)                   | •                |    |       | •     |        |        | •         |    |         |         |         |
|                       | COMBI PAL (200 position tray)<br>GC PAL (200 position tray) |                  |    |       |       |        |        | •         |    |         |         |         |
| (<br>(<br>(<br>(<br>( | COMBI PAL (32 position tray)<br>GC PAL (32 position tray)   |                  |    |       |       |        |        | •         |    | •       |         |         |
|                       | COMBI PAL (98 position tray)<br>GC PAL (98 position tray)   | •                |    |       | •     |        |        | •         |    |         |         |         |
|                       | CP-9010   | •                |    | •     | •     |        |        |           |    |         |         |         |
|                       | CP-9020/CP-9025/ CP-9060                                    |                  |    |       |       |        |        | •         |    |         |         |         |
|                       | CP-940, 941   | •                |    |       |       |        |        |           |    |         |         |         |
|                       | CTC COMBI PAL   |                  |    |       |       |        |        | •         |    | •       |         |         |
|                       | CTC GC PAL  | •                |    |       | •     |        |        |           |    |         |         |         |
|                       | CTC HTS+HTC PAL   | •                | •  |       | •     |        |        |           |    |         |         |         |
|                       | G1888A  |                  |    |       |       |        | •      |           |    |         | •       |         |
|                       | Genesis   | •                |    |       |       |        |        |           |    |         | •       |         |
|                       | GPC 110/210/220   | •                |    | •     | •     | •      |        |           |    |         |         |         |
|                       | HS7694  |                  |    |       |       |        | •      |           |    |         | •       |         |
|                       | LC 9100/LC 9095/ LC 9090                                    | •                | •  |       | •     |        |        |           |    |         |         |         |
|                       | Marathon basic, standard,<br>96 position                    | •                | •  | •     | •     |        |        |           |    |         |         |         |
|                       | PL-AS RT  | •                | •  | •     | •     | •      | •      |           | -  |         | -       |         |
| –<br>F                | ProStar 400, standard,<br>96 position tray                  | •                | •  | •     | •     | •      |        |           |    |         |         |         |
|                       | ProStar 410, large capacity,<br>96 position tray            | •                | •  | •     | •     | •      |        |           |    |         |         |         |

(continued)

#### Learn more

From instruments to columns and supplies, find everything you need from one trusted supplier. Better injections, better chromatography.

No matter what your sample introduction needs are, Agilent has a sampler to support your lab's productivity.

For Agilent GC autosamplers, visit **www.agilent.com/chem/GCsampleintro** For Agilent LC autosamplers, visit **www.agilent.com/chem/lc-injection-system** 

### Vial Selection

| Beckman<br>Coulter<br>Bruker | Model  | Crimp | Snap |       | Sc    | rew    |        |     | Hea | dspace  |         | VOA     |
|------------------------------|--|-------|------|-------|-------|--------|--------|-----|-----|---------|---------|---------|
|                              | Vial Septum Seat Diameter (mm)   | 11    | 11   | 8     | 9     | 10     | 13     | 23  | 23  | 23      | 23      | 28      |
|                              | Vial Size (mL)   | 2     | 2    | 2     | 2     | 2      | 4      | 10  | 20  | 10 & 20 | 10 & 20 | 20 & 40 |
|                              | Vial Thread Style  |       |      | 8-425 | 9-425 | 10-425 | 13-425 |     |     |         |         | 24-400  |
|                              | Bottom (FB – Flat Bottom,<br>RB – Round Bottom)                                  | FB    | FB   | FB    | FB    | FB     | FB     | RB  | RB  | RB      | FB      | FB      |
| Agilent                      | ProStar 410, large volume,<br>24 position tray                                   |       |      |       |       |        |        | •   |     |         |         |         |
|                              | ProStar 410, standard,<br>84 position tray                                       | •     | •    | •     | •     | •      |        | •   |     |         |         |         |
|                              | ProStar 420,<br>LSV, 72 position tray  |       |      |       |       |        | •      |     |     |         |         |         |
|                              | ProStar 420, standard,<br>96 position tray                                       | •     | •    | •     | •     | •      |        |     |     |         |         |         |
|                              | ProStar 420,<br>Super-LSV, 32 position tray                                      |       |      |       |       |        |        | •   |     |         |         |         |
|                              | ProStar 430, 48 position tray  | •     | •    | •     | •     |        |        |     |     |         |         |         |
|                              | Tekmar SOLATek72   |       |      |       |       |        |        |     |     |         |         | •       |
|                              | Vista  |       |      | •     | •     |        |        |     |     |         |         |         |
|                              | 501, 502, 507  | •     | •    | •     | •     | •      |        |     |     |         |         |         |
| Coulter                      | 508  |       |      |       | •     |        |        | •   |     |         |         |         |
|                              | Marathon, Promis   | •     | •    | •     | •     |        |        |     |     |         |         |         |
|                              | Triathlon  | •     | •    | •     | •     |        | •      | •   |     |         |         |         |
| Bruker                       | LC51   |       |      |       |       |        | •      |     |     |         |         |         |
|                              | Map II   | •     |      | •     | •     | •      |        |     |     |         |         |         |
| СТС                          | A200 LC  | •     | •    | •     | •     | •      |        | •   |     |         |         |         |
|                              | A200S  | •     |      | •     | •     | •      |        |     |     |         |         |         |
|                              | <br>Combi-xt (L-mode), GC-xt Headspace,<br>PAL HPLC-Systems, HTS-xt, HTX-xt, PAL | •     |      | •     | •     | •      |        | •   |     | •       |         |         |
|                              | Combi-xt Headspace,<br>Combi-xt SPME Option                                      | •     |      |       |       |        |        | •   |     | •       |         |         |
|                              | HS 500   |       |      |       |       |        |        | •   |     |         |         |         |
| DANI                         | ALS 39.80, 86.80, 1000   | •     | •    |       | •     |        |        |     |     |         |         |         |
|                              | HS39.50, HS86.50   |       |      |       |       |        |        |     |     |         | •       |         |
|                              | Master AS  | •     | •    |       | •     |        |        |     |     |         | •       |         |
| GE<br>Instruments            | Sievers 900  |       |      |       |       |        |        |     |     |         |         | •       |
| GERSTEL                      | MPS 2**, 3   | •     |      | •     | •     | •      |        | •** |     | •**     |         |         |

\*\*Specific models are only compatible with certain screw or headspace vial types. Model MPS 2 is only compatible with the headspace formats indicated by the asterisk (23 mm, 10 mL, RB and 23 mm, 10 and 20 mL, 23 x 75 mm, RB).

| JASCO<br>LEAP<br>Technologies | Model   | Crimp | Snap |       | Sc    | rew    |        |    | Hea | dspace  |         | VOA     |
|-------------------------------|---|-------|------|-------|-------|--------|--------|----|-----|---------|---------|---------|
|                               | Vial Septum Seat Diameter (mm)  | 11    | 11   | 8     | 9     | 10     | 13     | 23 | 23  | 23      | 23      | 28      |
|                               | Vial Size (mL)  | 2     | 2    | 2     | 2     | 2      | 4      | 10 | 20  | 10 & 20 | 10 & 20 | 20 & 40 |
|                               | Vial Thread Style   |       |      | 8-425 | 9-425 | 10-425 | 13-425 |    |     |         |         | 24-400  |
|                               | Bottom (FB – Flat Bottom,<br>RB – Round Bottom)   | FB    | FB   | FB    | FB    | FB     | FB     | RB | RB  | RB      | FB      | FB      |
| Gilson                        | 201/202, 221/222, 231/401,<br>232/402, Aspec, AspecXli, Aspec XL 4,<br>235/235P/SP 235/ SP 235P |       |      | •     | •     |        |        |    |     |         |         |         |
|                               | 234, 235, 215, 250,<br>231XL/232X- L/233XL  | •     |      | •     | •     |        |        |    |     |         |         |         |
| JASCO                         | AS 2055/AS 2055 (i),<br>v AS 2057/AS 2057 (i), AS 2059  | •     | •    | •     | •     | •      |        |    |     |         |         |         |
|                               | Combi PAL (32 position)   |       |      |       |       |        |        | •  |     | •       |         |         |
| Technologies                  | Combi PAL (98 position),<br>SPME (98 position)  | •     |      |       | •     |        |        |    |     |         |         |         |
|                               | Combi PAL SPME Mode (32 position)   |       |      |       |       |        |        |    |     | •       |         |         |
| (<br>-<br>L<br>H              | HTX PAL, HTC PAL, HTS PAL<br>(32 position)  |       |      |       |       |        |        |    |     | •       |         |         |
|                               | LC PAL (216 Pos.), HTX PAL, HTC PAL,<br>HTS PAL (54/98 position tray)                           | •     | •    | •     | •     | •      |        | ٠  |     |         |         |         |
| 0.I. Analytical               | 1020A,1088,1096,4551A,1552  |       |      |       |       |        |        |    |     |         |         | •       |
| PerkinElmer                   | AI-1, AS-100/(B), AS300, AS8300   | •     |      |       |       |        |        |    |     |         |         |         |
|                               | Clarus 400, 500, 600  | •     |      |       |       |        |        |    |     |         |         |         |
|                               | HS40/HS100/101  |       |      |       |       |        |        |    | •   |         |         |         |
|                               | Integral 4000, ISS  | •     |      |       |       | •      |        |    |     |         |         |         |
|                               | Series 200 vial tray, AS2000/AS2000B  | •     |      |       |       | •      |        |    |     |         |         |         |
|                               | TurboMatrix HS16/ HS40/HS40 XL/<br>HS40 Trap/HS110/ HS110 Trap                                  |       |      |       |       |        |        |    | •   | •       |         |         |
| Shimadzu                      | AOC-14/1400   | •     | •    | •     | •     | •      | •      | •  |     |         |         |         |
|                               | AOC-17  | •     | •    | •     | •     | •      | •      |    |     |         |         |         |
|                               | AOC-20/20i/20s,<br>96 position tray   |       |      |       |       |        | •      |    |     |         |         |         |
|                               | AOC-20/20i/20s,<br>150 position tray  | •     |      | •     | •     | •      | •      |    |     |         |         |         |
|                               | AOC-5000  | •     |      |       | •     |        |        | •  |     | •       |         |         |
|                               | ASI-V   |       |      |       |       |        |        |    |     |         |         | •       |
|                               | HSS-2B  |       |      |       |       | •      |        |    | -   | •       | •       |         |
|                               | HTA 200 H   |       |      |       |       |        |        |    |     | •       | •       |         |

### Vial Selection

| Manufacturer   | Model   | Crimp | Snap |       | Sc    | rew    |        |    | Hea | dspace  |         | VOA     |
|--|---|-------|------|-------|-------|--------|--------|----|-----|---------|---------|---------|
|  | Vial Septum Seat Diameter (mm)  | 11    | 11   | 8     | 9     | 10     | 13     | 23 | 23  | 23      | 23      | 28      |
|  | Vial Size (mL)  | 2     | 2    | 2     | 2     | 2      | 4      | 10 | 20  | 10 & 20 | 10 & 20 | 20 & 40 |
|  | Vial Thread Style   |       |      | 8-425 | 9-425 | 10-425 | 13-425 |    |     |         |         | 24-400  |
|  | Bottom (FB – Flat Bottom,<br>RB – Round Bottom)   | FB    | FB   | FB    | FB    | FB     | FB     | RB | RB  | RB      | FB      | FB      |
| Shimadzu   | LC2010C + LC2010A,<br>100 position tray   |       |      |       |       |        | •      |    |     |         |         |         |
|  | LC2010C + LC2010A,<br>140 position tray   | •     | •    | •     | •     | •      |        |    |     |         |         |         |
| 3<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>- | LC2010C + LC2010A,<br>350 position tray   |       |      |       |       |        |        |    |     |         |         |         |
|  | LC-20A, SIL-2AS, SIL-6A, -6B,<br>-7A, -8A, -9A  | •     | •    | •     | •     | •      | •      |    |     |         |         |         |
|  | SIL 30-ACMP   | •     |      | •     | •     |        |        |    |     |         | ·       |         |
|  | SIL-10A/SIL-10AF/SIL-10AP/<br>SIL-10Ai/SIL-10AxL/Rack L,<br>80 position                       |       |      |       |       |        | •      |    |     |         |         |         |
|  | SIL-10A/SIL-10AF/SIL-10AP/<br>SIL-10Ai/SIL-10AxL/Rack S,<br>100 position                      | •     | •    | •     | •     | •      |        |    |     |         |         |         |
|  | SIL-10A/SIL-10AF/ SIL-10AP/<br>SIL-10Ai/SIL-10AxL/Rack MTP2,<br>192 position                  |       |      |       |       |        |        |    |     |         |         |         |
|  | SIL-10ADvp  | •     | •    | •     | •     | •      | •      |    |     |         |         |         |
|  | SIL-10HTA/SIL-10HTC,<br>100 position tray   |       |      |       |       |        | •      |    |     |         |         |         |
|  | SIL-10HTA/SIL-10HTC,<br>350 position tray   |       |      |       |       |        |        |    |     |         |         |         |
|  | SIL-10HTA/SIL-10HTC,<br>140 position tray   | •     | •    | •     | •     | •      |        |    |     |         |         |         |
|  | SIL-20A (Prominence) 105 vial tray/<br>SIL-20AC (Prominence), 70 vial tray                    | •     | •    | •     | •     | •      |        |    |     |         |         |         |
|  | SIL-20A/Sil-20AC (Prominence),<br>175 vial tray   |       |      |       |       |        |        |    |     |         |         |         |
|  | SIL-20A/Sil-20AC (Prominence),<br>50 vial tray  |       |      |       |       |        | •      |    |     |         |         |         |
| —<br>S<br>1  | SIL-20AXR/SIL-20ACXR (Prominence),<br>175 (1 mL vials), 70 (1.5 mL vials),<br>50 (4 mL vials) | •     | •    | •     | •     |        | •      |    |     |         |         |         |
|  | SIL-30AC (Nexera), 175 (1 mL vials),<br>105 (1.5 mL vials), 50 (4 mL vials)                   | •     | •    | •     | •     |        | •      |    |     |         |         |         |

| Manufacturer         | Model   | Crimp | np Snap Screw |       |       |        |        |    | Hea | dspace  |         | VOA     |
|----------------------|---|-------|---------------|-------|-------|--------|--------|----|-----|---------|---------|---------|
|                      | Vial Septum Seat Diameter (mm)                      | 11    | 11            | 8     | 9     | 10     | 13     | 23 | 23  | 23      | 23      | 28      |
|                      | Vial Size (mL)                                      | 2     | 2             | 2     | 2     | 2      | 4      | 10 | 20  | 10 & 20 | 10 & 20 | 20 & 40 |
|                      | Vial Thread Style                                   |       |               | 8-425 | 9-425 | 10-425 | 13-425 |    |     |         |         | 24-400  |
|                      | Bottom (FB – Flat Bottom,<br>RB – Round Bottom)     | FB    | FB            | FB    | FB    | FB     | FB     | RB | RB  | RB      | FB      | FB      |
| Teledyne             | 7000/7000HT/7050                                    |       |               |       |       |        |        |    | •   |         |         |         |
| Tekmar               | AQUATek 70/ SOLATek 72                              |       |               |       |       |        |        |    |     |         |         | •       |
|                      | HT3   |       |               |       |       |        |        |    | •   | •       |         |         |
|                      | STS 8000 TOC  |       |               |       |       |        |        |    |     |         |         | •       |
| Fisher<br>Scientific | Accela High Speed LC Autosampler (200 position)     | •     | •             | •     | •     |        |        |    |     |         |         |         |
|                      | Accela Open Autosampler                             | •     | •             |       | •     |        |        |    |     |         |         |         |
|                      | AS 40   |       |               |       |       |        | •      |    |     |         |         |         |
|                      | AS 50   |       | •             | •     | •     | •      |        |    |     |         |         |         |
|                      | AS100   | •     | •             | •     | •     |        |        |    |     |         |         |         |
|                      | AS1000,200  | •     |               | •     | •     |        |        |    |     |         |         |         |
|                      | –<br>AS2000 90 vial tray (Trace GC),<br>200S, AS800 | •     |               | •     | •     |        |        |    |     |         |         |         |
|                      | AS300, A200LC, SpectraSystem<br>AS 100-3500         | •     | •             | •     | •     |        |        |    |     |         |         |         |
|                      | ASE 200   |       |               |       |       |        |        |    |     |         |         | •       |
|                      | Dionex AS 40  |       |               |       |       |        | •      |    |     |         |         |         |
|                      | Dionex AS-AP  | •     | •             | •     | •     | •      |        |    |     |         |         |         |
|                      | Dionex UltiMate WPS-3000                            | •     | •             | •     | •     | •      | •      |    |     |         |         |         |
|                      | Gina 50   | •     | •             |       | •     |        | •      |    |     |         |         |         |
|                      | HiPerTOC  |       |               |       |       |        |        |    |     |         |         | •       |
|                      | HS250-500   |       |               |       |       |        |        | •  |     |         |         |         |

(continued)

#### Tips and tools

#### Here's why "bargain" vials are not much of a bargain

Bargain vials can be made from type 70 or 71 COE glass, 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 that your results will not be compromised.

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

#### Vial glass types

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

Coefficient of expansion (COE) compliance – 0 to 300 °C, cm/cm x C x  $10^7$  (acceptable expansions for analytical chromatographic purposes).

### Vial Selection

| Manufacture          | r Model  | Crimp | Snap |       | Sc    | rew    |        |    | Hea | dspace  |         | VOA     |
|----------------------|--|-------|------|-------|-------|--------|--------|----|-----|---------|---------|---------|
|                      | Vial Septum Seat Diameter (mm)   | 11    | 11   | 8     | 9     | 10     | 13     | 23 | 23  | 23      | 23      | 28      |
|                      | Vial Size (mL)   | 2     | 2    | 2     | 2     | 2      | 4      | 10 | 20  | 10 & 20 | 10 & 20 | 20 & 40 |
|                      | Vial Thread Style  |       |      | 8-425 | 9-425 | 10-425 | 13-425 |    |     |         |         | 24-400  |
|                      | Bottom (FB – Flat Bottom,<br>RB – Round Bottom)  | FB    | FB   | FB    | FB    | FB     | FB     | RB | RB  | RB      | FB      | FB      |
| Thermo               | HS800-2000   |       |      |       |       |        |        | •  |     | •       |         |         |
| Fisher<br>Scientific | HS-HV  |       |      | •     |       |        |        |    |     |         |         |         |
|                      | Summit ASI 100, Analytical Tray<br>(117 position), Summit ASI 100,<br>Semipreparative tray (63 position) | •     | •    | •     | •     |        | •      |    |     |         |         |         |
|                      | Surveyor (Surveyor Plus)   | •     | •    | •     | •     |        |        | •  |     |         |         |         |
|                      | Trace 1300 Series  | •     | •    | •     | •     | •      |        |    | •   |         | •       |         |
|                      | TriPlus (=GC PAL) (AS+ Duo)  | •     |      | •     | •     |        |        | •  |     | •       |         |         |
|                      | TriPlus 300  |       |      |       |       |        |        |    |     | •       |         |         |
|                      | TriPlus HS, SPME   |       |      |       |       |        |        | •  | -   | •       |         |         |
|                      | TriPlus RSH  | •     | •    | •     | •     |        |        | •  |     | •       |         |         |
|                      | UltiMate Analytical, WPS 3000sl,<br>120 position (2 mL),<br>FAMOS (LC Packings–Dionex)                   | •     | •    | •     | •     | •      |        | •  |     |         |         |         |
|                      | UltiMate Nano/Cap/Micro,<br>WPS-3000 SL, 216 (3 x 72)<br>position rack (1.2 mL)                          |       |      |       |       |        |        | •  |     |         |         |         |
|                      | UltiMate Semipreparative, WPS-3000 SL,<br>66 (3 x 22) position rack (4 mL)                               |       |      |       |       |        | •      | •  |     |         |         |         |

### Need more information?

#### Make productivity happen, regardless of application or instrument vendor.

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

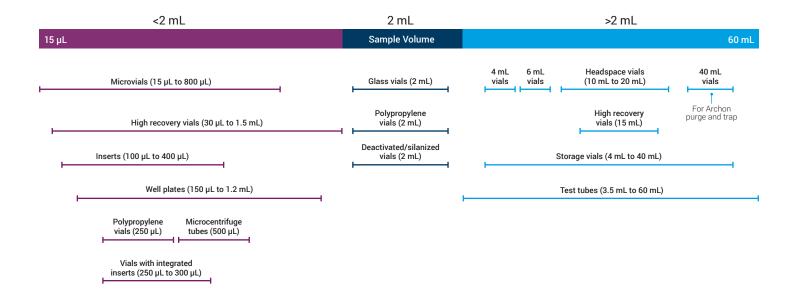
For information on GC, GC/MS, or GC headspace, visit www.agilent.com/chem/productivityGC To view our GC flow path supplies, visit www.agilent.com/chem/inert For LC and LC/MS products, visit www.agilent.com/chem/productivityLC

# Protect sample integrity by choosing the best vial for your application

By matching our vials 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.

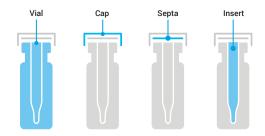
#### Which vial is best for my sample size?

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  $\mu$ L 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 that complex runs proceed smoothly.



### How do I choose the right closure?

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

### Compatibility of septa and sample

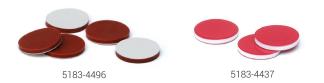
Make sure the septa you choose are chemically compatible with your sample and solvent. Chemical compatibility can vary, based on factors such as solvent concentration, molecular weight, and temperature.

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.

|   | 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                                    | ٠    | •             | •                   |                 | •               | •          |
| Cyclohexane                               | ٠    |               | •                   | •               | •               |            |

#### Septa Chemical Compatibility

\*PTFE/silicone/PTFE has the same chemical compatibility of PTFE only until punctured.



#### Tips and tools

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

### 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<br>Septa                     | Thin PTFE  | PTFE/Silicone*  | PTFE/Silicone/<br>PTFE*  | PTFE/Red Rubber   | Fluoroelastomer                              | Butyl  |
|--------------------------------|---|--|---|--|---|--|--|
| Temperature range              | 40 to 300 °C**                                | Up to 260 °C   | -40 to 200 °C   | -40 to 200 °C  | -40 to 90 °C  | -40 to 260 °C                                | -50 to 150 °C  |
| Use for multiple<br>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<br>headspace<br>applications | Superior chemical<br>inertness, short<br>cycle times, and<br>single injections | Most common<br>HPLC and GC<br>analyses, not as<br>resistant to coring<br>as P/S/P | Superior<br>performance for<br>ultra analysis,<br>repeat injections,<br>internal standards | Chlorosilanes, more<br>economical option<br>for single injections | Chlorinated solvents,<br>higher temperatures | Organic solvents,<br>acetic acids,<br>impermeable<br>to gasses |

\*Agilent silicone is peroxide-cured, making it more inert and less likely to interact with samples. \*\*For up to one hour

### Crimp cap vs. screw cap

Based on decades of chromatography experience, we have found that 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 extra security for food, forensics, and other applications where sample tethering needs to be avoided. We also recommend a screw cap vial if you are working with volatile compounds.



5188-5386



5190-3986



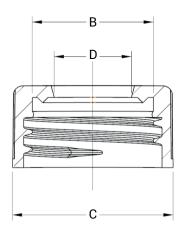
5182-0552

### Where to measure to match the vial size with its cap

Determine the right vials and caps for your needs. The table, with corresponding diagrams, shows where to take the measurement.

#### Vial and Closure Dimensions

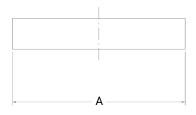
| Сар Туре             | Septum<br>(Diameter) | Vial Closure<br>(Septum Seat Diameter) | Vial Closure<br>(od) | Vial Closure<br>(Opening id) | Comments  |
|----------------------|----------------------|--|----------------------|------------------------------|---|
| 2 mL (wide opening)  |                      |  |                      |                              |   |
| Screw                | 9 mm                 | 9 mm                                   | 12 mm                | 6 mm                         |   |
| Crimp                | 11 mm                | 11 mm                                  | 11 mm                | 6 mm                         | Closure od and septum seat diameter are<br>very close since the crimp cap wall is thin.<br>After rounding, they are both 11 mm. |
| Snap                 | 11 mm                | 11 mm                                  | 12 mm                | 6 mm                         |   |
| 2 mL (short opening) |                      |  |                      |                              |   |
| Screw                | 8 mm                 | 8 mm                                   | 12 mm                | 5 mm                         | Closure od is measured at the flared base.  |
| 20 mm Headspace      |                      |  |                      |                              |   |
| Crimp                | 20 mm                | 20 mm                                  | 21 mm                | 9 mm                         | The septum has a larger od than the septum<br>seat diameter to provide a snug fit. This prevents<br>septum loosening.           |
| 20 mm Headspace      |                      |  |                      |                              |   |
| Screw                | 18 mm                | 18 mm                                  | 19 mm                | 8 mm                         | Closure od is measured at the flared base.  |
|                      |                      |  |                      |                              |   |



Closure when adjoined to screw top vial. B = Septa seat diameter

C = Cap body diameter (vial closure od)

D = Cap opening id (vial closure opening id)



Septum only. A = Septum diameter

# What about more specialized applications?



5183-4496



5191-8150

#### **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 before analysis.

#### Polypropylene vials

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

Agilent thoroughly tests and evaluates various polypropylene materials before selecting the grade used in our polypropylene vials. Our vials have the lowest levels of extractables to ensure sample integrity.

### Need more information?

#### 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
- Choose from over 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 high 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.

### Containment Solutions for Sample Volumes (<2 mL)

#### Vials

| Description  | Sample Volume               | Material                 | Certified | Unit     | Part No.  |
|--|-----------------------------|--------------------------|-----------|----------|-----------|
| Microvials   |                             |                          |           |          |           |
| Wine-glass shape, screw top, 12 x 32 mm                                | 15 µL                       | Glass, clear             |           | 100/pk   | 5184-3550 |
|  | 15 µL                       | Glass, amber             |           | 100/pk   | 5184-3554 |
| Wine-glass shape, crimp top, 12 x 32 mm                                | 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,<br>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 |
| 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 |
|  | 1 mL                        | Polypropylene            |           | 100/pk   | 5191-8150 |
| 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            | Υ         | 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 |



5191-8150

#### 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)<br>screw top vials  | 150 µL        | Glass with polymer feet                |           | 100/pk    | 5183-2088 |
| Vial insert, 200 μL measured fill (150 μL recommended),<br>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<br>polymer feet | Y         | 100/pk    | 5181-8872 |
| Vial insert, graduated to 300 μL in increments of 100 μL.<br>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 |
| Cap for 350 µL glass insert   |               |  |           | 1,000/pk  | 5188-5322 |



5181-8872



5183-2085



5181-3377





5182-0567

#### Tips and tools

You can also use our Vial Selection Tool to search by instrument manufacturer.  $\label{eq:visitwww.agilent.com/chem/order-infinitylab-well-plates-sealing-mats} Visitwww.agilent.com/chem/order-infinitylab-well-plates-sealing-mats$ 

#### Well plates

All well plates are made using polypropylene.

| No. of Wells | Well Volume | Well Shape | Bottom Shape | Height | Unit   | Part No.  | Recommended Mat     |
|--------------|-------------|------------|--------------|--------|--------|-----------|---------------------|
| 96           | 2.0 mL      | Square     | U            | 41 mm  | 30/pk  | 5043-9300 | 5043-9319           |
| 96           | 1.7 mL      | Round      | U            | 45 mm  | 30/pk  | 5043-9302 | 5043-9317/5043-9318 |
| 96           | 0.9 mL      | Round      | U            | 32 mm  | 50/pk  | 5043-9305 | 5043-9317/5043-9318 |
| 96           | 1.0 mL      | Round      | U            | 27 mm  | 25/pk  | 5043-9308 | 5043-9317/5043-9318 |
| 96           | 1.0 mL      | Round      | U            | 27 mm  | 50/pk  | 5043-9309 | 5043-9317/5043-9318 |
| 96           | 0.45 mL     | Round      | U            | 14 mm  | 30/pk  | 5043-9310 | 5042-1389           |
| 96           | 0.45 mL     | Round      | U            | 14 mm  | 120/pk | 5043-9311 | 5042-1389           |
| 96           | 0.3 mL      | Round      | V            | 14 mm  | 25/pk  | 5043-9312 | 5042-1389           |
| 96           | 0.3 mL      | Round      | V            | 14 mm  | 50/pk  | 5043-9313 | 5042-1389           |
| 96           | 0.3 mL      | Round      | V            | 14 mm  | 100/pk | 5043-9314 | 5042-1389           |
| 384          | 0.17 mL     | Square     | V            | 22 mm  | 25/pk  | 5043-9315 | 5043-9320           |

#### Mats

All mats are made with silicone and are preslit for best use with HPLC samplers.

| No. of Wells | Well Shape | Unit   | Part No.  |
|--------------|------------|--------|-----------|
| 96           | Round      | 50/pk  | 5043-9317 |
| 96           | Round      | 100/pk | 5043-9318 |
| 96           | Square     | 50/pk  | 5043-9319 |
| 384          | Square     | 50/pk  | 5043-9320 |
| 96           | Round      | 50/pk  | 5042-1389 |



### 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  |
| A-Line, clear, with write-on spot   | Y         | 5190-9591 |           |           |           |            |
| Clear, with write-on spot           | Y         | 5182-0543 | 5183-4492 |           |           |            |
| Clear, wide                         | Υ         |           |           | 5190-6116 | 5190-6123 |            |
| Clear, wide, with write-on spot     | Y         |           |           | 5190-6117 | 5190-6124 |            |
| A-Line, amber, with write-on spot   | Υ         | 5190-9592 |           |           |           |            |
| Amber, with write-on spot           | Υ         | 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                               | Υ         | 5182-0714 | 5183-2067 |           |           | 5185-5918  |
| A-Line, clear, with write-on spot   | Y         | 5190-9589 |           |           |           |            |
| 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                               | Υ         | 5188-6535 | 5188-6536 | 5190-6114 | 5190-6121 |            |
| A-Line, amber, with write-on spot   | Y         | 5190-9590 |           |           |           |            |
| Amber, with write-on spot           | Y         | 5182-0716 | 5183-2069 | 5190-6115 | 5190-6122 |            |
| Amber, with write-on spot, 8 mm     |           | 8010-0012 |           |           |           |            |
| Snap top                            |           |           |           |           |           |            |
| Clear                               |           | 5182-0544 | 5183-4504 |           | 5185-5934 |            |
| Clear, with write-on spot           |           | 5182-0546 | 5183-4505 |           |           |            |
| Amber, with write-on spot           | Y         | 5182-0545 | 5183-4506 |           |           |            |
| Deactivated (silanized) crimp top   |           |           |           |           |           |            |
| Clear                               | Y         | 5183-4494 |           |           |           |            |
| Clear, with write-on spot           | Y         | 5183-4495 |           |           |           |            |
| Amber, with write-on spot           | Y         | 5183-4496 |           |           |           |            |

(continued)



5181-3375



5183-2067



5182-0716

| Description                       | Certified | 100/pk    | 1,000/pk | 10,000/pk | 50,000/pk | 100,000/pk |
|-----------------------------------|-----------|-----------|----------|-----------|-----------|------------|
| Deactivated (silanized) screw top |           |           |          |           |           |            |
| Clear                             | Υ         | 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 |          |           |           |            |

#### 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 steel, magnetic | White silicone/PTFE     |           |           | 5188-5386 |           |           |           |           |            |
| Green aluminum       | Red PTFE/rubber         |           |           | 5181-1216 |           |           |           |           |            |
| Green aluminum       | PTFE/silicone/PTFE      | Y         |           |           |           | 5190-6096 |           |           |            |
| Red aluminum         | Red PTFE/rubber         |           |           | 5181-1217 |           |           |           |           |            |
| 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      | Rubber                  |           |           | 5190-6151 |           |           |           |           |            |
| 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 |           |           |           |           |            |
| Silver aluminum      | Preslit PTFE/silicone   |           |           | 8010-0582 |           |           |           |           |            |
| 8 mm crimp caps      |                         |           |           |           |           |           |           |           |            |
| Silver aluminum      | PTFE/silicone/PTFE      |           |           |           | 5180-0842 |           |           |           |            |





5181-1212

#### Screw Caps

| Cap Description                 | Septa Type                  | Certified | 100/pk    | 250/pk    | 500/pk    | 1,000/pk  | 5,000/pk  | 50,000/pk |
|---------------------------------|-----------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 12 mm screw caps                |                             |           |           |           |           |           |           |           |
| Mixed colors<br>(5 packs of 50) | PTFE/silicone               | Y         | 5182-0721 | 5040-4682 |           |           |           |           |
| 9 mm screw caps                 |                             |           |           |           |           |           |           |           |
| Black                           | PTFE/red silicone           | Y         | 5185-5838 |           |           |           |           |           |
| Blue, bonded                    | Preslit PTFE/red silicone   |           | 5185-5824 |           | 5040-4649 |           |           |           |
| Blue, bonded                    | PTFE/red silicone           |           | 5185-5823 |           |           |           |           |           |
| Blue, bonded                    | PTFE/white silicone         | Y         | 5190-7021 |           |           |           |           |           |
| Blue, bonded                    | Preslit PTFE/white silicone | Y         | 5190-7023 |           |           |           |           |           |
| Blue, bonded                    | PFTE/red silicone           | Y         | 5190-7024 |           |           |           |           |           |
| Blue                            | Preslit PTFE/red silicone   | Y         | 5183-2076 |           | 5185-5865 |           |           |           |
| Blue                            | PTFE-lined solid top        | Y         | 5183-2075 |           |           |           |           |           |
| Blue                            | PTFE/red silicone           | Y         | 5182-0717 |           | 5185-5820 | 5190-1599 | 5190-4049 | 5185-5917 |
| Blue                            | PTFE/white silicone         | Y         | 5182-0720 |           | 5185-5862 |           | 5190-4050 |           |
| Blue                            | PTFE/red silicone           |           | 5190-3156 |           |           | 8010-0186 |           |           |
| Blue                            | PTFE/red silicone/PTFE      | Y         | 5182-0723 |           |           | 8010-0187 |           |           |
| Blue                            | PTFE/white silicone         | Y         |           |           | 5185-5863 | ÷         |           |           |
| Blue, open top                  | No septa                    | Y         | 5182-0728 |           |           |           |           |           |
| Blue, magnetic                  | PTFE/red silicone           | Y         | 5191-8160 |           |           | ·         |           |           |
| Blue, magnetic                  | Preslit PTFE/red silicone   | Y         | 5191-8161 |           |           |           |           |           |
| Green, bonded                   | PTFE/red silicone           | Y         | 5190-7025 |           |           |           |           |           |
| Green, bonded                   | PTFE/white silicone         | Y         | 5190-7026 |           |           |           |           |           |
| Green, bonded                   | Preslit PTFE/red silicone   | Y         | 5190-7028 |           |           |           |           |           |
| Green                           | Preslit PTFE/red silicone   | Y         | 5183-2077 |           |           |           |           |           |
| Green                           | PTFE/red silicone           | Y         | 5182-0718 |           | 5185-5829 |           |           |           |
| Green                           | PTFE/white silicone         | Y         | 5182-0721 |           | 5185-5864 | ·         |           |           |
| Green                           | PTFE/red 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                     | Preslit PTFE/red silicone   | Y         | 5190-7032 |           |           |           |           |           |



5185-5823



5182-0717



### Ordering Information

| Cap Description      | Septa Type               | Certified | 100/pk    | 250/pk | 500/pk | 1,000/pk  | 5,000/pk | 50,000/pk |
|----------------------|--------------------------|-----------|-----------|--------|--------|-----------|----------|-----------|
| Red                  | PTFE/white silicone/PTFE |           |           |        |        | 8010-0188 |          |           |
| Clear, thin membrane | Clear polypropylene      | Y         | 5191-8151 |        |        |           |          |           |
| Red                  | Preslit PTFE/silicone    | Y         | 5183-2078 |        |        |           |          |           |
| Red                  | PTFE/red silicone        | Y         | 5182-0719 |        |        |           |          |           |
| Red                  | PTFE/white silicone      | Y         | 5182-0722 |        |        |           |          |           |
| Red                  | PTFE/red silicone/PTFE   | Y         | 5182-0725 |        |        |           |          |           |
| Red, open top        | No septa                 | Y         | 5182-0726 |        |        |           |          |           |
| Turquoise            | PTFE/silicone            |           | 5040-4683 |        |        |           |          |           |
| 8 mm screw caps      |                          |           |           |        |        |           |          |           |
| Black                | Red PTFE/white silicone  |           | 5183-4442 |        |        |           |          |           |
| Black                | No septa                 |           | 5183-4438 |        |        |           |          |           |
| Black                | PTFE/silicone/PTFE       |           | 8010-0063 |        |        |           |          |           |
| Red                  | PTFE/silicone/PTFE       |           | 8010-0068 |        |        |           |          |           |
| Orange               | Preslit PTFE/silicone    |           | 8010-0142 |        |        |           |          |           |
|                      |                          |           |           |        |        |           |          |           |

#### Snap Caps

| Cap Color       | Septa Type                  | Certified | 100/pk     | 500/pk     | 1,000/pk  | 50,000/pk |
|-----------------|-----------------------------|-----------|------------|------------|-----------|-----------|
| 12 mm snap caps |                             |           |            |            |           |           |
| Blue            | PTFE/red silicone           |           | 5182-3458  |            |           |           |
| Blue            | PTFE/silicone               |           | 5182-0541  |            |           |           |
| Clear           | Preslit PTFE/silicone       |           | 5183-4511  |            |           |           |
| Clear           | Solid polyethylene membrane |           | 5182-0542  |            |           |           |
| Clear           | Red silicone/PTFE           |           | 5182-0550  |            | 8010-0189 | 5190-2267 |
| Clear           | PTFE/red silicone/PTFE      |           | 5182-0566  |            |           |           |
| Green           | Red silicone/PTFE           |           | 5182-3457  |            |           |           |
| Red             | Red silicone/PTFE           |           | 5182-3459  | 5182-0564  |           |           |
| Clear           | Polyurethane                |           | 5181-1512* | 5042-6491* |           |           |
| Cream           | Solid polyethylene olefin   |           | 5181-1507* | 5181-1513* |           |           |
|                 |                             |           |            |            |           |           |

\*Can be used for CE-based applications.





5183-4511



#### Autosampler Vial Convenience Packs (2 mL)

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 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             | Preslit PTFE/silicone | Blue      | Y         | 5067-0205 |
| Clear                     | Preslit PTFE/silicone | Blue      | Y         | 5183-2079 |
| Clear                     | PTFE/red silicone     | Blue      | Y         | 5182-0732 |
| Clear                     | PTFE/silicone         | Blue      | Y         | 5182-0734 |
| Clear                     | PTFE/silicone/PTFE    | Blue      | Y         | 5182-0736 |
| Clear, with write-on spot | Preslit 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 | Preslit 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 Vial Packs (2 mL)

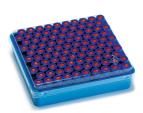
Pre-assembled packs come ready-to-use with the cap and septum of your choice attached to the vial. A time- and labor-saving product for use with your Agilent autosampler or any rotating tray automatic sampler.

| Description | Septa Type                | Cap Color | Certified | 100/pk    |
|-------------|---------------------------|-----------|-----------|-----------|
| Clear       | Preslit PTFE/red silicone | Blue      | Υ         | 5183-2082 |
| Clear       | PTFE/red silicone         | Blue      | Υ         | 5182-0553 |
| Clear       | PTFE/red silicone/PTFE    | Blue      | Υ         | 5182-0555 |
| Clear       | PTFE/red silicone         | Blue      | Y         | 5182-0557 |

(continued)



Autosampler vial convenience pack



Pre-assembled screw top vial pack

| Description               | Septa Type                | Cap Color | Certified | 100/pk    |
|---------------------------|---------------------------|-----------|-----------|-----------|
| Clear, with write-on spot | Preslit PTFE/red silicone | Blue      | Y         | 5183-2083 |
| Clear, with write-on spot | PTFE/red silicone         | Blue      | Y         | 5182-0864 |
| Clear, with write-on spot | PTFE/red silicone         | Blue      | Y         | 5182-0865 |
| Clear, with write-on spot | PTFE/red silicone/PTFE    | Blue      | Y         | 5182-0866 |
| Amber                     | PTFE/red silicone         | Green     | Y         | 5182-0558 |
| Amber                     | PTFE/red silicone/PTFE    | Green     | Y         | 5182-0556 |
| Amber, with write-on spot | PTFE/red silicone         | Green     | Y         | 5182-0554 |
|                           |                           |           |           |           |

#### Vial Kits (2 mL)

Vial kits with a volume of 2 mL 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    | Υ         |           |           | 5185-5946 |            |
| Amber  | PTFE/silicone            | Silver    |           | 8010-0196 |           |           |            |
| Amber  | PTFE/red rubber          | Silver    | Υ         |           |           | 5067-0214 |            |
| Screw top  |                          |           |           |           |           |           |            |
| Clear  | PTFE/red silicone        | Blue      | Υ         |           |           | 5185-5950 | 5067-0237  |
| Clear  |                          |           | Y         |           | 5190-6118 | 5190-6125 |            |
| Clear, with write-on spot  |                          |           | Υ         |           | 5190-6119 |           |            |
| Clear  | PTFE/silicone septa      | Blue      |           | 8010-0198 |           |           |            |
| Clear glass vial and cap pack  | Preslit 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<br>Waters 186000307C, National Scientific C4000-95W,<br>Chromacol MEL, and La-Pha-Pack 11 23 1051 | Preslit PTFE/silicone    | Blue      |           | 8010-0542 |           |           |            |
| Clear glass 8-425  | PTFE-lined solid storage |           |           | 5183-4518 |           |           |            |
| Amber  | PTFE/silicone septa      | Blue      |           | 8010-0199 |           |           |            |
| Amber, with write-on spot, 9 mm  | Preslit PTFE/silicone    | Blue      |           | 8010-0543 |           |           |            |
| Amber glass vial and cap pack, standard opening (8 mm)   | PTFE/silicone            | Black     |           | 8010-0415 |           |           |            |





8010-0426



8010-0414

### Containment Solutions for Sample Volumes (>2 mL)

#### Screw Top Vials (4 mL)

| 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 |  |
|                           |            |        |           |  |

#### Vial Kits (4 mL)

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

#### 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 |

#### Septa

| Unit     | Part No.  |
|----------|-----------|
| 100/nk   | 5192-4460 |
| 100/ PK  | 5165-4400 |
| 144/pk   | 9301-1031 |
| 1,000/pk | 5183-4459 |
|          | 144/pk    |

#### Vials (6 mL) and Associated 16 mm Caps, Caps with Septum, and Septum Only

| Description   | Certified | Units  | Part No.  |
|---|-----------|--------|-----------|
| Vial, screw top, clear glass, flat bottom, 6 mL     | Υ         | 100/pk | 9301-1377 |
| Vial, crimp top, clear glass, flat bottom, 6 mL     |           | 100/pk | 9301-1419 |
| Cap, screw, with preslit PTFE/silicone septa, 16 mm |           | 100/pk | 8010-0102 |
| Cap, screw, PTFE/silicone septa, 16 mm              |           | 100/pk | 8010-0101 |
| Septa, preslit PTFE/silicone, 16 mm                 | Y         | 100/pk | 5188-2758 |
| Septa, for 6 mL vials                               | Y         | 100/pk | 9301-1378 |
| Screw cap, for 6 mL vials                           |           | 100/pk | 9301-1379 |
|   |           |        |           |



#### Caps and Septa (10 mL)

| Description                              | Material      | Unit   | Part No.    |
|--|---------------|--------|-------------|
| 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 7693A automatic liquid sampler

Ensure you have an inert sample pathway for smooth GC performance without analyte degradation or loss. Go to www.agilent.com/chem/7693a

### Ordering Information

#### 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 | Molded PTFE/butyl                      | Y         | 5183-4479 |           | 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                      |           | 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        | Y         | 9301-0719   | 8010-0192 |           |
| 20 mm                                 | Tan PTFE/white silicone        | Y         |             |           | 5067-0234 |
| 20 mm                                 | Red molded silicone/white PTFE |           | 250-030-DAN |           |           |
| Stoppers                              |                                |           |             |           |           |
| Gray butyl stopper, 20 mm, –40/120 °C |                                | Y         | 5183-4476   |           |           |





5183-4479



5182-0840



5188-2759

#### Headspace Kits

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

#### LC High Recovery Vials

| Description            | Size  | Certified | 30/pk     |
|------------------------|-------|-----------|-----------|
| Screw top, clear glass | 15 mL | Υ         | 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

| Unit   | Cap Size   | Vial Type  | Septa Type  | Closed Top   | Open Top   |
|--------|--|--|---|--|--|
| 100/pk | 13-425   | Clear  | PTFE/silicone   | 5183-4311  | 5183-4331  |
| 100/pk | 13-425   | Amber  | PTFE/silicone   | 5183-4321  |  |
| 100/pk | 15-425   | Clear  | PTFE/silicone   | 5183-4312  | 5183-4332  |
| 100/pk | 15-425   | Amber  | PTFE/silicone   | 5183-4322  |  |
| 100/pk | 20-400   | Clear  | PTFE/silicone   | 5183-4313  | 5183-4333  |
| 100/pk | 20-400   | Amber  | PTFE/silicone   | 5183-4323  |  |
| 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  | PTFE/silicone   |  | 5190-4000  |
|        | 100/pk<br>100/pk<br>100/pk<br>100/pk<br>100/pk<br>100/pk<br>100/pk<br>100/pk | 100/pk      13-425        100/pk      13-425        100/pk      15-425        100/pk      15-425        100/pk      20-400        100/pk      20-400        100/pk      20-400        100/pk      24-414        100/pk      24-414 | 100/pk      13-425      Clear        100/pk      13-425      Amber        100/pk      13-425      Clear        100/pk      15-425      Clear        100/pk      15-425      Amber        100/pk      20-400      Clear        100/pk      20-400      Amber        100/pk      20-400      Amber        100/pk      20-400      Amber        100/pk      24-414      Clear        100/pk      24-414      Amber | 100/pk      13-425      Clear      PTFE/silicone        100/pk      13-425      Amber      PTFE/silicone        100/pk      13-425      Amber      PTFE/silicone        100/pk      15-425      Clear      PTFE/silicone        100/pk      15-425      Amber      PTFE/silicone        100/pk      20-400      Clear      PTFE/silicone        100/pk      20-400      Amber      PTFE/silicone        100/pk      20-400      Amber      PTFE/silicone        100/pk      24-414      Clear      PTFE/silicone        100/pk      24-414      Amber      PTFE/silicone | 100/pk      13-425      Clear      PTFE/silicone      5183-4311        100/pk      13-425      Amber      PTFE/silicone      5183-4321        100/pk      13-425      Amber      PTFE/silicone      5183-4321        100/pk      15-425      Clear      PTFE/silicone      5183-4312        100/pk      15-425      Clear      PTFE/silicone      5183-4322        100/pk      15-425      Amber      PTFE/silicone      5183-4322        100/pk      20-400      Clear      PTFE/silicone      5183-4323        100/pk      20-400      Amber      PTFE/silicone      5183-4323        100/pk      20-400      Amber      PTFE/silicone      5183-4323        100/pk      20-400      Amber      PTFE/silicone      5183-4324        100/pk      24-414      Clear      PTFE/silicone      5183-4324        100/pk      24-414      Amber      PTFE/silicone      5183-4324 |

### Ordering Information

#### **Bonded Caps**

| Cap Size | Unit   | Cap Color | Сар Туре      | 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                     | 13 mL  |           |           | 5022-6532 |
| 30 x 48 mm, round bottom glass  | 20 mL  | Y         | 5042-6470 |           |
| 16 x 150 mm                     | 21 mL  |           | 5190-9092 |           |
| 25 x 100 mm, round bottom glass | 40 mL  |           | 5042-6459 |           |
| 25 x 150 mm                     | 55 mL  |           | 5190-9091 |           |
| 30 x 100 mm, round bottom glass | 60 mL  |           | 5042-6458 |           |
| 30 x 150 mm                     | 78 mL  |           | 5190-9090 |           |
|                                 |        |           |           |           |



### 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 either repair or replace products that prove to be defective. If Agilent is unable, within a reasonable time, to repair or replace any product to the warranted condition, the buyer shall be entitled to a refund of the purchase price upon return of the product to Agilent.



### 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 re-use vials.

| Description  | Part No.  |
|--|-----------|
| Crimper  |           |
| Electronic crimper, 11 mm, with lithium battery      | 5191-5616 |
| Electronic crimper, 20 mm, with lithium battery      | 5191-5615 |
| Decapper   |           |
| Electronic decapper, 11 mm, with lithium battery     | 5191-5614 |
| Electronic decapper, 20 mm, with lithium battery     | 5191-5613 |
| 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 |          | 5191-5617 |
| Base for electronic crimping tool                      |          | 5190-4066 |
| Crimper jaw set for high-power electronic crimper      | 11 mm    | 5190-4062 |
| Decapper jaw set for high-power electronic crimp tool  | 11 mm    | 5190-4063 |
| Crimper jaw set for high-power electronic crimper      | 20 mm    | 5190-4064 |
| Decapper jaw set for high-power electronic crimper     | 20 mm    | 5190-4065 |
| High-power crimping tool and jaw set bundle            | 20 mm    | 5191-5624 |
|  |          |           |



# 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. They are also 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 |



5040-4667

#### Tips and tools

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





### The right vial is only a few clicks away

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
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