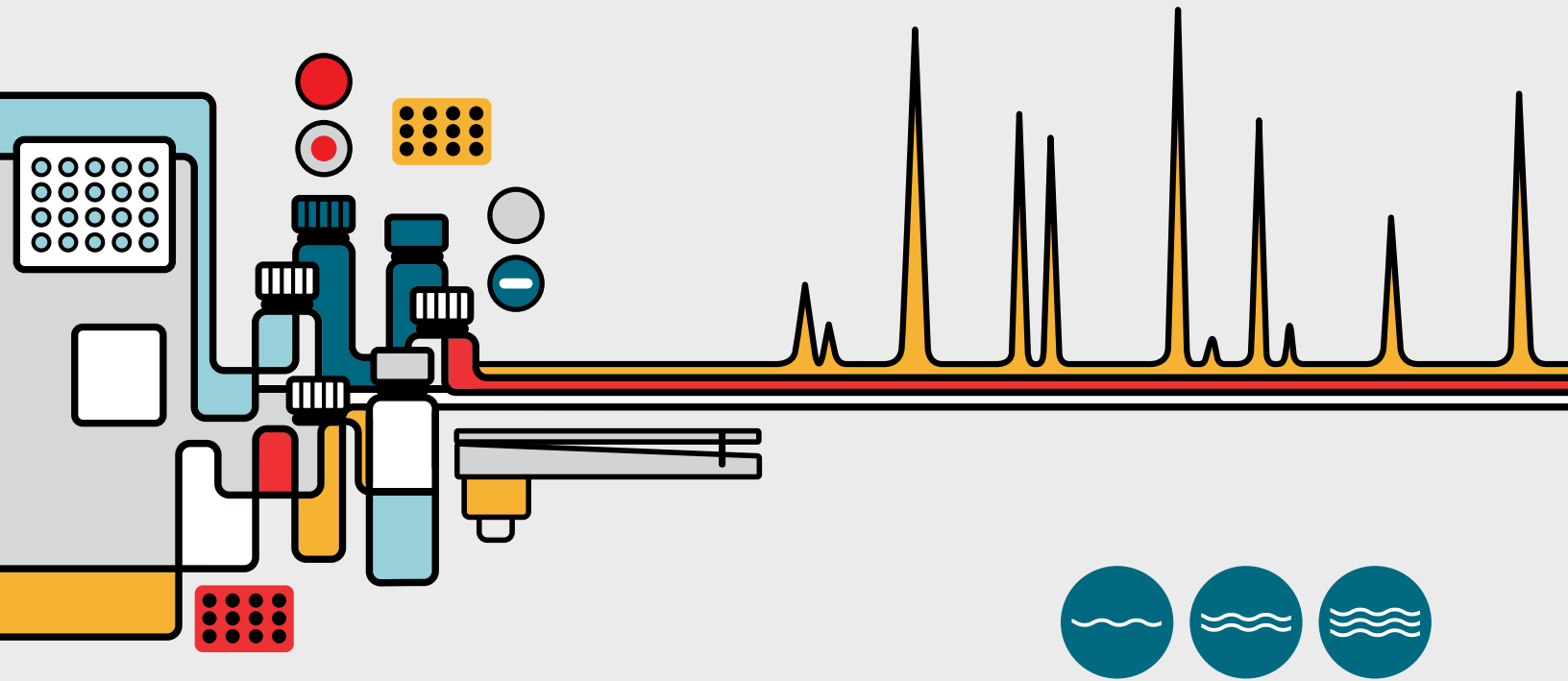


Vials and caps

# SureSTART collection

Streamlined choice. Trusted quality



# Introduction

**Streamlined choice. Trusted quality SureSTART vials, caps, inserts, well plates, mats and accessories**

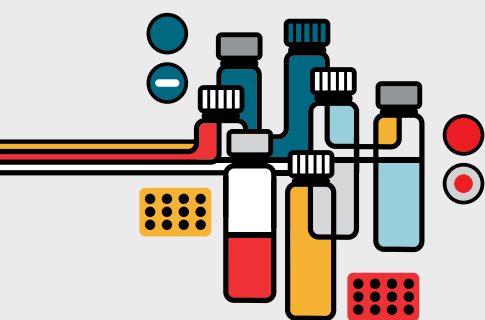
## Excellence from start to finish

The Thermo Scientific™ SureSTART™ sample handling collection includes a range of sample storage and analytical vials and well plates previously sold under Thermo Scientific™ National™, Thermo Scientific™ Chromacol™ and Thermo Scientific™ Sun-SRI™ product names.



All these products have been transitioned and absorbed into one collection so we can deliver a first-class product experience to our customers from the moment you start your purchasing journey, to provide you with performance, instrument compatibility, affordability and delivery that you need.

We understand that not every experiment or analyte is the same, and that you need products that can meet your performance and pricing requirements. You can find three different waves on each of our glass vials, making it easier for analysts to select the right products.

With the SureSTART collection, we ensure that no HPLC/UHPLC or GC system gets left behind. Our vials and well plates are suitable for standard instruments from all vendors, streamlining and simplifying your stockroom—and your budget.



# Section contents

Why choose Thermo Scientific SureSTART collection?	6
SureSTART Performance levels	7
Selection guides for vials and well plates	9
Certified integrity and consistency	13
 SureSTART Performance level 1 products: Everyday analysis	14
Screw vials and associated caps (2 mL)	15
Crimp vials and associated caps (<2 mL)	18
Snap vials and associated caps (2 mL)	20
Plastic inserts	22
Headspace vials and associated caps (20 mL)	23
Stoppers	25
Specification certified kits	26
Storage	27
 SureSTART Performance level 2 products: High throughput analysis	28
Screw vials and associated caps (<2 mL–2 mL)	30
Crimp vials and associated caps (2 mL)	35
Snap vials and associated caps (2 mL)	37
Screw vials and associated caps (4 mL)	40
Headspace screw vials and associated caps (10 mL vials, 18 mm caps)	42
Headspace crimp vials and associated caps (10 mL–20 mL vials, 20 mm caps)	44
Headspace screw vials and associated caps (20 mL, 18 mm closure)	47
Stoppers and septa	48
EPA vials and caps	49
Stoppers and septa	57
Specification certified vial and cap kits, EPA kits, and scintillation kits	58

# Section contents

Continued



SureSTART Performance level 3 products: High performance	64
Screw vials and associated caps (<2 mL–2 mL)	66
Crimp vials and associated caps (<2 mL–2 mL)	75
Snap vials and associated caps (<2 mL–2 mL)	79
Inserts	85
Headspace crimp vials and associated caps (6 mL–20 mL)	86
Specification certified, LC/GC certified, MSCERT and MSCERT+ kits	90

---

SureSTART vials and caps accessories	103
Manual crimpers and decrimpers	103
Electronic crimpers and decrimpers	104

---



WebSeal Performance level 1 products: Everyday analysis	108
Well plates and mats	108

---



WebSeal Performance level 2 products: High throughput analysis	112
Well plates and mats	112

---









WebSeal Performance level 3 products: High performance analysis	116
Well plates and mats	116

---

WebSeal kit accessories	119
-------------------------	-----

---

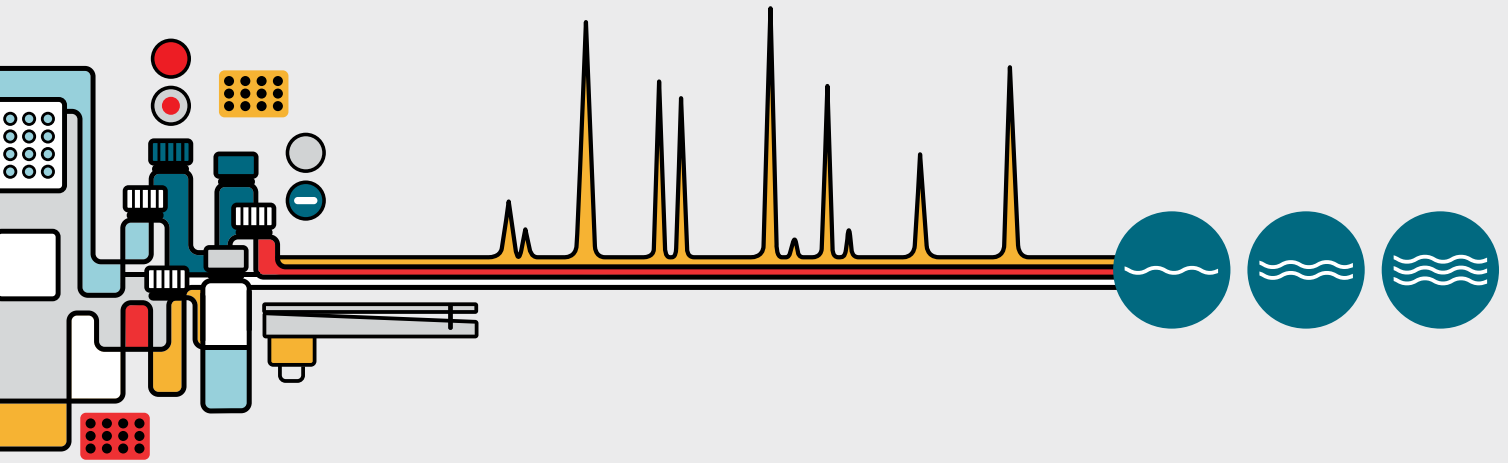
# Why choose Thermo Scientific SureSTART collection?

Five main benefits to you		More ways to master your testing
	<b>Assured quality and performance</b>	Need the highest standards of quality and performance? Our SureSTART collection has you covered with the most stringent standards in the marketplace—ensuring that you can meet every regulatory requirement.
	<b>Instrument compatibility</b>	Our collection contains a broad selection of products to provide complete compatibility for add-on and integrated chromatography autosamplers.
	<b>Sample security and low compound adsorption</b>	Protect your samples from being affected by pH shifting, adducting or contamination, and prevent analyte loss from either the cap top or analyte adsorption to the glass surface.
	<b>Better product experience</b>	Our SureSTART collection is segmented into three different Performance levels, with visual waves on each glass vial to ensure you always select the right product for your experiment, every time.  
	<b>Power to extend your consumables budget</b>	We offer several ways to realize extra value and extend your budget, including built-in bulk discounts—the more you buy, the more you save.



# SureSTART Performance levels

## Greater choice for what matters most



We are committed to providing a broad selection of solutions for all your chromatography and sample storage requirements.

Our vials and autosampler well plates are consistently manufactured with the lowest levels of extractables and leachables. They are also made from glass that has the lowest compound adsorption, and plastic that is tested and approved for analytical use.

We have the highest level of standards and certification available in the marketplace so that you can obtain highly reproducible data.

Whether you have routine samples, or you need to ensure the highest level of confidence and compliance, our market-leading collection of storage and autosampler vials, well plates and sample handling accessories has everything you will need

One collection. Three performance levels. All from one trusted source.




Want to learn more?



**Watch this short video**

to learn how two products can support you with improving your results.

## Analytical performance requirements

Products	Detector type	Description
 <b>Thermo Scientific™ SureSTART™ Performance level 1 products</b>	Non-MS	Suitable for QA/QC applications using core detectors, e.g., UV/Vis, PDA, RI, ELSD, FLD, FID, NPD, ECD, TCD, or FPD. Compound concentrations are at easily detectable levels.
 <b>Thermo Scientific™ SureSTART™ Performance level 2 products</b>	MS	Suitable for routine QA/QC applications using MS technology. Compound concentrations are at easily detectable or low levels of detection.
 <b>Thermo Scientific™ SureSTART™ Performance level 3 products</b>	MS	Suitable for challenging applications, and research-focused applications, using MS technology. Compound concentrations are at/near the method detection limit.



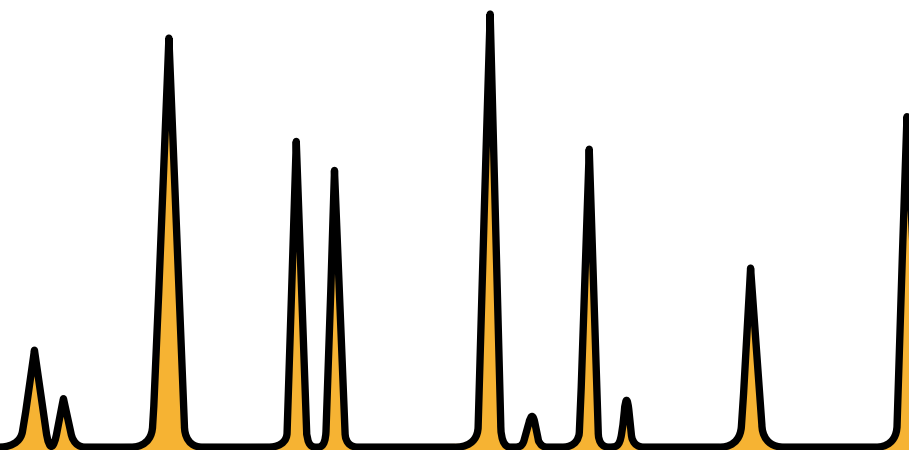
**Performance level 1**  
Everyday analysis:  
Chromatography approved



**Performance level 2**  
High throughput:  
Robust and reproducible



**Performance level 3**  
High performance:  
Selective and sensitive





# Selection guide for vials and well plates

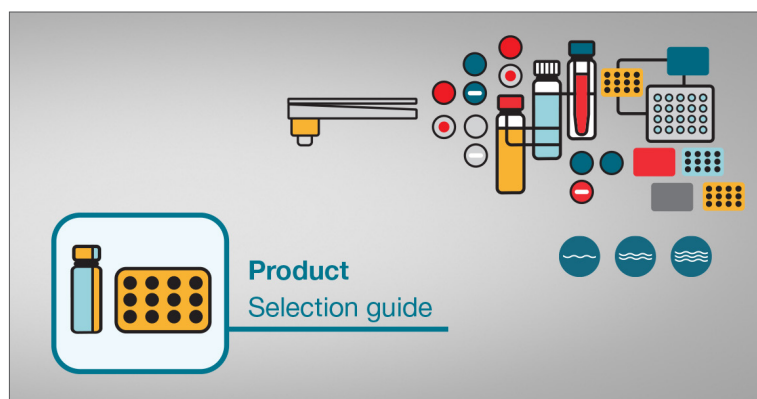
## Which SureSTART product/Performance level is right for you?

There are several factors to consider when choosing a vial or well plate for your application. This section will help guide you through this process to determine which combination is most suitable for your application requirements



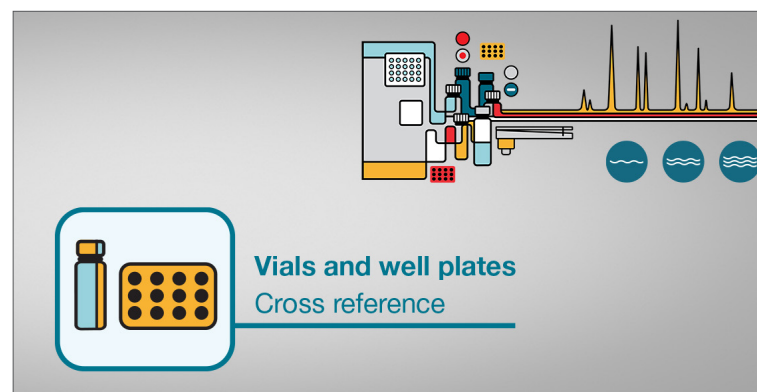
### Need a quick answer?

Why not use our online product selector guide that includes our entire SureSTART collection of vials, caps, well plates and mats.



### Already purchasing a product?

Let our cross-reference tool find the equivalent SureSTART product/catalog number for you.



# Choosing your vials and inserts

The chart below provides a quick guide to selecting the right vial/insert and material for your experimental and application requirements

Performance			Sample volume		
<b>Non-MS</b> Compound levels not challenging	<b>MS</b> Compound levels at relatively low levels	<b>MS</b> Compound levels near method detection limit or for research analysis	Not sample limited	Volumes vary	Limited
↓	↓	↓	↓	↓	↓
<b>SureSTART Performance level 1</b>  General purpose: chromatography approved	<b>SureSTART Performance level 2 high-throughput: for applications requiring robust and reproducible results</b>  High-throughput: for applications requiring robust and reproducible results	<b>SureSTART Performance level 3</b>  High performance: for applications requiring high selectivity and sensitivity	<b>2 mL vial</b>  SureSTART Performance level 1, 2 and 3	<b>High recovery vial</b> <b>Total recovery vial</b>  SureSTART Performance level 3	<b>Polyspring insert (self-aligning)</b> <b>Pulled insert</b> (economical choice)  <b>Fused insert vial 2 mL vial with separate inserts</b>  SureSTART Performance level 2 and 3









Compound polarity			Compound volatility		Compound stability	
Non-polar Mid-polar	Polar	Highly polar	Volatile	Non-volatile	Light-stable	Light-sensitive
↓	↓	↓	↓	↓	↓	↓
<b>Glass vials</b>  SureSTART Performance level 1, 2 and 3	<b>*GOLD-grade glass</b>  SureSTART Performance level 3	<b>*Silanized glass vials</b> <b>**Polypropylene (PP) vials</b> <b>GOLD-grade glass vials and inserts</b>  When low levels of inorganic are required and for solvent stability SureSTART Performance level 1 (PP), 2 and 3 (silanised)	<b>Crimp top vial</b> <b>*SureStop vial</b> <b>Screw thread vial</b> <b>Headspace vials</b>	<b>Screw thread vial</b> <b>Snap-It vial</b> <b>Crimp top vial</b>	<b>Clear vials</b>	<b>Amber vials</b>

\*These products can be found in SureSTART Performance level 3

\*\*Not recommended for GC applications

# Choosing your septa

The chart below provides a quick guide to selecting the right septa material type for your experimental and application requirements.

Multiple injection?	Temperature?			Thin, fragile needle?	Blunt, thick needle?	Critical analysis?	Low coring?
	-40°C to 120 °C	-40°C to 110 °C	-60°C to 200 °C				
Good resealability required				Soft and thin septa required	Pre-slit/pre-cut liner as penetration aid (HPLC)	Very clean liner required/ low-extractables	Double-sided PTFE laminated liners required
							
Silicone/PTFE Natural rubber/ TEF	Natural rubber/ TEF Butyl/PTFE	Red Rubber/ PTFE	Silicone/PTFE	Silicone/PTFE	Silicone/PTFE, pre-slit	Silicone/PTFE	PTFE/silicone/ PTFE

# Choosing your well plates and mats

Selecting the perfect Thermo Scientific™ WebSeal™ well plates and mats for your chromatography requirements is easy using our selector tools and resources.

Performance requirements			Compound polarity		Sample availability		
Compound levels not challenging	Compound levels not challenging/relatively low levels	Compound levels at/near method detection limit	Water and polar	Hydrophobic (e.g., proteins and peptides)	Unlimited	Limited	Very limited
↓	↓	↓	↓	↓	↓	↓	↓
<b>WebSeal</b> Plastic, chromatography tested	<b>WebSeal certified products</b> Plastic, MS tested	<b>WebSeal Plate+</b> Glass-coated plates <b>Plate with glass inserts</b>	<b>WebSeal plastic and certified</b>	<b>WebSeal Plate+</b> Glass-coated plates <b>Plate with glass inserts</b>	<b>Flat bottom</b> Where sample volume is high	<b>U-Bottom</b> Where sample volume is low	<b>V-Bottom</b> Where sample volume is very low

Microtitre: 14-16 mm (also referred to as microwell and standard well plate)  
Mid well plate: 20-41 mm  
Deep well plate: >44 mm

Autosampler compatibility					
Agilent	CTC (PAL)	Thermo Scientific™ TriPlus RSH*	Shimadzu	Thermo Scientific™ Vanquish™**	Waters ACQUITY
↓	↓	↓	↓	↓	↓
Microtitre plate Mid well plate Deep well plate					Mid well plate

\*TriPlus RSH with 6-drawer stack can accommodate 24 microtitre 15.5 mm plates microtitre well plate  
\*\*Barcoded plates for complete orientation



Examples of microtitre, mid well and deep well plates shown above



## Learn more about the well plate terms:

- Microtitre (also known as microwell and standard well plate): 14–16 mm
- Mid well plate: 20–41 mm
- Deep well plate: >44 mm

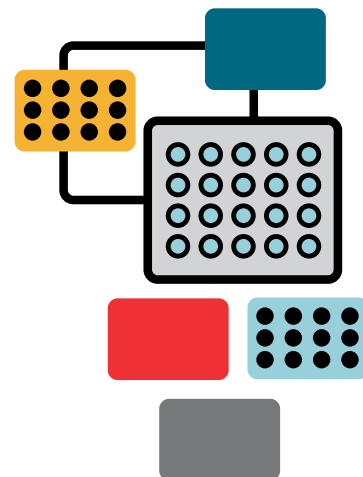
# Certified integrity and consistency



With over 40 years of experience supplying vial and well plates, Thermo Scientific SureSTART certified products are supplied to meet 'critical to quality' specifications, consistently. SureSTART products are produced in compliance with ISO 9001 requirements.

In addition, SureSTART certified products include:

- Glass vials made from First Hydrolytic Type 1 A borosilicate glass, which conforms to U.S Food and Drug Administration (FDA), USP and EU Pharmacopeia standards
- Chemically and thermally resistant well plates are made of the highest quality materials.
- Our autosampler WebSeal wellplates all conform to ANSI SLAS 4-2004 standards.
- In-line opto-electronic testing inspects 100% of all key dimensions
- Our well plates are chromatography tested for solvent compatibility and inertness to ensure your data quality is not compromised
- Packaged in material that has been tested and selected for cleanliness
- Subjected to rigorous end-of-line sampling and quality control procedures to ensure all vials remain within specification
- Most glass vials come with a non-removable write-on patch convenience and ease-of-use
- Patented products, such as Advanced Vial Closure System (AVCS™) caps designed to minimize sample evaporation
- Products produced and/or packed in a clean environment to reduce contamination
- Glass vials which are available deactivated/silanized



# Performance level 1: Everyday analysis



## Chromatography approved

### Meet your chromatographic needs

Choose the right vial for chromatographic analyses. Thermo Scientific SureSTART Performance level 1 products are designed for everyday chromatography analysis. They provide an affordable choice for use with all GC and HPLC/UHPLC instrument types.

If you are verifying compound presence and quantification using detection techniques such as UV/Vis, PDA, RI, ELSD, FLD, FID, NPD, ECD, TCD, or FPD, our Performance level 1 products are the perfect solution for you— select the products with the one wave.

Within Performance level 1 you will find a selection of vials (glass, plastic, <2 mL, 2 mL and headspace) and specification certified convenience kits.

You can also find a great selection of standard and bonded caps to support robotic autosamplers within this Performance level.

Need stoppers? These can also be found within this Performance level.

Vials	Caps
<2 mL polypropylene screw microvials	9 mm screw caps
2 mL glass screw vials	
2 mL glass crimp vials	11 mm crimp caps
<2 mL polypropylene snap microvials	11 mm snap caps
Plastic inserts	—
20 mL glass crimp headspace vials	20 mm crimp caps
20 mm stopper	—
Specification certified kits	—
Storage	—

### Performance level 1 for everyday analyses

- Packaged in material that has been tested and selected for cleanliness
- All products within this performance level are suitable for use with GC and HPLC/UHPLC
- Headspace vials and caps available in 20 mL options
- Vials are identified by one wave and a convenient write-on patch as standard
- Vials and caps available as screw, snap and crimp
- Vials available as clear or amber glass and as either glass or plastic
- Vial volume sizes ranging from 0.3 mL to 20 mL covering limited sample volumes to headspace analyses
- Caps come in a choice of polypropylene, aluminium and magnetic steel caps with silicone/PTFE, rubber/TEF, or butyl/PTFE septa
- Use Thermo Scientific™ manual or electronic crimpers and decrimpers for easy application and removal of crimp caps
- Buy vials and caps in bulk for greater savings

### Specification certified

- All Thermo Scientific SureSTART vials are dimensionally verified to ensure autosampler compatibility
- Automated optical and gauge inspection to ensure critical dimensions and tolerances
- Vials meet all relevant requirements of US, EU, JPN Pharmacopia
- Uniform and defect-free

### Lot traceable

- 100% traceable through the manufacturing process
- Certificate of Conformance available by lot number upon request



# Screw vials and associated caps

(<2 mL – 2 mL vials, 9 mm caps)

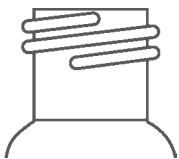
## <2 mL polypropylene screw microvials


Performance level 1 for everyday analysis

### Description

- Short thread screw
- 12 mm x 32 mm (diameter x height)
- No marking spot
- Specification certified

For use with 9 mm screw caps, or 9 mm AVCS screw caps



Vial color and material	Clear plastic	Clear plastic
Total volume	0.4 mL	1.5 mL
Usable volume	0.3 mL	1 mL
Residual volume	4 µL	170 µL
<b>Ordering information</b>	<b>Cat. no.</b>	<b>Cat. no.</b>
100/pack 	<a href="#">6ESV9-04PP</a>	<a href="#">6ESV9-1PP</a>
10 x 100/pack 	<a href="#">6ESV9-04PPT</a>	<a href="#">6ESV9-1PPT</a>
50 x 100/pack 	<a href="#">6ESV9-04PPF</a>	<a href="#">6ESV9-1PPF</a>



# Screw vials and associated caps Continued

## (<2 mL – 2 mL vials, 9 mm caps)

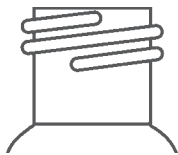
### 2 mL glass screw vials

Performance level 1 for everyday analysis

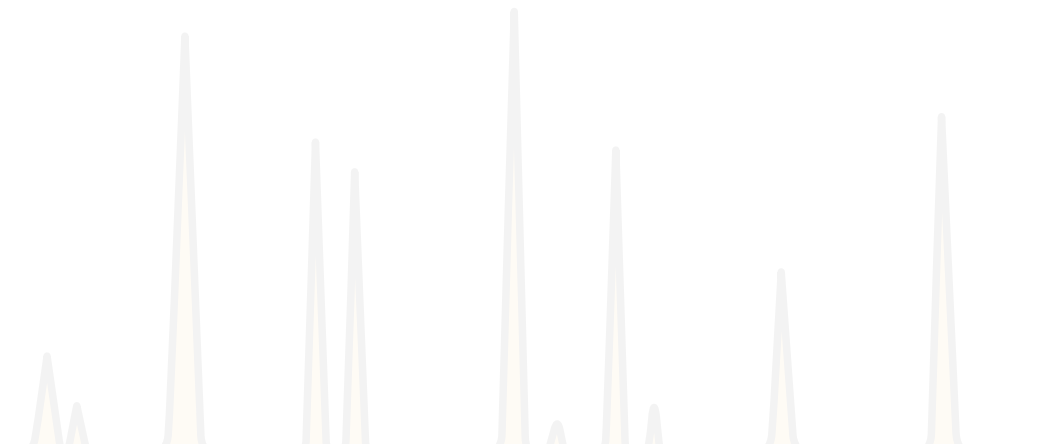
#### Description

- Short thread screw
- 12 mm x 32 mm (diameter x height) flat bottom base
- Marking spot
- Specification certified

For use with 9 mm screw caps, or 9 mm AVCS screw caps



Vial color and material	Clear glass	Amber glass
Total volume	2 mL	
Usable volume	1.5 mL	
Residual volume	170 µL	
Ordering information	Cat. no.	Cat. no.
100/pack	<a href="#">CHSV9-10P</a>	<a href="#">CHSV9-20P</a>
10 x 100/pack	<a href="#">CHSV9-10PT</a>	<a href="#">CHSV9-20PT</a>
50 x 100/pack	<a href="#">CHSV9-10PF</a>	<a href="#">CHSV9-20PF</a>







# Screw vials and associated caps Continued

(<2 mL – 2 mL vials, 9 mm caps)

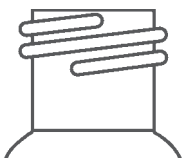
## 9 mm screw caps




Performance level 1 for everyday analysis

### Description

- Short thread screw
- 9 mm
- Specification certified

For use with <2 mL and 2 mL screw vials



Cap color and material	–	–	–	–	Bonded	Bonded	Bonded
	–	–	–	Pre-slit septa	–	Pre-slit septa	Pre-slit septa
Blue polypropylene							
Septum color and material	Red natural rubber/clear TEF	Red silicone/ivory PTFE	White silicone/red PTFE	White silicone/blue PTFE	White silicone/white PTFE	White silicone/white PTFE	White silicone/red PTFE
Septum thickness	1 mm						
Septum hardness	60 shore	45 shore	55 shore	55 shore	45 shore	45 shore	45 shore
Ordering information	Cat. no.	Cat. no.	Cat. no.	Cat. no.	Cat. no.	Cat. no.	Cat. no.
100/pack 	<a href="#">CHSC9-10</a>	<a href="#">CHSC9-20</a>	<a href="#">CHSC9-30</a>	<a href="#">CHSC9-40</a>	<a href="#">CHSC9-35UB</a>	<a href="#">CHSC9-35UBS</a>	<a href="#">CHSC9-30UBS</a>
10 x 100/pack 	<a href="#">CHSC9-10T</a>	<a href="#">CHSC9-20T</a>	<a href="#">CHSC9-30T</a>	<a href="#">CHSC9-40T</a>	<a href="#">CHSC9-35UBT</a>	<a href="#">CHSC9-35UBST</a>	–
50 x 100/pack 	<a href="#">CHSC9-10F</a>	<a href="#">CHSC9-20F</a>	<a href="#">CHSC9-30F</a>	<a href="#">CHSC9-40F</a>	<a href="#">CHSC9-35UBF</a>	<a href="#">CHSC9-35UBST</a>	–



# Crimp vials and associated caps

## (2 mL, 11 mm caps)



Seal these crimp vials with 11 mm aluminium crimp caps and septa using a manual or electronic crimper tool.

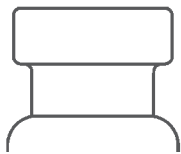
## 2 mL glass crimp vials




Performance level 1 for everyday analysis

### Description

- Crimp closure (11 mm)
- 12 mm x 32 mm (diameter x height) flat bottom base
- Marking spot
- Specification certified

For use with 11 mm crimp caps



Vial color and material	Clear glass	Amber glass
Total volume	2 mL	
Usable volume	1.5 mL	
Residual volume	170 µL	
Ordering information	Cat. no.	Cat. no.
100/pack 	<a href="#">CHCV11-10P</a>	<a href="#">CHCV11-20P</a>
10 x 100/pack 	<a href="#">CHCV11-10PT</a>	<a href="#">CHCV11-20PT</a>
50 x 100/pack 	<a href="#">CHCV11-10PF</a>	<a href="#">CHCV11-20PF</a>



# Crimp vials and associated caps Continued

## (2 mL, 11 mm caps)

### 11 mm crimp caps

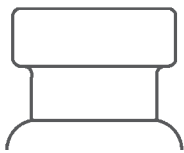
Performance level 1 for everyday analysis




#### Description

- Crimp closure (11 mm)
- Specification certified

For use with <2 mL and 2 mL crimp vials, or <2 mL and 2 mL snap vials

Use with 11 mm crimpers and decrimpers



Cap color and material	Silver aluminium	
Septum color and material	Natural rubber/clear TEF	White silicone/red PTFE
Septum thickness	1 mm	1.3 mm
Septum hardness	60 shore	45 shore
Ordering information	Cat. no.	Cat. no.
100/pack 	<a href="#">CHCC11-10</a>	<a href="#">CHCC11-30</a>
10 x 100/pack 	<a href="#">CHCC11-10T</a>	<a href="#">CHCC11-30T</a>
50 x 100/pack 	<a href="#">CHCC11-10F</a>	<a href="#">CHCC11-30F</a>

#### Learn more about:

Manual and electronic crimpers and decrimpers





# Snap vials and associated caps

(<2 mL vials, 11 mm caps)

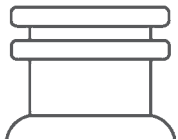
## <2 mL polypropylene snap microvials




Performance level 1 for everyday analysis

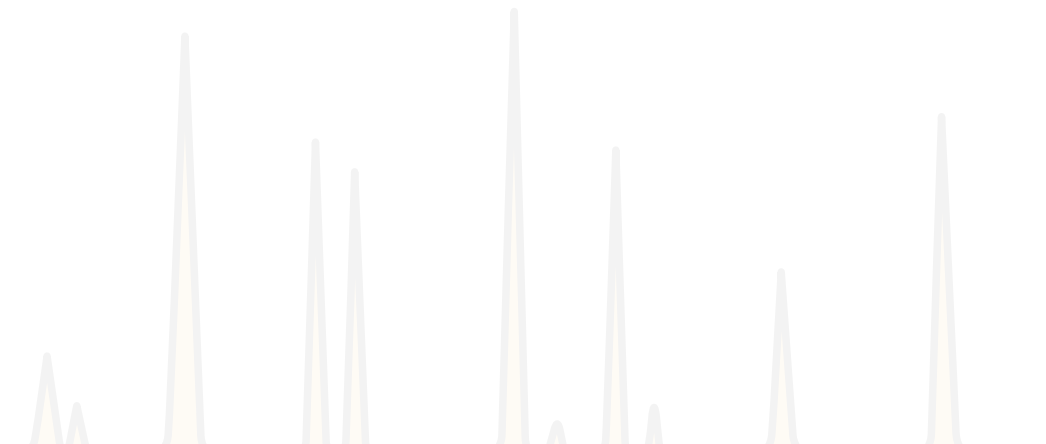
### Description

- Snap (11 mm)
- 12 mm x 32 mm (diameter x height)
- No marking spot
- Specification certified

For use with 11 mm snap caps



Vial color and material	Clear polypropylene		
	Conical	Conical	Flat bottom
Total volume	0.3 mL	0.8 mL	1.0 mL
Usable volume	0.2 mL	0.6 mL	0.8 mL
Residual volume	4 µL	6 µL	80 µL
<b>Ordering information</b>	<b>Cat. no.</b>	<b>Cat. no.</b>	<b>Cat. no.</b>
100/pack 	<a href="#">6ERV11-03PPC</a>	<a href="#">6ERV11-08PPC</a>	<a href="#">6ERV11-08PPFB</a>
10 x 100/pack 	<a href="#">6ERV11-03PPCT</a>	<a href="#">6ERV11-08PPCT</a>	<a href="#">6ERV11-08PPFBT</a>
50 x 100/pack 	<a href="#">6ERV11-03PPCF</a>	<a href="#">6ERV11-08PPCF</a>	<a href="#">6ERV11-08PPFBF</a>





# Snap vials and associated caps Continued

(<2 mL vials, 11 mm caps)

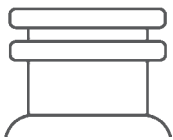
## 11 mm snap caps


Performance level 1 for everyday analysis

### Description

- Snap closure (11 mm)
- Specification certified
- Does not re-seal after puncture

For use with <2 mL and 2 mL snap vials



Cap color and material	Blue polyethylene snap cap with integral PE membrane	Clear polyethylene snap cap with integral PE membrane
	Membrane thickness 0.5 mm	
Septum color and material	This cap comes with no septa	
Septum thickness	This cap comes with no septa	
Septum hardness	This cap comes with no septa	
Ordering information	Cat. no.	Cat. no.
100/pack 	<a href="#">6ERC11PE</a>	<a href="#">6ERC11PEC</a>



# Plastic inserts (2 mL vials)

Need more information about which insert is most suitable for you?



Watch this short video

## Plastic inserts for 2 mL vials




Performance level 1 for everyday analysis

### Description

- 6 mm × 31 mm (diameter × height) (size × height) conical with polyspring base
- No marking spot but filling lines
- Specification certified

For use with 2 mL screw vials, 2 mL snap vials or 2 mL crimp vials



Insert color and material	Clear polypropylene with clear polypropylene polyspring	
Total volume	0.30 mL	
Usable volume	0.25 mL	
Residual volume	4 µL	
Ordering information	Cat. no.	
100/pack 	<a href="#">6EME03CPPSP</a>	
10 x 100/pack 	<a href="#">6EME03CPPSPT</a>	
50 x 100/pack 	<a href="#">6EME03CPPSPF</a>	

### Learn more about:



2 mL glass screw vials



2 mL glass crimp vials



2 mL glass snap vials





# Headspace vials and associated caps

## (20 mL vials, 20 mm caps)

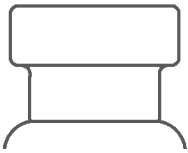
### 20 mL glass crimp headspace vials


Performance level 1 for everyday analysis

#### Description

- Crimp
- 22.5 mm x 75.5 mm (diameter x height) square rim, round bottom base
- Marking spot
- Specification certified

For use with 20 mm crimp caps



Vial color and material	Clear glass
Total volume	20 mL
Usable volume	18 mL
Residual volume	0.8 mL
Ordering information	Cat. no.
100/pack 	<a href="#">CHCV20-14</a>
10 x 100/pack 	<a href="#">CHCV20-14T</a>



# Headspace vials and associated caps Continued

## (20 mL vials, 20 mm caps)

### 20 mm crimp caps

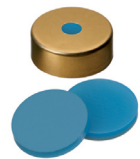
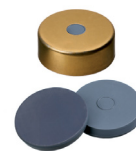
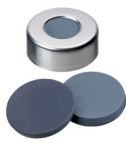
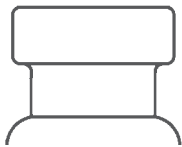
Performance level 1 for everyday analysis

#### Description

- Crimp closure (20 mm)
- Specification certified

For use with 10 mL and 20 mL crimp headspace vials (with diameter neck size of 20 mm)

Use with 20 mm crimpers and decrimpers



Cap color and material	Silver aluminium	Silver aluminium	Silver aluminium	Gold magnetic steel	Gold magnetic steel
Septum color and material	Molded	–	–	Molded	–
	Grey butyl/ grey PTFE	Blue silicone/ white PTFE	–	Grey butyl/ grey PTFE	Blue transparent silicone/clear PTFE
Septum thickness	3 mm	3 mm	–	3 mm	3 mm
Septum hardness	50 shore	45 shore	–	50 shore	45 shore
<b>Ordering information</b>	<b>Cat. no.</b>	<b>Cat. no.</b>	<b>Cat. no.</b>	<b>Cat. no.</b>	<b>Cat. no.</b>
100/pack 	<a href="#">CHCC20-1</a>	<a href="#">CHCC20-2</a>	–	<a href="#">CHCC20-1M</a>	<a href="#">CHCC20-2M</a>
10 x 100/pack 	<a href="#">CHCC20-1T</a>	<a href="#">CHCC20-2T</a>	<a href="#">6ECC200T</a>	<a href="#">CHCC20-1MT</a>	<a href="#">CHCC20-2MT</a>
50 x 100/pack 	<a href="#">CHCC20-1F</a>	<a href="#">CHCC20-2F</a>	–	<a href="#">CHCC20-1MF</a>	<a href="#">CHCC20-2MF</a>

#### Learn more about:

Manual and electronic crimpers and decrimpers







## 20 mm stopper




Performance level 1 for everyday analysis

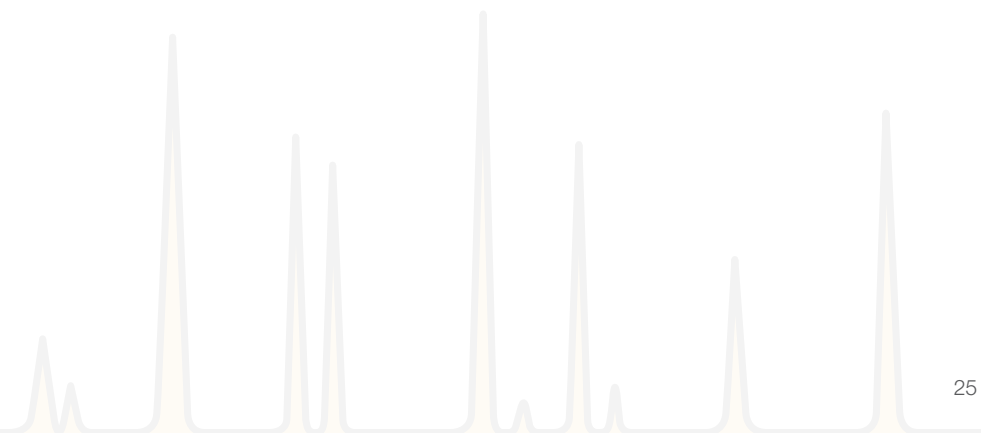
### Description

- Specification certified

For use with vials (e.g. 10 mL/20 mL crimp vials) with diameter neck size of 20 mm



Product description	Stopper (20 mm)
Color and material	Grey bromobutyl
Septum thickness	3 mm
Septum hardness	45 shore
Ordering information	Cat. no.
100/pack 	<a href="#">CHBS-20</a>
10 x 100/pack 	<a href="#">CHBS-20T</a>
50 x 100/pack 	<a href="#">CHBS-20F</a>





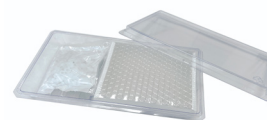
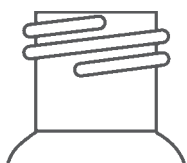
## Specification certified kits



### Specification certified shell, screw vial and cap kits

Performance level 1 for everyday analysis

#### Description

- Screw
- 9 mm short thread
- Specification certified



Vial color and material	Clear propylene	Clear propylene	Clear propylene
Vial total volume	0.4 mL	0.4 mL	1.25 mL
Cap color and material	White silicone	Blue propylene	Lamela plug
Septum color and material	Blue PTFE	White silicone/blue PTFE	—
Ordering information	Cat. no.	Cat. no.	Cat. no.
100/pack 	<a href="#">6EKPP97</a>	<a href="#">6EKPP87</a>	—
200/pack 	—	—	<a href="#">6EKSHV8</a>



# Storage

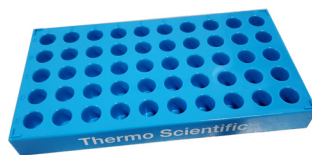
## Vial rack

Performance level 1 for everyday analysis

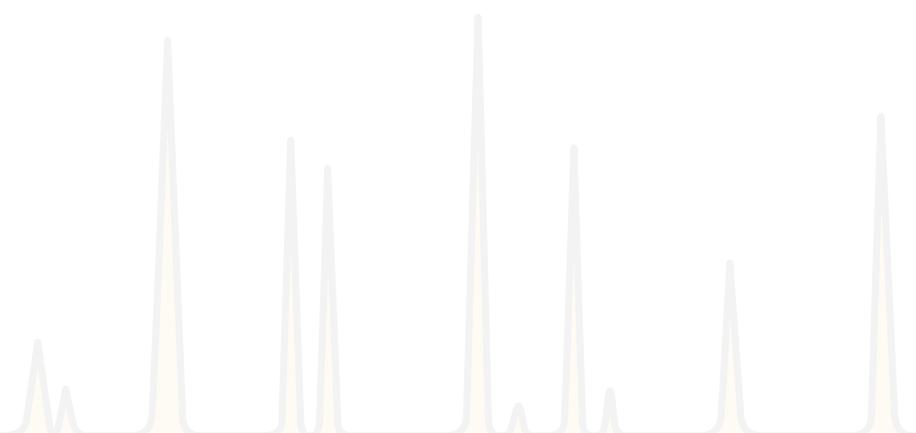
### Description

- For 12 × 32 mm vials
- 50 cavities (5 × 10)
- No lid, reusable 20 × 10.5 × 2.2 cm

Use with 2 mm vials



Product description	Vial rack
Color and material	Blue polypropylene
Ordering information	Cat. no.
1/pack	<a href="#">6EVR1232B</a>



# Performance level 2: High-throughput analysis

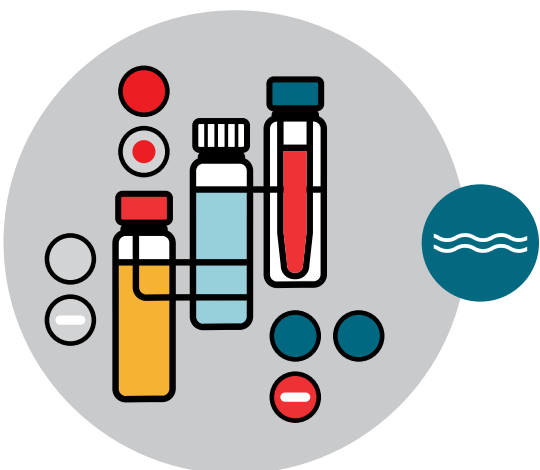
## When robustness and reproducibility are key

### Be compliant-ready for your high-throughput samples in regulated environments

Choose Thermo Scientific SureSTART Performance level 2 products, to ensure high quality data with an uninterrupted workflow in high throughput applications using GC, HPLC/UHPLC, single or triple quadrupole MS systems. Use these Performance level 2 vials for routine QA/QC applications, where the analyte levels are achievable or close to the method detection level. These products have very low metal content and extractables and leachables and conform to high standards so that you can meet your regulatory requirements. They are specification certified to ensure their physical dimensions and autosampler compatibility.

If you need products that support routine analyses, our Performance level 2 products are here for you. Select the products with the two waves.

Within Performance level 2 you will find a selection of kits (including our range of U.S. Environmental Protection Agency (EPA) and Scintillation), vials, caps, inserts, septa and stoppers.



#### Performance level 2 for high-throughput applications

- All products within this Performance level are suitable for GC, HPLC/UHPLC, and mass spectrometry (MS) applications
- Volume sizes ranging from 0.3 mL to 20 mL covering limited sample volumes to headspace analyses
- Headspace vials and caps available from 10 mL – 20 mL
- Vials are identified by two waves and a convenient write-on patch as standard
- Vials available as screw, snap and crimp
- Vials available in glass, silanized glass and plastic
- Vials available as clear or amber glass
- Caps available as screw, screw AVCS, snap and crimp
- Use Thermo Scientific manual or electronic crimpers and decrimpers for easy application and removal of crimp caps
- EPA, scintillation and specification certified kits can be found within Performance level 2
- Buy vials and caps in bulk for greater savings

#### Specification certified

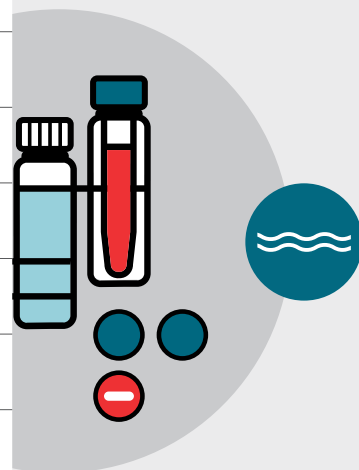
- All Thermo Scientific SureSTART vials are dimensionally verified to ensure autosampler compatibility
- Inspected by automated optical and gauge inspection to ensure critical dimensions and tolerances
- Vials meet all requirements of US, EU, JPN Pharmacopia
- Uniform and defect-free

#### Lot traceable

- 100% traceable through the manufacturing process
- Certificate of Conformance available by lot number upon request

# Performance level 2: High-throughput analysis

Vials	Caps
0.7 mL glass crimp vials	8 mm crimp caps
1.7 mL high-recovery glass screw vials	9 mm screw caps
2 mL glass screw vials	
2 mL glass crimp vials	11 mm crimp caps
2 mL glass snap vials	11 mm snap caps 11 mm crimp caps
Inserts for 2 mL vials	—
4 mL glass screw vials	13 mm screw caps
8 mL glass screw vials	15 mm screw caps
10 mL glass screw headspace vials	18 mm screw caps
10 mL glass crimp headspace vials	20 mm crimp caps
12 mL glass screw vials	15 mm screw caps
20 mL glass screw vials	18 mm screw caps
20 mL glass crimp headspace vials	20 mm crimp caps
20 mm stoppers and septa	
40 mL glass screw vials	24 mm screw caps
Kits	
Specification certified	
EPA	





# Screw vials and associated caps

(<2 mL – 2 mL vials, 8 mm caps)

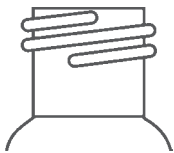
## 0.7 mL glass crimp microvials for <2 mL samples


Performance level 2 for high-throughput applications

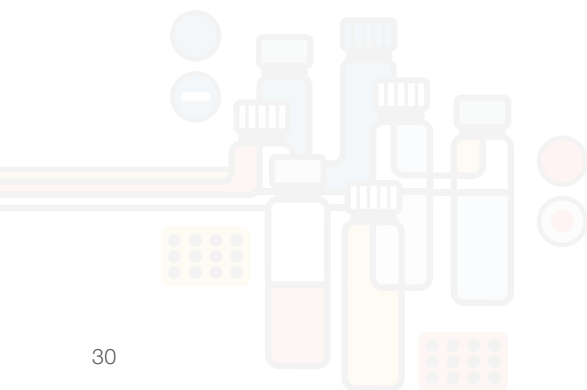
### Description

- Crimp
- Conical base
- Specification certified

For use with 8 mm crimp caps



Vial color and material	Amber glass
Total volume	0.7 mL
Usable volume	1.0 mL
Residual volume	–
Ordering information	Cat. no.
100/pack 	<a href="#">6ACV8-07C2</a>





# Screw vials and associated caps Continued

## (<2 mL – 2 mL vials, 9 mm caps)

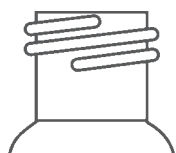
### 1.7 mL high-recovery glass screw microvials for <2 mL samples


Performance level 2 for high-throughput applications

#### Description

- Short thread screw
- 12 mm x 32 mm (diameter x height) inner V-bottom base
- Marking spot
- Specification certified

For use with 9 mm screw caps, or 9 mm AVCS screw caps



Vial color and material	Clear glass
Total volume	1.7 mL
Usable volume	1.3 mL
Residual volume	4 µL
<b>Ordering information</b>	<b>Cat. no.</b>
100/pack 	<a href="#">6ASV9-V1</a>
10 x 100/pack 	<a href="#">6ASV9-V1T</a>
50 x 100/pack 	<a href="#">6ASV9-V1F</a>





# Screw vials and associated caps Continued

(<2 mL – 2 mL vials, 9 mm caps)

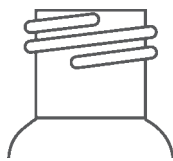
## 2 mL glass screw vials




Performance level 2 for high-throughput applications

### Description

- Short thread screw
- 12 mm × 32 mm (diameter × height) flat bottom base
- Marking spot
- Specification certified

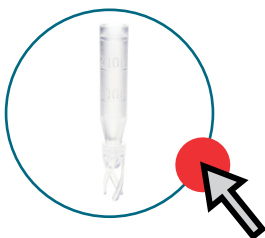
For use with 9 mm screw caps, or 9 mm AVCS screw caps



Vial color and material	Clear glass	Amber glass	Amber glass, silanized
Total volume	2.0 mL		
Usable volume	1.5 mL		
Residual volume	170 µL		
Ordering information	Cat. no.	Cat. no.	Cat. no.
100/pack 	<a href="#">6ASV9-1P</a>	<a href="#">6ASV9-2P</a>	<a href="#">6ASV9-S2P</a>
10 x 100/pack 	<a href="#">6ASV9-1PT</a>	<a href="#">6ASV9-2PT</a>	–
50 x 100/pack 	<a href="#">6ASV9-1PF</a>	<a href="#">6ASV9-2PF</a>	–

### Need a smaller volume?

Why not use with our polyspring glass inserts







# Screw vials and associated caps Continued

(<2 mL – 2 mL vials, 9 mm caps)

## 9 mm AVCS screw caps

Performance level 2 for high-throughput applications

### Description

- Short thread screw
- 9 mm
- Specification certified
- AVCS screw top technology

For use with <2 mL and 2 mL screw vials



Cap components	–	Bonded	Bonded	–	–	–
	–	Pre-slit	–	–	–	–
Cap color and material	Blue polypropylene				Red polypropylene	
Septum color and material	White silicone/ red PTFE	White silicone/ beige PTFE	White silicone/ beige PTFE	Red rubber/ ivory PTFE	White silicone/ red PTFE	Red rubber/ ivory PTFE (RedRubber)
Septum thickness	1 mm					
Septum hardness	45 shore	45 shore	45 shore	45 shore	45 shore	45 shore
Ordering information	Cat. no.	Cat. no.	Cat. no.	Cat. no.	Cat. no.	Cat. no.
100/pack	<a href="#">6ASC9ST1</a>	<a href="#">6ASC9STBS1</a>	<a href="#">6ASC9STB1</a>	<a href="#">6ASC9RT1</a>	<a href="#">6ASC9ST1R</a>	<a href="#">6ASC9RT1R</a>
10 x 100/pack	<a href="#">6ASC9ST1T</a>	<a href="#">6ASC9STBS1T</a>	<a href="#">6ASC9STB1T</a>	<a href="#">6ASC9RT1T</a>	<a href="#">6ASC9ST1RT</a>	<a href="#">6ASC9RT1RT</a>
50 x 100/pack	<a href="#">6ASC9ST1F</a>	<a href="#">6ASC9STBS1F</a>	<a href="#">6ASC9STB1F</a>	<a href="#">6ASC9RT1F</a>	<a href="#">6ASC9ST1RF</a>	<a href="#">6ASC9RT1RF</a>



# Screw vials and associated caps Continued

(<2 mL – 2 mL vials, 9 mm caps)

## 9 mm AVCS screw caps


Performance level 2 for high-throughput applications

### Description

- Short thread screw
- 9 mm
- Specification certified
- AVCS screw top technology

For use with <2 mL and 2 mL screw vials



Cap components	Close top cap	–	–	–	–	–	–
	–	–	–	–	–	–	–
Cap color and material	Blue polypropylene	Black polypropylene	Black polypropylene	Green polypropylene	Green polypropylene	Yellow polypropylene	Yellow polypropylene
Septum color and material	Red rubber/ivory PTFE (RedRubber)	White silicone/red PTFE	Red rubber/ivory PTFE (RedRubber)	White silicone/red PTFE	Red rubber/ivory PTFE (RedRubber)	White silicone/red PTFE	Red rubber/ivory PTFE (RedRubber)
Septum thickness	1 mm						
Septum hardness	45 shore	45 shore	45 shore	45 shore	45 shore	45 shore	45 shore
Ordering information	<b>Cat. no.</b>	<b>Cat. no.</b>	<b>Cat. no.</b>	<b>Cat. no.</b>	<b>Cat. no.</b>	<b>Cat. no.</b>	<b>Cat. no.</b>
100/pack 	<a href="#">6ASC9CTRR1</a>	<a href="#">6ASC9ST1B</a>	<a href="#">6ASC9RT1B</a>	<a href="#">6ASC9ST1G</a>	<a href="#">6ASC9RT1G</a>	<a href="#">6ASC9ST1Y</a>	<a href="#">6ASC9RT1Y</a>



# Crimp vials and associated caps

## (2 mL vials, 11 mm caps)

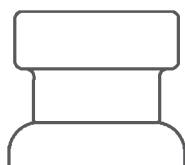
### 2 mL glass crimp vials

Performance level 2 for high-throughput applications

#### Description

- Crimp
- 12 mm x 32 mm (diameter x height) flat bottom base
- Marking spot
- Specification certified

For use with 11 mm crimp caps, or 11 mm snap caps



Vial color and material	Clear glass	Amber glass
Total volume	2 mL	
Usable volume	1.7 mL	
Residual volume	170 µL	
Ordering information	Cat. no.	Cat. no.
100/pack	<a href="#">6ACV11-1P</a>	<a href="#">6ACV11-2P</a>
10 x 100/pack	<a href="#">6ACV11-1PT</a>	<a href="#">6ACV11-2PT</a>
50 x 100/pack	<a href="#">6ACV11-1PF</a>	<a href="#">6ACV11-2PF</a>



# Crimp vials and associated caps Continued

## (2 mL vials, 11 mm caps)

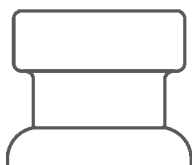
### 11 mm crimp caps


Performance level 2 for high-throughput applications

#### Description

- Crimp closure (11 mm)
- Specification certified

For use with <2 mL – 2 mL crimp vials, or <2 mL – 2 mL snap vials  
 Use with 11 mm crimpers and decrimpers



Cap color and material	Silver aluminium closure	
Septum color and material	White silicone/red PTFE	Red rubber/clear PTFE
Septum thickness	1 mm	
Septum hardness	45 shore	60 shore
Ordering information	Cat. no.	Cat. no.
100/pack 	<a href="#">6ACC11ST1</a>	<a href="#">6ACC11RT1</a>
10 x 100/pack 	<a href="#">6ACC11ST1T</a>	<a href="#">6ACC11RT1T</a>
50 x 100/pack 	<a href="#">6ACC11ST1F</a>	<a href="#">6ACC11RT1F</a>

#### Learn more about:

Manual and electronic crimpers and decrimpers





# Snap vials and associated caps

## (2 mL vials, 11 mm caps)

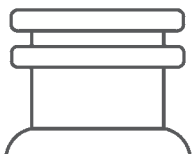
### 2 mL glass snap vials




Performance level 2 for high-throughput applications

#### Description

- Snap
- 12 mm x 32 mm (diameter x height) flat bottom base
- Marking spot
- Specification certified

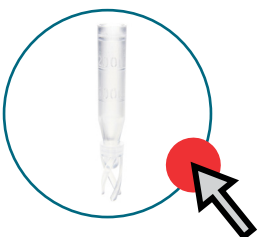
For use with 11 mm snap caps or 11 mm crimp caps



Vial color and material	Clear glass	Amber glass
Total volume	2 mL	
Usable volume	1.7 mL	
Residual volume	170 µL	
<b>Ordering information</b>		
100/pack 	<a href="#">6ARV11-1P</a>	<a href="#">6ARV11-2P</a>
10 x 100/pack 	<a href="#">6ARV11-1PT</a>	<a href="#">6ARV11-2PT</a>
50 x 100/pack 	<a href="#">6ARV11-1PF</a>	<a href="#">6ARV11-2PF</a>

#### Need a smaller volume?

Why not use with our polyspring glass inserts





# Snap vials and associated caps Continued

## (2 mL vials, 11 mm caps)

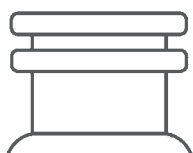
### 11 mm snap caps




Performance level 2 for high-throughput applications

#### Description

- Snap closure (11 mm)
- Specification certified

For use with 11 mm glass or plastic snap vials



Cap color and material	Blue polyethylene	Blue polyethylene	Red polyethylene	Red polyethylene
Septum color and material	White silicone/ red PTFE	Natural rubber/ clear TEF	White silicone/ red PTFE	Natural rubber/ clear TEF
Septum thickness	1 mm			
Septum hardness	45 shore	60 shore	55 shore	60 shore
Ordering information	Cat. no.	Cat. no.	Cat. no.	Cat. no.
100/pack 	<a href="#">6ARC11ST1</a>	<a href="#">6ARC11NRT1</a>	<a href="#">6ARC11ST1R</a>	<a href="#">6ARC11NRT1R</a>
10 x 100/pack 	<a href="#">6ARC11ST1T</a>	<a href="#">6ARC11NRT1T</a>	<a href="#">6ARC11ST1RT</a>	<a href="#">6ARC11NRT1RT</a>
50 x 100/pack 	<a href="#">6ARC11ST1F</a>	<a href="#">6ARC11NRT1F</a>	<a href="#">6ARC11ST1RF</a>	<a href="#">6ARC11NRT1RF</a>



# Snap vials and associated caps Continued

## (2 mL vials, 11 mm caps)

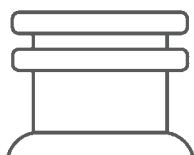
### 11 mm snap caps



Performance level 2 for high-throughput applications

#### Description

- Snap closure (11 mm)
- Specification certified

For use with 11 mm glass or plastic snap vials



Cap color and material	Clear polyethylene	Clear polyethylene	Red polyethylene	Red polyethylene	Orange polyethylene	Clear polyethylene	Blue polyethylene
Septum color and material	Red silicone rubber/clear PTFE	White silicone/red PTFE	White silicone/red PTFE	White silicone/red PTFE	White silicone/red PTFE	White virgin PTFE	Red silicone rubber/clear PTFE
Septum thickness	1 mm						
Septum hardness	45 shore	60 shore	55 shore	60 shore	60 shore	53 shore	60 shore
Ordering information	<b>Cat. no.</b>	<b>Cat. no.</b>	<b>Cat. no.</b>	<b>Cat. no.</b>	<b>Cat. no.</b>	<b>Cat. no.</b>	<b>Cat. no.</b>
100/pack 	<a href="#">6ARC11RRT1C</a>	<a href="#">6ARC11ST1C</a>	<a href="#">6ARC11ST1B</a>	<a href="#">6ARC11ST1OR</a>	-	<a href="#">6ARC11-P</a>	<a href="#">6ARC11RRT1</a>
1000/pack 	-	-	-	-	<a href="#">6ARC11ST1ORT</a>	-	-





# Screw vials and associated caps

## (4 mL vials, 13 mm caps)

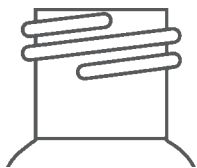
### 4 mL glass screw vials


Performance level 2 for high-throughput applications

#### Description

- Screw
- 15 × 45 mm (diameter × height) flat base
- Specification certified

For use with 13 mm screw caps



Vial color and material	Clear glass	Amber glass
Total volume	4.0 mL	
Usable volume	3.5 mL	
Residual volume	800 µL	
Ordering information	Cat. no.	Cat. no.
100/pack 	<a href="#">6ASV13-1P</a>	<a href="#">6ASV13-2P</a>





# Screw vials and associated caps Continued

## (4 mL vials, 13 mm caps)

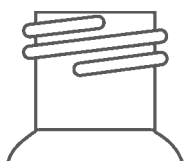
### 13 mm screw caps

Performance level 2 for high-throughput applications

#### Description

- Short thread screw closure (13 mm/13-425)
- Specification certified

For use with 4 mL screw vials (and other vials with screw 13 mm dimensions)



Cap color and material	-	Pre-slit septa	-
Septum color and material	Black polypropylene	White polypropylene	White polyurethane
Septum thickness	White silicone/red PTFE	White silicone/blue PTFE	White UR 13-425 PE foam/ PTFE close top
Septum hardness	1.5 mm	1.5 mm	1.5 mm
Septum hardness	55 shore	45 shore	75 shore
Ordering information	Cat. no.	Cat. no.	Cat. no.
100/pack	<a href="#">6ASC13ST15</a>	<a href="#">6PSC13STS15W</a>	<a href="#">6ASC13-CTP</a>





# Headspace screw vials and associated caps (10 mL vials, 18 mm caps)

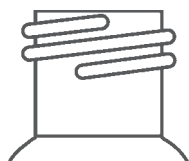
## 10 mL glass screw headspace vials




Performance level 2 for high-throughput applications

### Description

- Screw
- 22.5 mm x 46 mm (diameter x height) round bottom base
- Marking spot
- Specification certified

For use with 18 mm screw caps



Vial color and material	Clear glass	Amber glass
Total volume	10 mL	10 mL
Usable volume	8 mL	8 mL
Residual volume	0.8 mL	0.8 mL
Ordering information	Cat. no.	Cat. no.
100/pack 	<a href="#">6ASV10-1</a>	<a href="#">6ASV10-2</a>
10 x 100/pack 	<a href="#">6ASV10-1T</a>	<a href="#">6ASV10-2T</a>
50 x 100/pack 	<a href="#">6ASV10-1F</a>	<a href="#">6ASV10-2F</a>



# Headspace screw vials and associated caps Continued

## (20 mL vials, 18 mm caps)

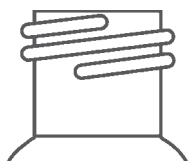
### 20 mL glass screw headspace vials

Performance level 2 for high-throughput applications

#### Description

- Screw
- 22.5 mm x 75.5 mm (diameter x height) round bottom base
- Marking spot
- Specification certified

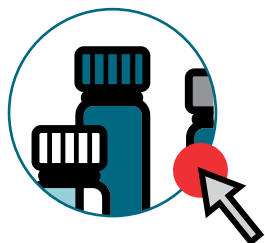
For use with 18 mm screw caps



Vial color and material	Clear glass	Amber glass
Total volume	20 mL	20 mL
Usable volume	18 mL	18 mL
Residual volume	0.8 mL	0.8 mL
<b>Ordering information</b>	<b>Cat. no.</b>	<b>Cat. no.</b>
100/pack	<a href="#">6ASV20-1</a>	<a href="#">6ASV20-2</a>
10 x 100/pack	<a href="#">6ASV20-1T</a>	<a href="#">6ASV20-2T</a>
50 x 100/pack	<a href="#">6ASV20-1F</a>	<a href="#">6ASV20-2F</a>

#### Looking for caps?

Our 18 mm precision screw caps which are a perfect fit for these vials





# Headspace crimp vials and associated caps (10 mL – 20 mL vials, 20 mm caps)

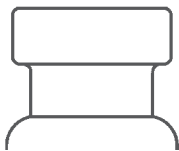
## 10 mL glass crimp headspace vials




Performance level 2 for high-throughput applications

### Description

- Crimp
- 22.50 mm × 46 mm (diameter × height) round bottom base with beveled edge rim
- Marking spot
- Specification certified

For use with 20 mm crimp caps



Vial color and material	Clear glass	Amber glass
Total volume	10 mL	
Usable volume	8 mL	
Residual volume	0.8 mL	
Ordering information	Cat. no.	Cat. no.
100/pack 	<a href="#">6ACV10-1R</a>	<a href="#">6ACV10-2R</a>
10 x 100/pack 	<a href="#">6ACV10-1RT</a>	<a href="#">6ACV10-2RT</a>
50 x 100/pack 	<a href="#">6ACV10-1RF</a>	<a href="#">6ACV10-2RF</a>



# Headspace crimp vials and associated caps Continued

## (10 mL – 20 mL vials, 20 mm caps)

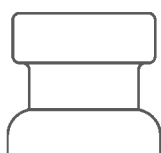
### 20 mL glass crimp headspace vials




Performance level 2 for high-throughput applications

#### Description

- Crimp
- 22.65 mm × 75 mm (diameter × height) round bottom base with beveled edge rim (6ACV20-1R)
- 23 mm × 75.5 mm (diameter × height) round bottom base with beveled edge rim (6ACV20-1PE, 6ACV20-2PE)
- Marking spot
- Specification certified

For use with 20 mm crimp caps



Vial color and material	Clear glass	Clear glass	Amber glass
Vial diameter and length	22.65 × 75.5	23 × 75.5	23 × 75.5
Total volume	20 mL		
Usable volume	18 mL		
Residual volume	0.8 mL		
<b>Ordering information</b>	<b>Cat. no.</b>	<b>Cat. no.</b>	<b>Cat. no.</b>
100/pack 	<a href="#">6ACV20-1R</a>	<a href="#">6ACV20-1PE</a>	<a href="#">6ACV20-2PE</a>
10 x 100/pack 	<a href="#">6ACV20-1RT</a>	<a href="#">6ACV20-1PET</a>	<a href="#">6ACV20-2PET</a>
50 x 100/pack 	<a href="#">6ACV20-1RF</a>	<a href="#">6ACV20-1PEF</a>	<a href="#">6ACV20-2PEF</a>

[6ACV20-1PE](#) and [6ACV20-2PE](#) fit PerkinElmer instruments



# Headspace crimp vials and associated caps Continued

## (10 mL – 20 mL vials, 20 mm caps)

### 20 mm crimp caps

Performance level 2 for high-throughput applications


#### Description

- Crimp closure (20 mm)
- Specification certified

For use with 10 mL and 20 mL crimp headspace vials (with neck size of 20 mm)

Use with 20 mm crimpers and decrimpers



Cap components	–	–	–	Magnetic	Magnetic
	–	–	Pressure release	–	Suitable for high temperature
	–	–	–	Soft septa	–
Cap color and material	Silver aluminium	Silver aluminium	Silver aluminium	Gold steel	Silver steel
Septum color and material	Black butyl/ grey PTFE/ molded Pharmafix	White silicone/ beige PTFE	White silicone/ beige PTFE	Blue silicone/ clear PTFE	Red silicone/ natural PTFE
Septum thickness	3.0 mm	3.2 mm	3.2 mm	3.0 mm	3.0 mm
Septum hardness	50 shore	45 shore	45 shore	40 shore	55 shore
Ordering information	Cat. no.	Cat. no.	Cat. no.	Cat. no.	Cat. no.
100/pack 	<a href="#">6ACC20-PFT</a>	<a href="#">6ACC20-ST1</a>	<a href="#">6APRCC20-ST1</a>	<a href="#">6AMCC20-ST3</a>	<a href="#">6AMCC20-STH</a>
10 x 100/pack 	<a href="#">6ACC20-PFTT</a>	<a href="#">6ACC20-ST1T</a>	<a href="#">6APRCC20-ST1T</a>	<a href="#">6AMCC20-ST3T</a>	<a href="#">6AMCC20-STHT</a>
50 x 100/pack 	<a href="#">6ACC20-PFTF</a>	<a href="#">6ACC20-ST1F</a>	<a href="#">6APRCC20-ST1F</a>	<a href="#">6AMCC20-ST3F</a>	<a href="#">6AMCC20-STHF</a>

#### Learn more about:

Manual and electronic crimpers and decrimpers





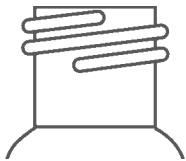
# Headspace screw vials and associated caps (20 mL, 18 mm closure)


## Screw vial and cap kits

Performance level 2 for high-throughput applications

### Description

- Screw thread
- Specification certified
- 22.5 × 75.5 (diameter × height) headspace round bottom base



Vial color and material	Clear glass
Vial total volume	20 mL
Cap color and material	Silver stainless steel open top screw cap, magnetic
Septum color and material	Blue silicone/clear PFTE, 45 shore hardness
Ordering information	Cat. no.
100/pack 	<a href="#">6AKHSVST201</a>





# Stoppers and septa

## 20 mm stoppers and septa




Performance level 2 for high-throughput applications

### Description

- Specification certified

For use with vials (e.g. 10 mL/20 mL crimp vials) with diameter neck size of 20 mm



Product description	Stopper (20 mm)	Septum (20 mm)	Septum (20 mm)
Color and material	Grey bromobutyl	White silicone/beige PTFE	Black butyl/ grey PTFE molded pharmafix
Septum thickness	3.0 mm	3.2 mm	3.0 mm
Septum hardness	45 shore	45 shore	50 shore
Ordering information	Cat. no.	Cat. no.	Cat. no.
100/pack 	<a href="#">6A20BS</a>	<a href="#">6A20ST1</a>	<a href="#">6A20CBT3</a>
10 x 100/pack 	<a href="#">6A20BST</a>	<a href="#">6A20BST</a>	-
50 x 100/pack 	<a href="#">6A20BSF</a>	<a href="#">6A20BSF</a>	-







# EPA vials and caps

## 8 mL EPA screw vials

Performance level 2 for high-throughput applications

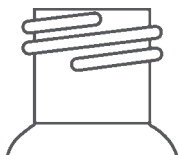
### Description


- Screw (15-425)
- 17 × 60 mm (diameter × height) flat base
- Specification certified - Level 100 EPA vials

For use with 15 mm screw caps

These are processed and packaged under a strict registered ISO Quality Management System. The products are not certified to EPA standards or pre-cleaned. Every case of product is labeled with its production number and is custody sealed to ensure reliable chain-of-custody.

EPA screw vials convenience kits are recommended for discrete water sampling under EPA 40 CFR 136 "Guidelines for Establishing Test Procedures for the Analysis of Pollutants" and EPA 40 CFR 141 "National Interim Primary Drinking Water Regulations: Control of Trihalomethanes in Drinking Water"



Vial color and material	Clear glass	Amber glass
Total volume	8 mL	8 mL
Usable volume	6 mL	6 mL
Residual volume	0.8 mL	0.8 mL
Ordering information	Cat. no.	Cat. no.
200/pack 	<a href="#">6ASV8EPA-1</a>	<a href="#">6ASV8EPA-2</a>





# EPA vials and caps

Continued

## 12 mL EPA screw vials

Performance level 2 for high-throughput applications

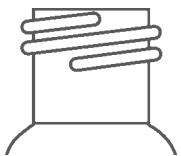
### Description


- Screw thread (15-425)
- Specification certified - Level 100 EPA vials

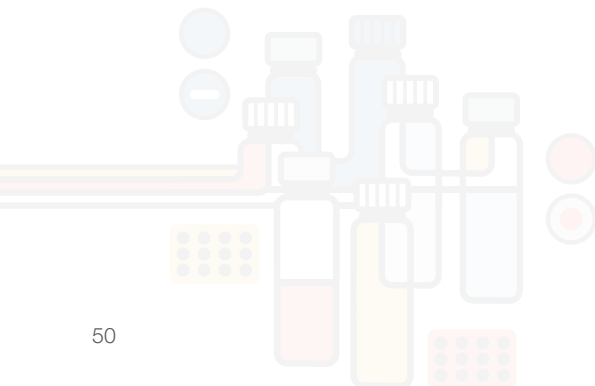
For use with 15 mm screw caps

These are processed and packaged under a strict registered ISO Quality Management System. The products are not certified to EPA standards or pre-cleaned. Every case of product is labeled with its production number and is custody sealed to ensure reliable chain-of-custody.

EPA screw vials convenience kits are recommended for discrete water sampling under EPA 40 CFR 136 "Guidelines for Establishing Test Procedures for the Analysis of Pollutants" and EPA 40 CFR 141 "National Interim Primary Drinking Water Regulations: Control of Trihalomethanes in Drinking Water".



Vial color and material	Clear glass	Amber glass
Total volume	12 mL	12 mL
Usable volume	11 mL	11 mL
Residual volume	0.8 mL	0.8 mL
Ordering information	Cat. no.	Cat. no.
200/pack 	<a href="#">6ASV12EPA-1</a>	<a href="#">6ASV12EPA-2</a>





# EPA vials and caps

Continued

## 16 mL EPA screw vials

Performance level 2 for high-throughput applications

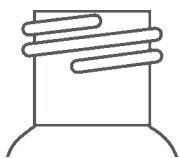
### Description

- Screw thread (18-400)
- Specification certified - Level 100 EPA certified

For use with 18 mm screw caps

These are processed and packages under a strict registered ISO Quality Management System. The products are not certified to EPA standards or pre-cleaned. Every case of product is labeled with its production number and is custody sealed to ensure reliable chain-of-custody.

EPA screw vials convenience kits are recommended for discrete water sampling under EPA 40 CFR 136 "Guidelines for Establishing Test Procedures for the Analysis of Pollutants" and EPA 40 CFR 141 "National Interim Primary Drinking Water Regulations: Control of Trihalomethanes in Drinking Water".



Vial color and material	Clear glass	Amber glass
Total volume	16 mL	16 mL
Usable volume	15 mL	15 mL
Residual volume	0.8 mL	0.8 mL
Ordering information	Cat. no.	Cat. no.
200/pack	<a href="#">6ASV16EPA-1</a>	<a href="#">6ASV16EPA-2</a>



# EPA vials and caps

Continued

## 20 mL EPA screw vials

Performance level 2 for high-throughput applications

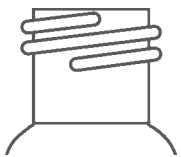
### Description


- Screw thread (20-400)
- 23 × 85 mm (diameter × height ) flat base
- Specification certified - Level 100 EPA vials

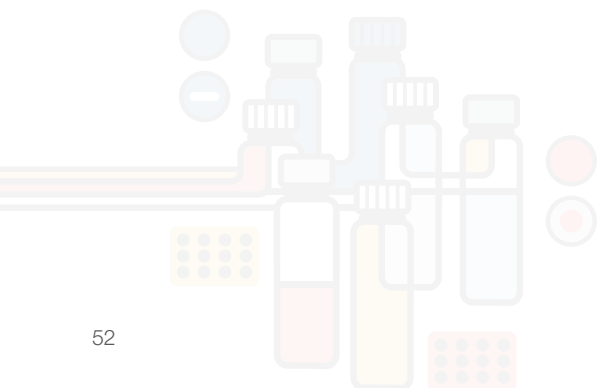
For use with 20 mm screw caps

These are processed and packages under a strict registered ISO Quality Management System. The products are not certified to EPA standards or pre-cleaned. Every case of product is labeled with its production number and is custody sealed to ensure reliable chain-of-custody.

EPA screw vials convenience kits are recommended for discrete water sampling under EPA 40 CFR 136 "Guidelines for Establishing Test Procedures for the Analysis of Pollutants" and EPA 40 CFR 141 "National Interim Primary Drinking Water Regulations: Control of Trihalomethanes in Drinking Water".



Vial color and material	Clear glass
Total volume	20 mL
Usable volume	18 mL
Residual volume	0.8 mL
Ordering information	Cat. no.
100/pack 	<a href="#">6ASV20EPA-1</a>





# EPA vials and caps

Continued

## 40 mL EPA screw vials

Performance level 2 for high-throughput applications

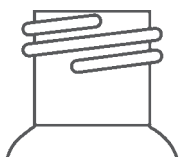
### Description


- Screw thread 24 mm (24-400)
- Specification certified - Level 100 EPA vials

For use with 24 mm crimp caps

These are processed and packaged under a strict registered ISO Quality Management System. The products are not certified to EPA standards or pre-cleaned. Every case of product is labeled with its production number and is custody sealed to ensure reliable chain-of-custody.

EPA screw vials convenience kits are recommended for discrete water sampling under EPA 40 CFR 136 "Guidelines for Establishing Test Procedures for the Analysis of Pollutants" and EPA 40 CFR 141 "National Interim Primary Drinking Water Regulations: Control of Trihalomethanes in Drinking Water".



Vial color and material	Clear glass	Amber glass
Total volume	40 mL	
Usable volume	38 mL	
Residual volume	0.8 mL	
Ordering information	Cat. no.	Cat. no.
100/pack 	<a href="#">6ASV40EPA-1</a>	<a href="#">6ASV40EPA-2</a>



# EPA vials and caps

Continued

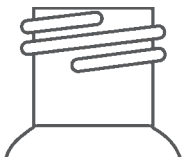
## 15 mm screw caps


Performance level 2 for high-throughput applications

### Description

- Short thread screw closure 15 mm (15-425)
- Specification certified

For use with 8 and 12 mL screw vials (and other vials with screw 15 mm dimensions)



Cap color and material	White polypropylene, close top
Septum color and material	PE foam/PTFE
Septum thickness	-
Septum hardness	75 shore
Ordering information	Cat. no.
100/pack 	<a href="#">6ASC15-CTP</a>





# EPA vials and caps

Continued

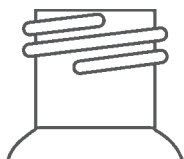
## 18 mm screw caps


Performance level 2 for high-throughput applications

### Description

- Screw closure 18 mm (18-400)
- Specificaiton certified

For use with 20 mL EPA screw vials (and other vials with screw 18 mm dimensions) except for 20 mL headspace vials



Cap color and material	White polypropylene, close top
Septum color and material	PE foam/PTFE
Septum thickness	-
Septum hardness	75 shore
Ordering information	Cat. no.
100/pack 	<a href="#">6ASC18-CTP</a>





# EPA vials and caps

Continued

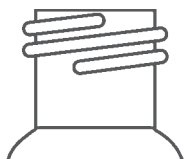
## 24 mm screw caps


Performance level 2 for high-throughput applications

### Description

- Screw closure 24 mm (24-400)
- Specification certified

For use with 40 mL screw vials (and other vials with screw 24 mm dimensions)



Cap color and material	White polypropylene, close top
Septum color and material	PE foam/PTFE
Septum thickness	-
Septum hardness	75 shore
Ordering information	Cat. no.
100/pack 	<a href="#">6ASC24-CTP</a>







# Stoppers and septa

## 22 mm septa


Performance level 2 for high-throughput applications

### Description

- Specification certified

For use with screw vials (with 24-400 screw thread closure) with a diameter neck size of 22 mm



Product description	Septum (22 mm)
Color and material	Clear silicone/beige PTFE
Septum thickness	2.6 mm
Septum hardness	50 shore
Ordering information	Cat. no.
100/pack 	<a href="#">6A24ST26</a>





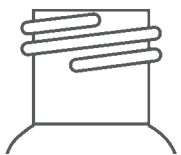
# Specification certified vial and cap kits, EPA kits, and scintillation kits


## Specification certified screw vial and cap kits

Performance level 2 for high-throughput applications

### Description

- 2 mL screw vial (9 mm) with short thread screw closure
- Marking spot
- Specification certified



<b>Key attributes</b>	AVCS				
<b>Vial color and material</b>	Clear glass	Amber glass	Clear glass	Clear glass	Amber glass
<b>Vial total volume</b>	2 mL				
<b>Cap color and material</b>	Blue polypropylene				
<b>Septum color and material</b>	Red silicone/ ivory PTFE	Red silicone/ ivory PTFE	Red PTFE/white silicone/red PTFE	White silicone/ red PTFE	White silicone/ red PTFE
<b>Ordering information</b>	<b>Cat. no.</b>	<b>Cat. no.</b>	<b>Cat. no.</b>	<b>Cat. no.</b>	<b>Cat. no.</b>
100/pack 	<a href="#">6AK80W</a>	<a href="#">6AK82W</a>	<a href="#">6AK86W</a>	<a href="#">6AK92W</a>	<a href="#">6AK94W</a>





# Specification certified vial and cap kits, EPA kits, and scintillation kit

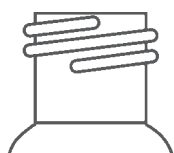
Continued


## Specification certified screw vial and cap kits Continued

Performance level 2 for high-throughput applications

### Description

- 2 mL screw vial (9 mm) with short thread screw closure
- Marking spot
- Specification certified



Key attributes	SureStop/ AVCS	SureStop/ AVCS	SureStop/ AVCS	AVCS	AVCS	Bonded	Bonded
	–	–	Preslit septa	Soft septa	Preslit septa	Preslit septa	–
Vial color and material	Clear glass	Amber glass	Clear glass	Clear glass	Clear glass	Clear glass	Clear glass
Vial total volume	2 mL						
Cap color and material	Blue polypropylene	Blue polypropylene	Blue polypropylene	Blue polypropylene	Blue polypropylene	Grey polypropylene	Black polypropylene
Septum thickness	White silicone/ red PTFE	White silicone/ red PTFE	White silicone/ blue PTFE	Blue silicone/ clear PTFE	White silicone/ blue PTFE	White silicone/ red PTFE	White silicone/ red PTFE
Ordering information	<b>Cat. no.</b>	<b>Cat. no.</b>	<b>Cat. no.</b>	<b>Cat. no.</b>	<b>Cat. no.</b>	<b>Cat. no.</b>	<b>Cat. no.</b>
100/pack 	<a href="#">6AK592W</a>	<a href="#">6AK594W</a>	<a href="#">6AK595W</a>	<a href="#">6AK599W</a>	<a href="#">6AK95W</a>	<a href="#">6AK93BW</a>	<a href="#">6AK78BW</a>



# Specification certified vial and cap kits, EPA kits, and scintillation kits

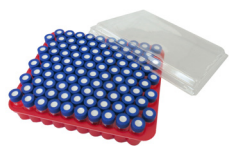
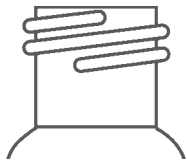
Continued


## Specification certified screw vial and cap kits Continued

Performance level 2 for high-throughput applications

### Description

- Assembled 2 mL screw vial (9 mm) with short thread screw closure
- Marking spot
- Specification certified



Vial color and material	Clear glass	Amber glass	Clear glass	Amber glass
Vial total volume	2 mL	2 mL	2 mL	2 mL
Cap color and material	Blue propylene	Blue propylene	Blue propylene	Blue propylene
Septum color and material	Red PTFE/white silicone/ red PTFE	White silicone/ red PTFE	Red silicone/ ivory PTFE (RedRubber/PTFE)	White silicone/ blue PTFE, pre-slit
Ordering information	Cat. no.	Cat. no.	Cat. no.	Cat. no.
100/pack 	<a href="#">6AK186W</a>	<a href="#">6AK192W</a>	<a href="#">6AK180W</a>	<a href="#">6AK195W</a>



# Specification certified vial and cap kits, EPA kits, and scintillation kits

Continued

## EPA screw vial and cap kits

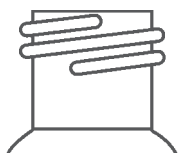
Performance level 2 for high-throughput applications

### Description

- 4 mL – 40 mL screw vials with screw closures (13 mm – 24 mm)
- Level 100 EPA vials

These are processed and packages under a strict registered ISO Quality Management System. The products are not certified to EPA standards or pre-cleaned. Every case of product is labeled with its production number and is custody sealed to ensure reliable chain-of-custody.

EPA screw vials convenience kits are recommended for discrete water sampling under EPA 40 CFR 136 "Guidelines for Establishing Test Procedures for the Analysis of Pollutants" and EPA 40 CFR 141 "National Interim Primary Drinking Water Regulations: Control of Trihalomethanes in Drinking Water".



Vial color and material	Clear glass	Amber glass	Clear glass	Amber glass	Clear glass	Amber glass
Vial total volume	4 mL (13 mm)		8 mL (15 mm)		12 mL (15 mm)	
Cap color and material	White screw cap (PP) (13 mm) close top		White screw cap (PP) (15 mm) close top			
Septum color and material	PE foam/white PTFE closed top					
Ordering information	<b>Cat. no.</b>	<b>Cat. no.</b>	<b>Cat. no.</b>	<b>Cat. no.</b>	<b>Cat. no.</b>	<b>Cat. no.</b>
100/pack	<a href="#">6AK4CCT</a>	<a href="#">6AK4ACT</a>	–	–	–	–
200/pack	–	–	<a href="#">6AK8CCT</a>	<a href="#">6AK8ACT</a>	<a href="#">6AK12CCT</a>	<a href="#">6AK12ACT</a>





# Specification certified vial and cap kits, EPA kits, and scintillation kit

Continued

## EPA screw vial and cap kits Continued

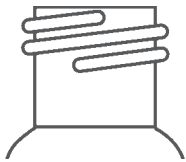
Performance level 2 for high-throughput applications



### Description

- 4 mL – 40 mL screw vials with screw closures (13 mm – 24 mm)
- Level 100 EPA vials

These are processed and packages under a strict registered ISO Quality Management System. The products are not certified to EPA standards or pre-cleaned. Every case of product is labeled with its production number and is custody sealed to ensure reliable chain-of-custody.

EPA screw vials convenience kits are recommended for discrete water sampling under EPA 40 CFR 136 "Guidelines for Establishing Test Procedures for the Analysis of Pollutants" and EPA 40 CFR 141 "National Interim Primary Drinking Water Regulations: Control of Trihalomethanes in Drinking Water".



Vial color and material	Clear glass	Amber glass	Clear glass	Amber glass	Clear glass
Vial total volume	16 mL (18 mm 18-400)		20 mL (24 mm /24-400)		
Cap color and material	White screw cap (PP) (18 mm)		White screw cap (PP) (24 mm), assembled		
Septum color and material	PE foam/white PTFE closed top				Clear silicone/white PTFE open top
Ordering information	Cat. no.	Cat. no.	Cat. no.	Cat. no.	Cat. no.
100/pack 	–	–	<a href="#">6AK20CCTAS</a>	<a href="#">6AK20ACTAS</a>	<a href="#">6AK20COTAS</a>
200/pack 	<a href="#">6AK16CCT</a>	<a href="#">6AK16ACT</a>	–	–	–



# Specification certified vial and cap kits, EPA kits, and scintillation kit

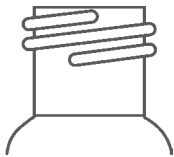
Continued


## EPA screw vial and cap kits Continued

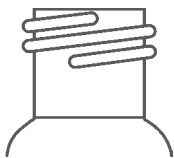
Performance level 2 for high-throughput applications


### Description

- 4 mL – 40 mL screw vials with screw closures (13 mm – 24 mm)
- Level 100 EPA vials



Vial color and material	Clear glass	Amber glass	Clear glass	Amber glass
Vial total volume	40 mL (24 mm)			
Cap color and material	White screw cap (PP) (24 mm), assembled		White screw cap (PP) (24 mm)	
Septum color and material	Clear silicone/white PTFE open top		PE foam/white PTFE closed top	
Ordering information	Cat. no.	Cat. no.	Cat. no.	Cat. no.
100/pack 	<a href="#">6AK40COTAS</a>	<a href="#">6AK40AOTAS</a>	<a href="#">6AK40CCT</a>	<a href="#">6AK40ACT</a>



Key attributes	Scintillation
Vial color and material	Clear screw
Vial total volume	20 mL
Cap color and material	White closed top screw cap
Septum color and material	Silver polypropylene foil
Ordering information	Cat. no.
5 x 100/pack 	<a href="#">6AK20SCIN</a>

# Performance level 3: High performance



## When sensitivity is a must

Protect your most valuable samples and deliver consistent, reproducible results for your most demanding analyses

Our Thermo Scientific™ SureSTART™ Performance level 3 products are packed in clean rooms to protect them against environmental factors, and contain the lowest amounts/levels of metals, extractables and leachables; ensuring that you can get the sensitivity and selectivity from your most challenging analytes confidently and consistently.

If you are looking for the ultimate performance from your methods, while maintaining the highest levels of and sample security and integrity, our Performance level 3 products will meet your needs. Select the products with the three waves.

For analytes that are prone to glass adsorption why not try our GOLD-grade glass technology which has been specifically designed for these more challenging polar analytes, as well as our silanized vials and inserts

This offering includes Thermo Scientific™ SureStop™ vials, which, when used with 9 mm AVCS caps, ensure an optimal seal every time. The SureStop vial-AVCS cap system is specially designed to prevent screw thread vial failures such as cap tilt, cap deformities, dislodged septa or septa push through, thus prevents injection failures and sample evaporation.

Our Performance level 3 septa have the highest purity as they have been conditioned to remove all the low-mid boiling volatiles providing the lowest extractables and leachables within the collection. You can also find within this Performance level soft septa options for ultimate needle performance, as these products offer protection for even the most fragile needles with the highest gauge, and SPME fibers. You can also find our high temperature compatible septa here.

### Performance level 3 for high performance applications

- All products within this Performance level are suitable for GC, HPLC/UHPLC, and nominal mass and high-resolution accurate mass (HR-AM) applications
- Headspace vials and caps available from 6 mL – 20 mL
- Vials are identified by three waves and a convenient write-on patch as standard
- Vials available as screw, SureStop, snap and crimp
- Vials available in glass, GOLD-grade glass, silanized and TPX
- Vials available as clear or amber glass
- Volume sizes ranging from 0.2 mL to 20 mL covering limited sample volumes to headspace analyses
- Vials with fixed inserts are available
- Caps available as screw, screw AVCS, snap and crimp
- Use Thermo Scientific Manual or Electronic Crimpers and decrimpers for easy application and removal of crimp caps
- LC/GC Certified, MSCERT and MSCERT+ Kits can be found within Performance level 3
- Buy vials and caps in bulk for greater savings

### Specification certified

- All Thermo Scientific SureSTART vials are dimensionally verified
- Inspected by automated optical and gauge inspection to ensure critical dimensions and tolerances
- Meet all relevant requirements of US, EU, JPN Pharmacopeia.
- Uniform and defect-free

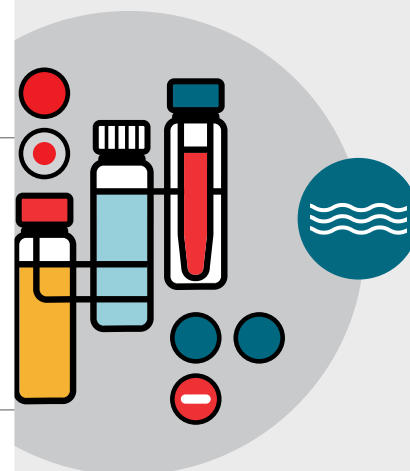
### Lot traceable

- 100% traceable through the manufacturing process
- Certificate of Conformance available by lot number upon request



# Performance level 3: High performance

Vials	Caps
0.2 mL TPX screw microvial	
Glass screw vials	
1.4 mL total recovery glass screw vials	
1.5 mL total recovery glass screw vials	9 mm screw caps
1.7 mL high recovery glass screw vials	
2 mL glass screw vials	
2 mL GOLD-grade glass screw vials	
Glass crimp microvials	
2 mL GOLD-grade glass crimp vial	11 mm crimp caps
2 mL glass crimp vials	
Glass snap microvials	
1.5 mL total recovery glass snap microvials	
High recovery glass snap microvials	11 mm snap caps
2 mL glass snap vials	
Vial inserts for 2 mL vials	—
Glass crimp headspace vials	20 mm crimp caps
<b>Crimpers and decrimpers</b>	
Electronic crimpers and decrimpers	
<b>Kits</b>	
LC/GC certified	
TOC	
MSCERT and MSCERT+	
Assembled	





# Screw vials and associated caps

(<2 mL – 2 mL vials, 9 mm caps)



## What is TPX?

It is a transparent plastic (polymethylpentene) that is heat resistant and has excellent resealability.

## 0.2 mL TPX screw microvial with glass insert


Performance level 3 for high performance analysis

### Description

- Short thread screw
- 12 mm x 32 mm (diameter x height) fixed conical glass insert
- No marking spot
- Specification certified

For use with 9 mm screw caps, or 9 mm AVCS screw cap

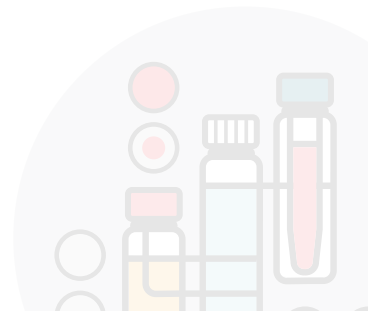


Vial color and material	TPX with fixed insert
	Clear glass, amber transparent plastic
Total volume	200 µL
Usable volume	150 µL
Residual volume	1 µL
Ordering information	Cat. no.
100/pack 	<a href="#">60180-1655</a>

Want to learn more?



Watch this short microsampling video





# Screw vials and associated caps Continued

## (<2 mL – 2 mL vials, 9 mm caps)

### Glass screw microvials




Performance level 3 for high performance analysis

#### Description

- Short thread screw
- 12 mm x 32 mm (diameter x height) fixed conical insert, flat bottom base
- Marking spot
- Specification certified

For use with 9 mm screw caps, or 9 mm AVCS screw caps



Vial color and material	Clear glass	Amber glass
Total volume	300 µL	
Usable volume	250 µL	
Residual volume	2 µL	
<b>Ordering information</b>	<b>Cat. no.</b>	<b>Cat. no.</b>
100/pack 	<a href="#">6PSV9-03FIVP</a>	<a href="#">6PSV9-03FIVAP</a>
10 x 100/pack 	<a href="#">6PSV9-03FIVPT</a>	<a href="#">6PSV9-03FIVAPT</a>
50 x 100/pack 	<a href="#">6PSV9-03FIVPF</a>	<a href="#">6PSV9-03FIVAPE</a>





# Screw vials and associated caps Continued

(<2 mL – 2 mL vials, 9 mm caps)

## 1.4 mL and 1.5 mL total recovery glass screw microvial



Performance level 3 for high performance analysis

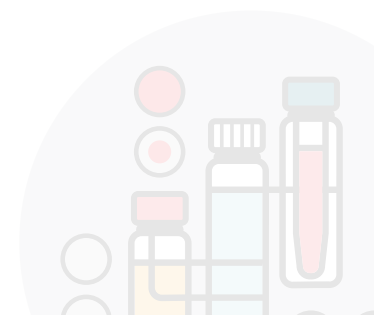
### Description

- Short thread screw
- 12 mm × 32 mm (diameter × height) total recovery internal base
- No marking spot
- Specification certified

For use with 9 mm screw caps, or 9 mm AVCS screw caps



Vial color and material	Clear glass	Clear glass
Total volume	1.5 mL	1.4 mL
Usable volume	1.1 mL	1.0 mL
Residual volume	1 µL	4 µL
Ordering information	Cat. no.	Cat. no.
100/pack 	<a href="#">6PSV9-TR1</a>	<a href="#">6PSV9-CHV1</a>
10 x 100/pack 	<a href="#">6PSV9-TR1T</a>	–
50 x 100/pack 	<a href="#">6PSV9-TR1F</a>	–





# Screw vials and associated caps Continued

## (<2 mL – 2 mL vials, 9 mm caps)

### 1.7 mL high recovery glass screw microvial



Performance level 3 for high performance analysis

#### Description

- Short thread screw
- 12 mm x 32 mm (diameter x height) internal V-base
- No marking spot
- Specification certified

For use with 9 mm screw caps, or 9 mm AVCS screw caps



Vial color and material	Clear glass
Total volume	1.7 mL
Usable volume	1.5 mL
Residual volume	4 µL
Ordering information	Cat. no.
100/pack 	<a href="#">6PSV9-V1</a>
10 x 100/pack 	<a href="#">6PSV9-V1T</a>
50 x 100/pack 	<a href="#">6PSV9-V1F</a>





# Screw vials and associated caps Continued

(<2 mL – 2 mL vials, 9 mm caps)

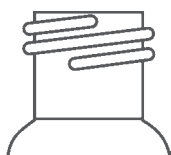
## 2 mL Gold-grade glass screw vials




Performance level 3 for high performance analysis

### Description

- Short thread screw
- 12 mm x 32 mm (diameter x height), flat bottom base
- Marking spot
- Specification certified

For use with 9 mm screw caps, or 9 mm AVCS screw caps



Vial color and material	SureStop, GOLD-grade glass
	Clear glass
Total volume	2 mL
Ordering information	Cat. no.
100/pack 	<a href="#">6PSV9-1PG</a>
10 x 100/pack 	<a href="#">6PSV9-1PGT</a>
50 x 100/pack 	<a href="#">6PSV9-1PGF</a>



**Learn more about our quality materials:**  
Thermo Scientific SureSTART products—Innovation



# Screw vials and associated caps Continued

## (<2 mL – 2 mL vials, 9 mm caps)

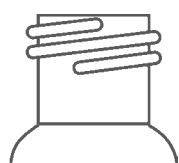
### 2 mL glass screw vials

Performance level 3 for high performance analysis

#### Description

- Screw
- 12 mm x 32 mm (diameter x height) flat bottom base
- Marking spot
- Specification certified

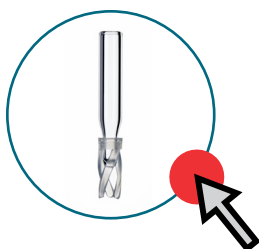
For use with 9 mm screw caps, or 9 mm AVCS screw caps



Vial color and material	—	Silianised	SureStop	SureStop
	Clear glass	Clear glass	Clear glass	Amber glass
Total volume	2 mL			
Usable volume	1.5 mL			
Ordering information	Cat. no.	Cat. no.	Cat. no.	Cat. no.
100/pack	<a href="#">6PSV9-1P</a>	<a href="#">6PSV9-S1P</a>	<a href="#">6PSV9-1PSS</a>	<a href="#">6PSV9-2PSS</a>
10 x 100/pack	<a href="#">6PSV9-1PT</a>	—	<a href="#">6PSV9-1PSST</a>	<a href="#">6PSV9-2PSST</a>
50 x 100/pack	<a href="#">6PSV9-1PF</a>	—	<a href="#">6PSV9-1PSSF</a>	<a href="#">6PSV9-2PSSF</a>

#### Need a smaller volume?

Why not use with our polyspring glass inserts





# Screw vials and associated caps Continued

## (<2 mL – 2 mL vials, 9 mm caps)

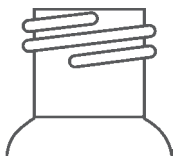
### 9 mm screw caps




Performance level 3 for high-throughput applications

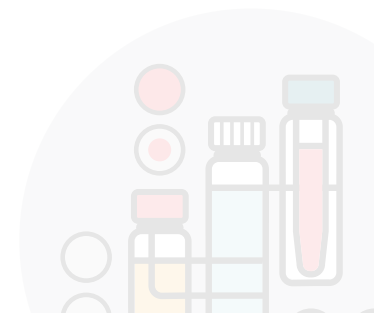
#### Description

- Short thread screw
- Specification certified

For use with <2 mL – 2 mL screw vials



Cap components	AVCS cap					
	—	Pre-slit septa	—	Pre-slit septa	—	—
Cap color and material	Blue polypropylene	Blue polypropylene	Blue polypropylene	Blue polypropylene	Blue polypropylene	Red polypropylene
Septum color and material	Red PTFE/ white silicone/ red PTFE	White silicone/ blue PTFE	White silicone/ red PTFE	Blue silicone/ clear PTFE	Blue silicone/ clear PTFE	Red PTFE/ white silicone/ red PTFE
Septum hardness	45 shore	54 shore	54 shore	30 shore	30 shore	45 shore
Ordering information	<b>Cat. no.</b>	<b>Cat. no.</b>	<b>Cat. no.</b>	<b>Cat. no.</b>	<b>Cat. no.</b>	<b>Cat. no.</b>
100/pack 	<a href="#">6PSC9TST</a>	<a href="#">6PSC9STS1</a>	<a href="#">6PSC9ST1</a>	<a href="#">6PSC9ST101X</a>	<a href="#">6PSC9ST101</a>	<a href="#">6PSC9TSTR</a>
10 x 100/pack 	<a href="#">6PSC9TSTT</a>	<a href="#">6PSC9STS1T</a>	<a href="#">6PSC9ST1T</a>	—	—	<a href="#">6PSC9TSTRT</a>
50 x 100/pack 	<a href="#">6PSC9TSTF</a>	<a href="#">6PSC9STS1F</a>	<a href="#">6PSC9ST1F</a>	—	—	<a href="#">6PSC9TSTRF</a>







# Screw vials and associated caps Continued

## (<2 mL – 2 mL vials, 9 mm caps)

### 9 mm screw caps Continued

Performance level 3 for high-throughput applications

#### Description

- Short thread screw
- Specification certified
- Screw AVCS technology

For use with <2 mL – 2 mL screw vials



Cap components	AVCS cap Pre-slit septa –	AVCS cap – –	AVCS cap – –
Cap color and material	Yellow polypropylene	Yellow polypropylene	Green polypropylene
Septum color and material	White silicone/ blue PTFE	Red PTFE/ White silicone/ red PTFE	Red PTFE/ White silicone/ red PTFE
Septum thickness	1 mm		
Septum hardness	45 shore	50 shore	50 shore
Ordering information	<b>Cat. no.</b>	<b>Cat. no.</b>	<b>Cat. no.</b>
100/pack	<a href="#">6PSC9STS1Y</a>	<a href="#">6PSC9TSTY</a>	<a href="#">6PSC9TSTG</a>





# Screw vials and associated caps Continued

(<2 mL – 2 mL vials, 9 mm caps)

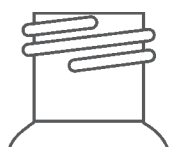
## 9 mm screw caps Continued




Performance level 3 for high-throughput applications

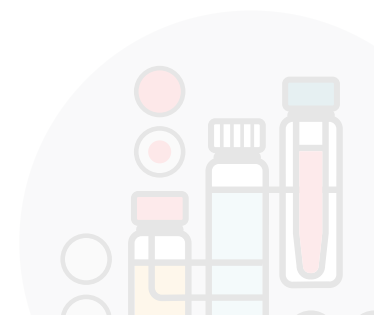
### Description

- Short thread screw
- Specification certified

For use with <2 mL – 2 mL screw vials



Cap components	AVCS cap	AVCS cap	Bonded cap	Bonded cap	AVCS cap
	Pre-slit septa	–	Pre-slit septa	–	–
	–	–	–	–	Magnetic cap
Cap color and material	Red polypropylene	Red polypropylene	Grey polypropylene	Black polypropylene	Blue polypropylene with gold magnetic tinplate cover
Septum color and material	White silicone/blue PTFE	White silicone/red PTFE	White silicone/red PTFE	White silicone/red PTFE	White silicone/red PTFE
Septum thickness	1 mm				
Septum hardness	54 shore				
Ordering information	Cat. no.	Cat. no.	Cat. no.	Cat. no.	Cat. no.
100/pack 	<a href="#">6PSC9STS1R</a>	<a href="#">6PSC9ST1R</a>	<a href="#">6PSC9STBS1</a>	<a href="#">6PSC9STB1</a>	<a href="#">6PMSC9ST1</a>
10 x 100/pack 	<a href="#">6PSC9STS1RT</a>	<a href="#">6PSC9ST1RT</a>	<a href="#">6PSC9STBS1T</a>	<a href="#">6PSC9STB1T</a>	–
50 x 100/pack 	<a href="#">6PSC9STS1RF</a>	<a href="#">6PSC9ST1RF</a>	<a href="#">6PSC9STBS1F</a>	<a href="#">6PSC9STB1F</a>	–





# Crimp vials and associated caps

(<2 mL – 2 mL, 11 mm caps)

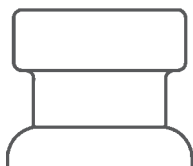
## Glass crimp microvials

Performance level 3 for high performance analysis

### Description

- Crimp
- 12 mm x 32 mm (diameter x height) fixed conical insert, flat bottom base
- Marking spot
- Specification certified

For use with 8 mm crimp vials



Vial color and material	Clear glass	Amber glass	Clear glass, round bottom, Gold grade	Clear glass, conical bottom, Gold grade
Total volume	300 µL		300 µL	200 µL
Usable volume	250 µL		250 µL	150 µL
Residual volume	4 µL		2 µL	2 µL
Ordering information	Cat. no.	Cat. no.	Cat. no.	Cat. no.
100/pack	<a href="#">6PCV11-03FIVP</a>	<a href="#">6PCV1103FIVAP</a>	<a href="#">6PCV8-03R1G</a>	<a href="#">6PCV8-02C1G</a>
10 x 100/pack	<a href="#">6PCV11-03FIVPT</a>	<a href="#">6PCV1103FIVAPT</a>	-	-
50 x 100/pack	<a href="#">6PCV11-03FIVPF</a>	<a href="#">6PCV1103FIVAPF</a>	-	-





# Crimp vials and associated caps Continued

## (<2 mL – 2 mL, 11 mm caps)

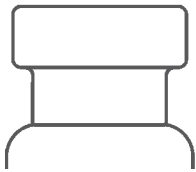
### 2 mL GOLD-grade crimp vials


Performance level 3 for high performance analysis

#### Description

- Crimp
- 12 mm x 32 mm (diameter x height)
- Marking spot
- Specification certified

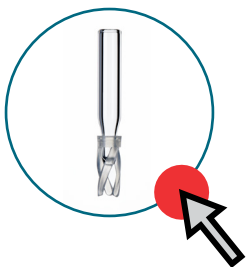
For use with 11 mm crimp caps



Vial color and material	GOLD-grade glass
	Clear glass
Total volume	2 mL
Ordering information	Cat. no.
100/pack 	<a href="#">6PCV11G</a>

#### Need a smaller volume?

Why not use with our glass inserts



#### Learn more about our quality materials

Thermo Scientific SureSTART products—Innovation



# Crimp vials and associated caps Continued

## (<2 mL – 2 mL, 11 mm caps)

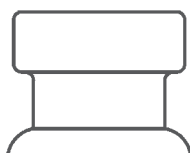
### 2 mL glass crimp vials




Performance level 3 for high performance analysis

#### Description

- Crimp
- 12 mm x 32 mm (diameter x height)
- Marking spot
- Specification certified

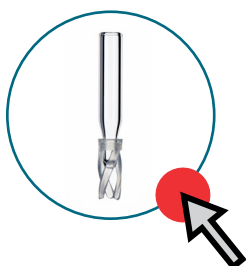
For use with 11 mm crimp caps



Vial color and material	Clear glass
Total volume	2 mL
Usable volume	1.5 mL
Ordering information	Cat. no.
100/pack 	<a href="#">6PCV11-1P</a>
10 x 100/pack 	<a href="#">6PCV11-1PT</a>
50 x 100/pack 	<a href="#">6PCV11-1PF</a>

#### Need a smaller volume?

Why not use with our glass inserts





# Crimp vials and associated caps Continued

## (<2 mL – 2 mL, 11 mm caps)

### 11 mm crimp caps

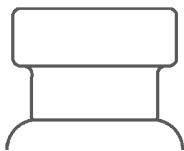
Performance level 3 for high performance analysis

#### Description

- Crimp closure (11 mm)
- Specification certified

For use with <2 mL – 2 mL crimp vials, or <2 mL – 2 mL snap vials

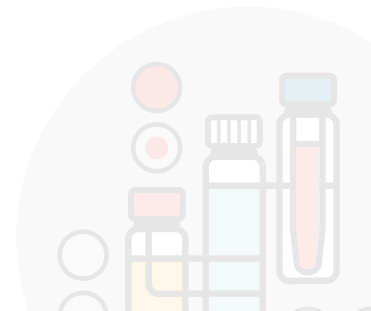
Use with 11 mm crimpers and decrimpers



Cap color and material	Silver aluminium	Silver magnetic steel	Silver aluminium	Silver magnetic steel
Septum color and material	Red PTFE/ white silicone/red PTFE	White silicone/ red PTFE	Blue silicone/clear PTFE, soft septa, pre-slit	Blue silicone/ clear PTFE, soft septa
Septum thickness	1 mm			
Septum hardness	45 shore	57 shore	30 shore	30 shore
Ordering information	Cat. no.	Cat. no.	Cat. no.	Cat. no.
100/pack	<a href="#">6PCC11TST</a>	<a href="#">6PCCMST15</a>	<a href="#">6PCC11ST101</a>	<a href="#">6PCCMST101X</a>

#### Learn more about:

Manual and electronic crimpers and decrimpers





# Snap vials and associated caps

(<2 mL – 2 mL vials, 11 mm caps)

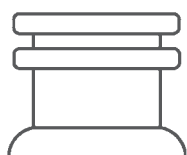
## Glass snap microvials




Performance level 3 for high performance analysis

### Description

- Snap
- 11 mm x 32 mm (diameter x height) fixed conical insert, flat bottom base
- Marking spot
- Specification certified

For use with 11 mm snap caps or 11 mm crimp caps



Vial color and material	Clear glass	Amber glass
Total volume	300 µL	
Usable volume	250 µL	
Residual volume	4 µL	
Ordering information	Cat. no.	Cat. no.
100/pack 	<a href="#">6PRV11-03FIVP</a>	<a href="#">6PRV1103FIVAP</a>
10 x 100/pack 	<a href="#">6PRV11-03FIVPT</a>	<a href="#">6PRV1103FIVAPT</a>
50 x 100/pack 	<a href="#">6PRV11-03FIVPF</a>	<a href="#">6PRV1103FIVAPF</a>





# Snap vials and associated caps Continued

(<2 mL – 2 mL vials, 11 mm caps)

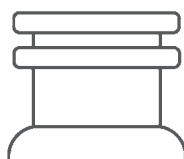
## 1.5 mL total recovery glass snap microvials




Performance level 3 for high performance analysis

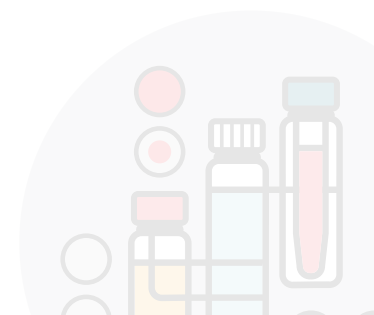
### Description

- Snap
- 12 mm x 32 mm (diameter x height) total recovery internal base
- No marking spot
- Specification certified

For use with 11 mm snap caps



Vial color and material	Clear glass
Total volume	1.5 mL
Usable volume	1.1 mL
Residual volume	1 µL
Ordering information	Cat. no.
100/pack 	<a href="#">6PRV11-TR1</a>
10 x 100/pack 	<a href="#">6PRV11-TR1T</a>
50 x 100/pack 	<a href="#">6PRV11-TR1F</a>







# Snap vials and associated caps Continued

## (<2 mL – 2 mL vials, 11 mm caps)

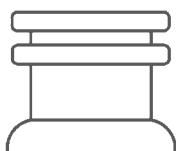
### High recovery glass snap microvials

Performance level 3 for high performance analysis

#### Description

- Snap
- 12 mm × 32 mm (diameter × height) internal V-base
- No marking spot
- Specification certified

For use with 11 mm snap caps



Vial color and material	Silanized glass	Clear glass	Clear glass
Total volume	1.7 mL	1.7 mL	1.5 mL
Usable volume	1.5 mL	1.5 mL	1.2 mL
Residual volume	4 µL		
Ordering information	Cat. no.	Cat. no.	Cat. no.
100/pack	<a href="#">6PRV11-S1V</a>	<a href="#">6PRV11-1V</a>	<a href="#">6PRV11-15V</a>
10 x 100/pack	–	–	<a href="#">6PRV11-15VT</a>
50 x 100/pack	–	–	<a href="#">6PRV11-15VF</a>





# Snap vials and associated caps Continued

(<2 mL – 2 mL vials, 11 mm caps)

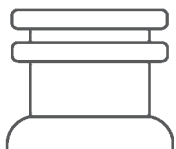
## 2 mL glass snap vials




Performance level 3 for high performance analysis

### Description

- Snap
- 12 mm x 32 mm (diameter x height)
- Marking spot
- Specification certified

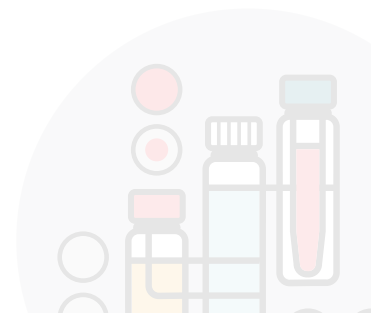
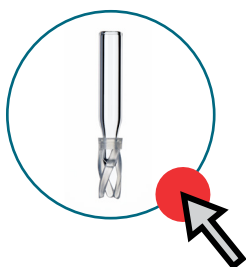
For use with 11 mm snap caps



Vial color and material	Clear glass
Total volume	2 mL
Usable volume	1.5 mL
Ordering information	Cat. no.
100/pack 	<a href="#">6PRV11-1P</a>
10 x 100/pack 	<a href="#">6PRV11-1PT</a>
50 x 100/pack 	<a href="#">6PRV11-1PF</a>

### Need a smaller volume?

Why not use with our glass inserts





# Snap vials and associated caps Continued

## (<2 mL – 2 mL vials, 11 mm caps)

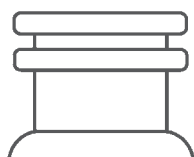
### 11 mm snap cap

Performance level 3 for high performance analysis

#### Description

- Snap closure (11 mm)
- Specification certified

For use with <2 mL and 2 mL snap vials



<b>Key attributes</b>	Pre-slit	–	–	Star pre-slit	–	–
<b>Cap color and material</b>	Blue polyethylene	Blue polyethylene	Blue polyethylene	Clear polyethylene	Red polyethylene	Red polyethylene
<b>Septum color and material</b>	–	–	Soft	–	–	–
	White silicone/ blue PTFE	White silicone/ red PTFE	Blue silicone/ clear PTFE	White silicone/ red PTFE	Red silicone/ blue PTFE	White silicone/ red PTFE
<b>Septum thickness</b>	1 mm	1 mm	1 mm	1 mm	1.3 mm	1.3 mm
<b>Septum hardness</b>	54 shore	54 shore	45 shore	54 shore	54 shore	54 shore
<b>Ordering information</b>	<b>Cat. no.</b>	<b>Cat. no.</b>	<b>Cat. no.</b>	<b>Cat. no.</b>	<b>Cat. no.</b>	<b>Cat. no.</b>
100/pack	<a href="#">6PRC11STS1</a>	<a href="#">6PRC11ST1</a>	<a href="#">6PRC11ST101</a>	<a href="#">6PRC11STS1X</a>	<a href="#">6PRC11STS1R</a>	<a href="#">6PRC11ST1R</a>
10 x 100/pack	<a href="#">6PRC11STS1T</a>	<a href="#">PRC11ST1T</a>	<a href="#">6PRC11ST101T</a>	<a href="#">6PRC11STS1XT</a>	<a href="#">6PRC11STS1RT</a>	<a href="#">6PRC11ST1RT</a>
50 x 100/pack	<a href="#">6PRC11STS1F</a>	<a href="#">6PRC11ST1F</a>	<a href="#">6PRC11ST101F</a>	<a href="#">6PRC11STS1XF</a>	<a href="#">6PRC11STS1RF</a>	<a href="#">6PRC11ST1RF</a>





# Snap vials and associated caps Continued

(<2 mL – 2 mL vials, 11 mm caps)

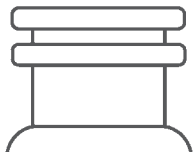
## 11 mm snap cap Continued




Performance level 3 for high performance analysis

### Description

- Snap closure (11 mm)
- Specification certified

For use with <2 mL and 2 mL snap vials



Key attributes		–	Pre-slit	Pre-slit	Pre-slit
Cap color and material	Red polyethylene	Red polyethylene	Green polyethylene	Yellow polyethylene	Clear polyethylene
Septum color and material	Blue Silicone/ clear PTFE, soft	Red PTFE/ white silicone/ red PTFE	White silicone/ blue PTFE	White silicone/ blue PTFE	White silicone/ blue PTFE
Septum thickness	45 shore	50 shore	45 shore	45 shore	45 shore
Septum hardness	1.0 mm	1.0 mm	1.0 mm	1.0 mm	1.0 mm
Ordering information	<b>Cat. no.</b>	<b>Cat. no.</b>	<b>Cat. no.</b>	<b>Cat. no.</b>	<b>Cat. no.</b>
100/pack 	<a href="#">6PRC11ST101R</a>	<a href="#">6PRC11TST1R</a>	<a href="#">6PRC11STS1G</a>	<a href="#">6PRC11STS1Y</a>	<a href="#">6PRC11STS1C</a>
10 x 100/pack 	<a href="#">6PRC11ST101RT</a>	–	–	–	–
50 x 100/pack 	<a href="#">6PRC11ST101RE</a>	–	–	–	–



# Inserts (2 mL vials)



Watch this short  
microsampling  
video

## Inserts for 2 mL vials

Performance level 3 for high-throughput applications

### Description

- 6 mm × 31 mm (diameter × height)
- No marking spot
- Specification certified

For use with 2 mL screw vials, 2 mL snap vials or 2 mL crimp vials



Insert color and material	GOLD-grade glass	Deactivated/silanized glass	—	—	—	—	—
	0.2 mL clear conical glass insert	0.3 mL clear conical glass insert, with PE polyspring	0.3 mL conical glass insert, with PE polyspring	0.4 mL clear conical glass insert, with pulled point	0.4 mL clear conical glass insert, with pulled point	0.5 mL clear flat bottom glass insert	0.5 mL clear flat bottom glass insert
Total volume	200 µL	300 µL	300 µL	400 µL	400 µL	500 µL	500 µL
Usable volume	150 µL	250 µL	250 µL	350 µL	350 µL	450 µL	450 µL
Residual volume	2 µL	1 µL	4 µL	4 µL	2 µL	25 µL	25 µL
Height	31 mm	30 mm	30 mm	31 mm	31 mm	31 mm	31 mm
Inner diameter	6 mm	6 mm	6 mm	6 mm	6 mm	6 mm	6 mm
Base style	Conical base	Conical base	Conical base	Conical base	Conical base	Flat bottom	Flat bottom
Ordering information	Cat. no.	Cat. no.	Cat. no.	Cat. no.	Cat. no.	Cat. no.	Cat. no.
100/pack	—	<a href="#">6PME03C1SSP</a>	<a href="#">6PME03C1SP</a>	<a href="#">6PME04C1</a>	<a href="#">6PME04CPR1</a>	—	—
10 x 100/pack	<a href="#">6PME02CG</a>	<a href="#">6PME03C1SSPT</a>	<a href="#">6PME03C1SPT</a>	<a href="#">6PME04C1T</a>	—	—	—
50 x 100/pack	—	<a href="#">6PME03C1SSPF</a>	<a href="#">6PME03C1SPF</a>	<a href="#">6PME04C1F</a>	—	<a href="#">6PME05F1*</a>	<a href="#">6PME05FS1</a>

\*Pack of 500 only

Learn more about



2 mL glass  
screw vials



2 mL glass  
crimp vials



2 mL glass  
snap vials



# Headspace crimp vials and associated caps

(6 mL – 20 mL vials, 20 mm caps)

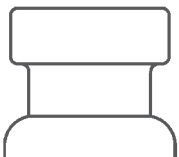
## 6 mL, 10 mL and 20 mL glass crimp headspace vials

Performance level 3 for high performance analysis

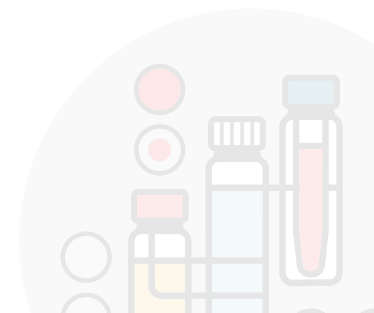
### Description

- Crimp (20 mm)
- Marking spot
- Specification certified

For use with 20 mm crimp caps



Vial color and material	Clear glass			
Total volume	6 mL	10 mL	20 mL	20 mL
Usable volume	5 mL	8 mL	18 mL	18 mL
Residual volume	0.8 mL	0.8 mL	0.8 mL	0.8 mL
Dimensions	21.75 mm x 38 mm	22.75 mm x 46 mm	22.75 mm x 75.0 mm	22.75 mm x 75.0 mm
Rim and base style	Square rim, flat bottom	Beveled rim, flat bottom	Beveled rim, flat bottom	Beveled rim, round bottom
Ordering information	Cat. no.	Cat. no.	Cat. no.	Cat. no.
100/pack 	<a href="#">6PCV6-1F</a>	<a href="#">6PCV10-1F</a>	<a href="#">6PCV20-1F</a>	<a href="#">6PCV20-1R</a>
10 x 100/pack 	<a href="#">6PCV6-1FT</a>	<a href="#">6PCV10-1FT</a>	<a href="#">6PCV20-1FT</a>	<a href="#">6PCV20-1RT</a>
50 x 100/pack 	<a href="#">6PCV6-1FF</a>	<a href="#">6PCV10-1FF</a>	<a href="#">6PCV20-1FF</a>	<a href="#">6PCV20-1RF</a>





# Headspace crimp vials and associated caps Continued

## (6 mL – 20 mL vials, 20 mm caps)

### 8 mm crimp caps

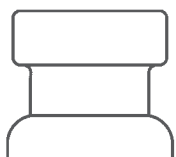
Performance level 3 for high performance analysis


#### Description

- Crimp closure (8 mm)
- Specification certified

For use with <2 mL crimp vials (with neck size of 8 mm)

Use with 8 mm crimpers and decrimpers



Cap color and material	- Silver aluminium
Septum color and material	Blue silicone/ clear PTFE; soft
Septum thickness	1 mm
Septum hardness	30 shore
Ordering information	Cat. no.
100/pack 	<a href="#">6PCC8ST101</a>





# Headspace crimp vials and associated caps Continued

## (6 mL – 20 mL vials, 20 mm caps)

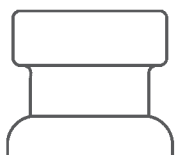
### 18 mm precision screw caps



Performance level 3 for high performance analysis

#### Description

- Crimp closure
- Specification certified

For use with 10 mL and 20 mL screw top headspace vials



Cap color and material	Magnetic	Magnetic
	Silver aluminium	Silver aluminium
Septum color and material	Blue silicone/ clear PTFE; soft	Red silicone/ natural PTFE; high temperautre
Septum thickness	2 mm	3 mm
Septum hardness	45 shore	45 shore
Ordering information	Cat. no.	Cat. no.
100/pack 	<a href="#">6PMSC18-ST2</a>	<a href="#">6PMSC18-STH</a>
10 x 100/pack 	<a href="#">6PMSC18-ST2T</a>	<a href="#">6PMSC18-STHT</a>
50 x 100/pack 	<a href="#">PMSC18-ST2F</a>	<a href="#">6PMSC19-STHF</a>





# Headspace crimp vials and associated caps Continued

## (6 mL – 20 mL vials, 20 mm caps)

### 20 mm crimp caps

Performance level 3 for high performance analysis




#### Description

- Crimp closure (20 mm)
- Specification certified

For use with 10 mL and 20 mL crimp headspace vials (with neck size of 20 mm)

Use with 20 mm crimpers and decrimpers



Cap color and material	–	Magnetic	Magnetic	Magnetic	Magnetic
Cap color and material	Silver aluminium	Red aluminium/ magnetic tinplate	Silver aluminium/ magnetic tinplate	Blue aluminium/ magnetic tinplate	Red aluminium/ magnetic tinplate
Septum color and material	Blue silicone/ clear PTFE; soft	Blue silicone/ clear PTFE; soft	Red silicone/ natural PTFE; high Temperature	White silicone/ blue PTFE	Grey chlorobutyl/ black PTFE
Septum thickness	3 mm	3 mm	3 mm	3 mm, 1.5 mm at thinned area	3 mm
Septum hardness	45 shore	45 shore	54 shore	54 shore	50 shore
Ordering information	Cat. no.	Cat. no.	Cat. no.	Cat. no.	Cat. no.
100/pack 	<a href="#">6PCC20-ST3</a>	<a href="#">6PBCC20-ST3</a>	<a href="#">6PBCC20-STH</a>	<a href="#">6PBCC20-STME</a>	<a href="#">6PBCC20-CBT3</a>
10 x 100/pack 	<a href="#">6PCC20-ST3T</a>	<a href="#">6PBCC20-ST3T</a>	<a href="#">6PBCC20-STHT</a>	<a href="#">6PBCC20-STMET</a>	–
50 x 100/pack 	<a href="#">6PCC20-ST3F</a>	<a href="#">6PBCC20-ST3F</a>	<a href="#">6PBCC20-STHF</a>	<a href="#">6PBCC20-STMEF</a>	–

#### Learn more about:

Manual and electronic crimpers and decrimpers





# Specification certified, LC/GC certified, MSCERT and MSCERT+ kits

## 1. Specification certified kits

### For everyday analysis

- Tested and certified for up to 15 critical physical specifications

## 2. LC/GC certified kits

### For chromatographic analysis

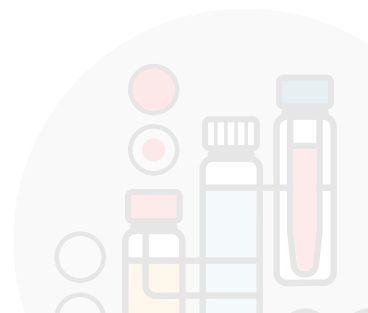
- Tested and certified for up to 15 critical physical specifications
- Tested and certified using LC-UV and GC-FID to ensure that there are no residual manufacturing agents present in the vial
- A certificate is provided with each kit

## 3. MSCERT and MSCERT+ kits

### For use with mass spectrometry systems

- Our mass spec certified vials carry our highest level of certification and are recommended for low adsorption
- Tested and certified for up to 15 critical physical specifications
- Tested using LC-MS and GC-MS for low contamination
- Certification comes with the kit
- MSCERT+ kits are pre-cleaned and certified for particle count
  - Highly recommended for direct injection analysis (DIA)

	MSCERT	MSCERT+
Proprietary cleaning process to reduce particulates	–	+
Packaged in cleanroom conditions	–	+
Cleanest product available on the market	–	+
Vial/closure combination tested by GC/MS and LC/MS	+	+
Batch specific test certificate with MS-chromatograms	+	+
Glass surface with low adsorption tendencies for all polar compounds	+	+
Closures contain very soft ultra-low bleed silicone septa with PTFE layer or bonded caps	+	+
Optimised for trace analysis	+	+





# Specification certified, LC/GC certified, MSCERT and MSCERT+ kits Continued

## Specification certified screw vial and cap kits


Performance level 3 for high performance analysis

### Description

- Short thread screw kit
- 12 mm × 32 mm (diameter × height) fixed conical glass insert
- No marking
- Specification certified

For use with short thread screw cap closure



Key attributes	Bonded caps
	TPX vials
	0.2 mL with fixed glass insert
Vial color and material	Amber TPX
Vial total volume	200 µL
Vial usable volume	150 µL
Vial residual volume	1 µL
Cap color and material	Black screw cap
Septa color and material	White silicone/red PTFE
Septa thickness	1 mm
Ordering information	<b>Cat. no.</b>
100/pack 	<a href="#">6PK1655</a>





# Specification certified, LC/GC certified, MSCERT and MSCERT+ kits Continued

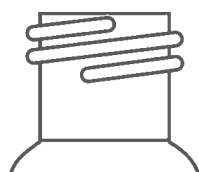
## Specification certified screw vial and cap kits Continued


Performance level 3 for high performance analysis

### Description

- Short thread screw kit
- 12 mm × 32 mm (diameter × height) flat bottom base
- Marking spot
- Specification certified

For use with short thread screw cap closure



Key attributes	GOLD-grade glass
	SureStop vials
	AVCS caps
Vial total volume	2 mL
Vial color and material	Clear glass
Cap color and material	Blue screw cap (PP)
Septa color and material	White silicone/red PTFE
Septa thickness	1 mm
Ordering information	Cat. no.
100/pack 	<a href="#">6PKG592W</a>



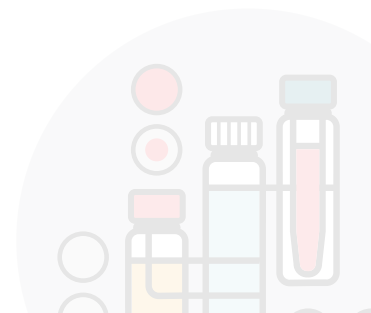
#### Learn more about our quality materials:

Thermo Scientific SureSTART products—Innovation



#### Analyzing polar compounds/compounds prone to glass adsorption?

We recommend using our GOLD-grade glass vials





# Specification certified, LC/GC certified, MSCERT and MSCERT+ kits Continued

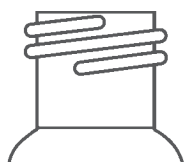
## LC/GC certified kits: <2 mL vials with 9 mm caps

Performance level 3 for high performance analysis

### Description

- Short thread screw kit
- 12 mm x 32 mm (diameter x height) flat bottom base
- Marking spot
- LC/GC certified

For use with short thread screw cap closure



Key attributes	Bonded caps	AVCS caps
	Pre-slit septa	Pre-slit septa
Vial total volume	1.5 mL total recovery vials	0.3 mL fused insert vial
Vial color and material	Clear glass	Clear glass
Cap color and material	Grey screw cap (PP)	Grey screw cap (PP)
Septa color and material	Clear silicone/clear PTFE	White silicone/blue PTFE
Septa thickness	1 mm	
Ordering information	Cat. no.	Cat. no.
100/pack	<a href="#">6PCK993</a>	<a href="#">6PCK71LVW</a>





# Specification certified, LC/GC certified, MSCERT and MSCERT+ kits Continued

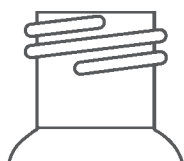
## LC/GC certified kits: 2 mL vials with 9 mm caps


Performance level 3 for high performance analysis

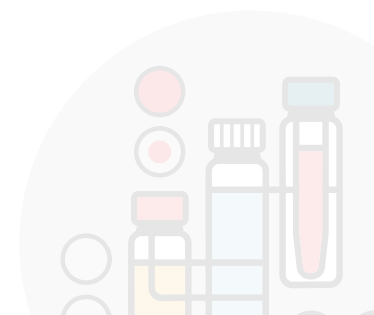
### Description

- Short thread screw kit
- 12 mm × 32 mm (diameter × height) flat bottom base
- Marking spot
- LC/GC certified

For use with short thread screw cap closure



Key attributes	—	—	—	SureStop vials	SureStop vials	SureStop vials
	Bonded caps	Bonded caps	AVCS caps	AVCS caps	AVCS caps	AVCS caps
	Pre-slit septa	Pre-slit septa	Pre-slit septa	Pre-slit septa	—	—
Vial total volume	2 mL					
Vial color and material	Clear glass	Amber glass	Clear glass	Amber glass	Clear glass	Amber glass
Cap color and material	Grey screw cap (PP)	Grey screw cap (PP)	Blue screw cap (PP)	Blue screw cap (PP)	Blue screw cap (PP)	Blue screw cap (PP)
Septa color and material	White silicone/red PTFE	White silicone/red PTFE	White silicone/blue PTFE	White silicone/blue PTFE	White silicone/red PTFE	White silicone/red PTFE
Septa thickness	1 mm					
Ordering information	Cat. no.	Cat. no.	Cat. no.	Cat. no.	Cat. no.	Cat. no.
100/pack 	<a href="#">6PCK93W</a>	<a href="#">6PCK76W</a>	<a href="#">6PCK593W</a>	<a href="#">6PCK576W</a>	<a href="#">6PCK578W</a>	<a href="#">6PCK575W</a>





# Specification certified, LC/GC certified, MSCERT and MSCERT+ kits Continued

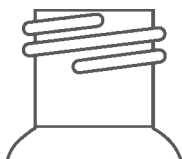
## LC/GC certified assembled kits: 2 mL vials with 9 mm caps


Performance level 3 for high performance analysis

### Description

- Short thread screw kit
- 12 mm × 32 mm (diameter × height) flat bottom base
- Marking spot
- LC/GC certified

For use with short thread screw cap closure



Key attributes	Bonded caps	AVCS caps
	Pre-slit septa	Pre-slit septa
Vial total volume	2 mL	2 mL
Vial color and material	Clear glass	Amber glass
Cap color and material	Grey screw cap (PP)	Grey screw cap (PP)
Septa color and material	White silicone/red PTFE	White silicone/red PTFE
Septa thickness	1 mm	
Ordering information	Cat. no.	Cat. no.
100/pack 	<a href="#">6PCK193W</a>	<a href="#">6PCK176W</a>





# Specification certified, LC/GC certified, MSCERT and MSCERT+ kits Continued

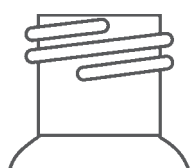
## MSCERT kits


Performance level 3 for high performance analysis

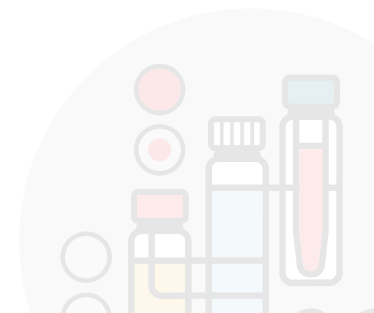
### Description

- Short thread screw kit
- 12 mm × 32 mm (diameter × height) flat bottom base
- Marking spot
- MSCERT certified

For use with short thread screw cap closure



Key attributes	SureStop vials			
	AVCS caps			
	—	—	Pre-slit septa	Pre-slit septa
Vial total volume	2 mL			
Vial color and material	Clear glass	Amber glass	Clear glass	Amber glass
Cap color and material	Blue screw cap (PP)			
Septa color and material	Blue silicone/clear PTFE septa			
Septa thickness	1 mm			
Ordering information	Cat. no.	Cat. no.	Cat. no.	Cat. no.
100/pack 	<a href="#">6PMSCK534W</a>	<a href="#">6PMSCK535W</a>	<a href="#">6PMSCK540W</a>	<a href="#">6PMSCK541W</a>







# Specification certified, LC/GC certified, MSCERT and MSCERT+ kits Continued

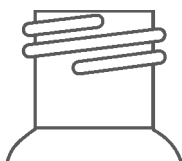
## MSCERT kits Continued


Performance level 3 for high performance analysis

### Description

- Short thread screw kit
- 12 mm x 32 mm (diameter x height) flat bottom base
- Marking spot
- MSCERT certified

For use with short thread screw cap closure



Key attributes	Pre-slit septa			
	Bonded caps			
Vial total volume	—	—	SureStop vials	SureStop vials
Vial color and material	Clear glass	Amber glass	Clear glass	Amber glass
Cap color and material	Blue screw cap (PP)			
Septa color and material	White silicone/beige PTFE			
Septa thickness	1 mm			
Ordering information	Cat. no.	Cat. no.	Cat. no.	Cat. no.
100/pack 	<a href="#">6PMSCK641W</a>	<a href="#">6PMSCK651W</a>	<a href="#">6PMSCK601W</a>	<a href="#">6PMSCK611W</a>





# Specification certified, LC/GC certified, MSCERT and MSCERT+ kits Continued

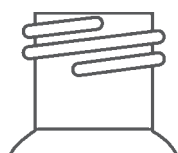
## MSCERT+ kits


Performance level 3 for high performance analysis

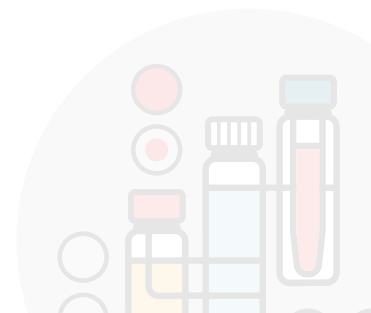
### Description

- Short thread screw kit
- 12 mm × 32 mm (diameter × height) flat bottom base
- Marking spot
- MSCERT+ certified and pre-cleaned

For use with short thread screw cap closure



Key attributes	SureStop vials			
	AVCS caps			
	—	—	Pre-slit septa	Pre-slit septa
Vial total volume	2 mL			
Vial color and material	Clear glass	Amber glass	Clear glass	Amber glass
Cap color and material	Blue screw cap			
Septa color and material	Blue silicone/clear PTFE			
Septa thickness	1 mm			
Ordering information	Cat. no.	Cat. no.	Cat. no.	Cat. no.
100/pack 	<a href="#">6PMCK34W</a>	<a href="#">6PMCK35W</a>	<a href="#">6PMCK40W</a>	<a href="#">6PMCK41W</a>





# Specification certified, LC/GC certified, MSCERT and MSCERT+ kits Continued

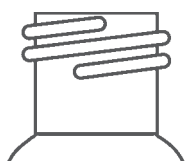
## MSCERT+ kits Continued


Performance level 3 for high performance analysis

### Description

- Short thread screw kit
- 12 mm × 32 mm (diameter × height) flat bottom base
- Marking spot
- MSCERT+ certified and pre-cleaned

For use with short thread screw cap closure



Key attributes	SureStop vials		Fused-insert	
	Bonded			
	—	—	—	Pre-slit septa
Vial total volume	2 mL	2 mL	0.3 mL	0.3 mL
Vial color and material	Clear glass	Amber glass	Clear glass	Clear glass
Cap color and material	Blue screw cap	Blue screw cap	Blue screw cap	Grey screw cap
Septa color and material	Clear silicone/clear PTFE			
Septa thickness	1 mm			
Ordering information	Cat. no.	Cat. no.	Cat. no.	Cat. no.
100/pack 	<a href="#">6PMCK341W</a>	<a href="#">6PMCK351W</a>	<a href="#">6PMCK30LVW</a>	<a href="#">6PMCK36LVW</a>





# Specification certified, LC/GC certified, MSCERT and MSCERT+ kits Continued

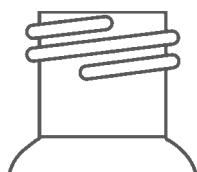
## MSCERT+ kits Continued


Performance level 3 for high performance analysis

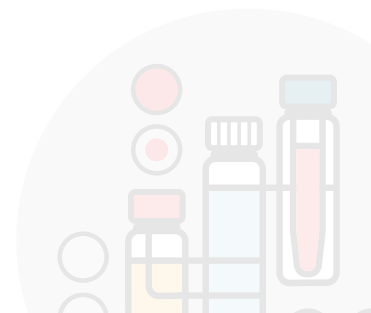
### Description

- High recovery vial
- Short thread screw vial
- 12 mm x 32 mm (diameter x height) flat bottom base
- MSCERT+ certified and pre-cleaned

For use with short thread screw cap closure



Key attributes	Total recovery
	Bonded
	Pre-slit
Vial total volume	1.5 mL
Vial color and material	Clear glass
Cap color and material	Grey screw cap
Septa color and material	Clear silicone/clear PTFE
Septa thickness	1 mm
Ordering information	Cat. no.
100/pack 	<a href="#">6PMCK39TR</a>





# Specification certified, LC/GC certified, MSCERT and MSCERT+ kits Continued

## TOC certified screw vial and cap kits

Performance level 3 for high performance analysis


### Description

- TOC certification (20 ppb)
- TOC certification (10 ppb)

Our low-level certified vials for Total Organic Carbon testing and sampling are manufactured, tested and packaged by exacting standards.

Thermo Scientific™ TOC Certified Containers are certified to contribute <10ppb or < 20ppb TOC as background.



Vial description	40 mL (24 mm) screw glass vial	
Vial color and material	Clear	
Cap description	Bonded white screw cap (24-400) (PP)	
Septum color and material	White silicone/clear PTFE open top	
Septum thickness	3 mm	
Septum hardness	50 shore	
Certification level	TOC certification (20 ppb)	TOC certification (10 ppb)
Ordering information	<b>Cat. no.</b>	<b>Cat. no.</b>
72/pack 	<a href="#">6PK40TOC20</a>	<a href="#">6PK40TOC10</a>





# Specification certified, LC/GC certified, MSCERT and MSCERT+ kits Continued


## EPA certified assembled kits: 40 mL with 24 mm caps

Performance level 3 for high performance analysis

### Description

- Screw thread 24 mm (24-400)
- 28 mm x 95 mm (diameter x height) flat bottom base
- Processed and packaged under a registered ISO Quality Management System
- Laboratory certified to meet U.S. EPA Super Fund Standards in accordance with the latest edition of EPA's "Specifications and Guidance for Contaminant Free Sample Containers"
- Every case contains a Certificate of Analysis and is custody sealed to ensure reliable chain-of-custody



Vial description	40 mL (24 mm) screw glass vial
Vial color and material	Clear
Cap description	Bonded white screw cap (24-400) (PP)
Septum color and material	White silicone/clear PTFE open top
Septum thickness	3 mm
Septum hardness	50 shore
Ordering information	Cat. no.
72/pack 	<a href="#">6ACK40COTAS</a>

# SureSTART vials and caps accessories


## Manual crimpers and decrimpers

### Manual crimpers and decrimpers

Achieve secure, repeatable crimps or remove seals with minimized risk of damage


Use Thermo Scientific™ SureSTART™ vial crimpers and decrimpers to manually attach or remove crimp caps from vials, respectively. These manual crimpers and decrimpers are available in 8 mm, 11 mm, 13 mm, and 20 mm sizes and allow you to easily seal or remove crimp caps reliably.\*\*



Product description	Red manual crimper				Stainless steel manual crimper*
Suitable for	8 mm crimp caps	11 mm crimp caps	13 mm crimp caps	20 mm crimp caps	20 mm crimp caps
Ordering information	Cat. no.	Cat. no.	Cat. no.	Cat. no.	Cat. no.
1/pack 	<a href="#">60180-CR8</a>	<a href="#">60180-CR11</a>	<a href="#">60180-CR13</a>	<a href="#">60180-CR20</a>	<a href="#">60180-CR20SS</a>

\*Crimper can be sterilized, for clean room applications



Product description	—	Black manual decrimper	Black manual decrimper	—	Black manual decrimper
Suitable for	—	11 mm crimp caps	13 mm crimp caps	—	20 mm crimp caps
Ordering information	Cat. no.	Cat. no.	Cat. no.	Cat. no.	Cat. no.
1/pack 	—	<a href="#">60180-DCR11</a>	<a href="#">60180-DCR13</a>	—	<a href="#">60180-DCR20</a>

\*\*These crimper are not for flip top/flip off closures. Further specials are available on request or see our selection of electronic crimper on the following page.

# Electronic crimpers and decrimping tools

## Electronic crimpers and decrimpers

Our electronic Thermo Scientific crimper portfolio includes tools for 8 mm, 11 mm, 13 mm, and 20 mm crimp caps.

The tools provide all important settings like actual crimp power at one glance. The hand-held crimpers and decrimpers allow crimping of vials with aluminium, pressure release and bi-metal caps while remaining in most sample trays.

The crimp head selection includes also special crimp heads for 13 mm and 20 mm flip-off caps, further specials are available on request.

Attach or remove crimp vial seals with high sample security with a simple, one-handed push of a button.

### Electronic hand-held crimpers and decrimpers

The battery charge icon on the color screen of the hand-held tools changes to red when battery is low. Each hand-held tool comes with fully rechargeable lithium ion battery and universal power supply/recharger and international plug adapters.

For steel caps and/or high numbers of crimp or decrimp processes per day we recommend the Thermo Scientific™ High-Power Crimp Station as it provides the highest crimping force independent from battery charge status.



Versatile and programmable crimp station

### Electronic crimpers and decrimpers features and benefits

- Tools available for use with 8 mm, 11 mm, 13mm, and 20 mm crimp vial caps
- Available as handheld and high-power models
- These electronic vial crimpers also feature adjustable settings for best crimp results and a motor with extended lifetime and no particle emission
- Interchangeable crimper and decrimper jaw sets for Programmable Electronic High-Power Crimp Stations
- One hand operation with a simple push of a button
- Error message feedback after the incorrect crimping process
- Adjustable settings for best crimp results
- Actual crimp power setting displayed on the color screen.
- 8 different languages available—EN, CN, JA, DE, FR, ES, IT, KO
- Motor with extended lifetime and no particle emission
- Free hands for faster crimping operations with the adjustable Thermo Scientific™ Accessory Base for Programmable Electronic High-Power Crimp Stations. (ECRH-STAND)
- Each High-Power Crimper comes with 12-volt DC supply with power cord
- Crimp and Decrimp Heads for the High-Power Crimper are included in the kits or available separately




# Electronic crimpers and decrimping tools

Continued

## Electronic hand-held battery-operated crimper (black)


Generation 4




<b>Product description</b>	Electronic hand-held battery-operated crimper (black). Generation 4			
<b>Suitable for</b>	8 mm crimp caps	11 mm crimp caps	13 mm crimp caps	20 mm crimp caps
<b>Ordering information</b>	<b>Cat. no.</b>	<b>Cat. no.</b>	<b>Cat. no.</b>	<b>Cat. no.</b>
1/pack 	<a href="#">60180-ECR8</a>	<a href="#">60180-ECR11</a>	<a href="#">60180-ECR13</a>	<a href="#">60180-ECR20</a>

## Electronic hand-held battery-operated decrimper (black)

Generation 4

<b>Product description</b>	Electronic hand-held battery-operated decrimper (black). Generation 4			
<b>Suitable for</b>	—	11 mm crimp caps	13 mm crimp caps	20 mm crimp caps
<b>Ordering information</b>	<b>Cat. no.</b>	<b>Cat. no.</b>	<b>Cat. no.</b>	<b>Cat. no.</b>
1/pack 	—	<a href="#">60180-EDCB11</a>	<a href="#">60180-EDCB13</a>	<a href="#">60180-EDCB20</a>

## Electronic crimper for FTFO and Flip-Off crimp closures


<b>Product description</b>	13 mm electronic crimper for FTFO	20 mm electronic Flip-Off crimper
<b>Ordering information</b>	<b>Cat. no.</b>	<b>Cat. no.</b>
1/pack 	60180-ECR13FO	60180-ECR20FO

# Electronic crimpers and decrimping tools

Continued


## Electronic high-power programmable crimp station



<b>Product description</b>	Electronic high-power crimp station (without crimp heads) (black). Generation 2		
<b>Ordering information</b>	Cat. no.		
1/pack 	<a href="#">60180-ECRHB</a>		



## Electronic high-power programmable crimper kits

<b>Product description</b>	Electronic high-power programmable crimper kit		
<b>Suitable for</b>	11 mm	13 mm	20 mm
<b>Include</b>	11 mm crimp head 11 mm decrimp head	13 mm crimp head 13 mm decrimp head	20 mm crimp head 20 mm decrimp head
<b>Ordering information</b>	Cat. no.	Cat. no.	Cat. no.
1/pack 	<a href="#">60180-ECRH11KIT</a>	<a href="#">60180-ECRH13KIT</a>	<a href="#">60180-ECRH20KIT</a>

# Electronic crimpers and decrimping tools


Continued


## Accessories for electronic high-power programmable crimper



<b>Product description</b>	<b>Accessory base for electronic crimpers:</b> Height adjustable and solvent resistant (consists of base plate and bar)
<b>Ordering information</b>	<b>Cat. no.</b>
1/pack 	<a href="#">ECRH-STAND</a>



<b>Product description</b>	8 mm crimp head	11 mm crimp head	13 mm crimp head	20 mm crimp head
<b>Ordering information</b>	<b>Cat. no.</b>	<b>Cat. no.</b>	<b>Cat. no.</b>	<b>Cat. no.</b>
1/pack 	<a href="#">ECMJ-8</a>	<a href="#">ECMJ-11</a>	<a href="#">ECMJ-13</a>	<a href="#">ECMJ-20</a>

<b>Product description</b>	13 mm Flip-Off crimp head	20 mm Flip-Off crimp head
<b>Ordering information</b>	<b>Cat. no.</b>	<b>Cat. no.</b>
1/pack 	<a href="#">ECMJ-13FO</a>	<a href="#">ECMJ-20FO</a>

## Accessories for electronic high-power programmable decrimper

<b>Product description</b>	11 mm decrimp head	13 mm decrimp head	20 mm decrimp head
<b>Ordering information</b>	<b>Cat. no.</b>	<b>Cat. no.</b>	<b>Cat. no.</b>
1/pack 	<a href="#">ECDJ-11</a>	<a href="#">ECDJ-13</a>	<a href="#">ECDJ-20</a>

# WebSeal Performance level 1 products



## Well plates and mats

Performance level 1 for everyday analysis

A full selection of high quality sample well plates for your UHPLC, LC and GC applications

We offer a comprehensive range of Thermo Scientific™ 96- and 384- well plates for complex and routine analyses in high-throughput screening laboratories.

We offer a broad selection of polypropylene (PP) well plates that meet ANSI and SBS standards with different sealing options and fit most manifolds, autosamplers, and robots.

### Handle more samples in less time

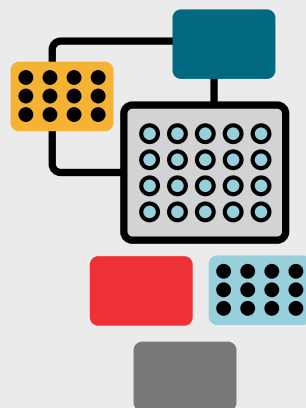
- Low volume and high recovery cavity

### Solutions for all applications

- Chromatography tested for solvent compatibility and inertness

### Ultimate sample security

- Low-leachable, high-purity materials and manufacturing processes





# Well plates and mats Continued

## Performance level 1 for everyday analysis

### WebSeal well plates

Plastic, non-coated, non-sterile, chromatography tested

#### Description

- Thermo Scientific WebSeal well plates are manufactured from a GC/MS tested polypropylene material
- Microplates are chemically and thermally resistant and will tolerate temperatures from  $-80^{\circ}\text{C}$  to  $+121^{\circ}\text{C}$
- SBS and ANSI standard footprint design for broad instrument compatibility
- Microplates are ideal for pharmaceutical applications, sample collection and storage, combinatorial chemistry and HTS applications
- U- and V- bottom wells for optimal sample recovery



Description	Total height	Well format	Total volume (μL)	Working volume range (μL/well)	Cat. no.	Pack size
96 well microplate, round well	14.4	V-Shape, 8 mm diameter	450	10-400	<a href="#">60180-P100</a>	20
					<a href="#">60180-P130</a>	120
	14.5	V-Shape, 8 mm diameter	500	20-500	<a href="#">60180-P102</a>	10
			2000	50-1900	<a href="#">60180-P132</a>	12
96 well plates, round well	26.5	U-shape, 8 mm diameter, mid height plate	1100	50-900	<a href="#">60180-P154</a>	50
	31.6	U-shape, 8 mm diameter, deep-well plate	1300	50-1000	<a href="#">60180-P103</a>	5
					<a href="#">60180-P133</a>	50
	45.0		2000	50-1900	<a href="#">60180-P104</a>	5
				<a href="#">60180-P124</a>	50	
96 deep well plate, square well	31.0	U-shape, square, mid height plate	1600	50-1300	<a href="#">60180-P155</a>	96
	44.0	V-Shape, square, deep-well plate	2000	50-1900	<a href="#">60180-P105</a>	5
				<a href="#">60180-P135</a>	50	
384 well microplate	15.5	V-Shape, square, micro titer plate	145	4-120	<a href="#">60180-P109</a>	10
					<a href="#">60180-P129</a>	100
	22.0	V-shape, square, mid-height plate	252	5-240	<a href="#">60180-P107</a>	5
22.0	V-shape, square, mid-height plate	<a href="#">60180-P127</a>			100	



# Well plates and mats Continued

## Performance level 1 for everyday analysis

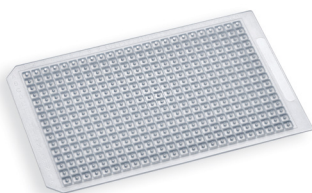
### WebSeal mats and sealing tapes, non-sterile

For plates with round and square wells of 8 mm or 384 well plates

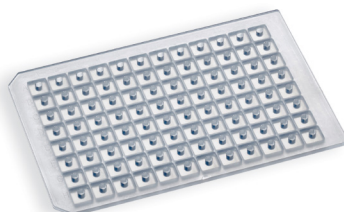
#### Description

- Mats manufactured of EVA (Ethylene-vinyl acetate) or pure silicone with or without PTFE coating
- The footprint permits plates to be securely stacked without robotic arm interference
- Eliminates cross contamination of samples
- Dry heat autoclavable (only silicone mats) with excellent chemical compatibility, withstand low temperature to -80°C
- Resists coring and tearing
- Superior resealability after multiple injections
- Available pre-slit for easy penetration and reduced vacuum formation
- Sealing tapes minimize evaporation and protect samples from contamination and spilling.
- Adhesive seals effectively seal all microplate formats
- Wide range of adhesive seals for every assay
- Thin, lightweight tapes seal onto the plate with a convenient, handheld applicator (available separately, cat. no. 60180-M950)

60180-M126



60180-M121



60180-M123



60180-M999





# Well plates and mats Continued

Performance level 1 for everyday analysis

## WebSeal mats and sealing tapes, non-sterile Continued

For plates with round and square wells of 8 mm or 384 well plates

Description	Color	Material	Well design	Pre-slit	Cat. no.	Pack size		
WebSeal mats CLR silicone mat, round well	Clear	Silicone	96 round well, 8 mm diameter, flat base with cross		<a href="#">60180-M184</a>	50		
WebSeal mats (alcohol resistant), round well		EVA	96 round well, 8 mm diameter	No	<a href="#">60180-M101</a>	5		
WebSeal CLR silicone mat, round well	Blue	Silicone/PTFE	96 round well – flat base, 8 mm diameter, large penetration area		<a href="#">60180-M171</a>	50		
WebSeal mats (solvent resistant), round well				Yes	<a href="#">60180-M134</a>		<a href="#">60180-M183</a>	
WebSeal mats (alcohol resistant), square well	Clear	EVA	96 square well - flat base	No	<a href="#">60180-M102</a>	5		
WebSeal CLR silicone mat, square well				Yes	<a href="#">60180-M103</a>		<a href="#">60180-M177</a>	
WebSeal CLR silicone mat, square well	Clear	Silicone	96 square well – flat base, 8 mm diameter, large penetration area	No	<a href="#">60180-M178</a>	50		
				Yes	<a href="#">60180-M121</a>		<a href="#">60180-M123</a>	5
				No	<a href="#">60180-M185</a>	50		
				Yes	<a href="#">60180-M126</a>	5	<a href="#">60180-M150</a>	
Sealing tape, -40°C – 90°C		PE/silicone		No	<a href="#">60180-M186</a>	50		
				Yes	<a href="#">60180-M142</a>			
Sealing tape, -70°C – 100°C		PES/silicone			<a href="#">60180-M143</a>			
Sealing tape, -80°C – 120°C	Silver	Aluminum/silicone		N/A	<a href="#">60180-M144</a>	100		
Sealing tape with SRA (synthetic rubber adhesive)	Clear	Polyolefin/rubber	N/A	No	<a href="#">60180-M145</a>			
Re-sealing tape with 3 layer no adhesive at cavity area		PET/silicone/PET		Yes	<a href="#">60180-M146</a>	25		
Hand held sealing tape applicator	Gold	N/A		N/A	<a href="#">60180-M176</a>	2		
Hand held mat applicator	Black				<a href="#">60180-M950</a>	1		
WebSeal cutter for vial removal	Silver	N/A	N/A	N/A	<a href="#">60180-M999</a>	1		
					<a href="#">60180-M975</a>	1		

# WebSeal Performance level 2 products



## Well plates and mats

Performance level 2 for high-throughput applications

### WebSeal well plates

Plastic, non-coated, non-sterile, certified

#### Description

- Polypropylene microplates are manufactured from ultra low bleed high purity basis resin
- Plates are tested by GC-MS and LC/MS for organic extractables
- Microplates are chemically and thermally resistant and will tolerate temperatures from -80°C to +121°C
- SBS and ANSI standard footprint design for broad instrument compatibility
- Microplates are ideal for pharmaceutical applications, sample collection and storage, combinatorial chemistry and HTS applications
- U- and V- bottom wells for optimal sample recovery, Total V-plates for low volume applications

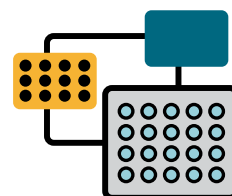
60180-P201



60180-P202



60180-P204







# Well plates and mats Continued

Performance level 2 for high-throughput applications

## WebSeal well plates

Plastic, non-coated, non-sterile, certified

Description	Total height	Well format	Total volume (µL)	Working volume range µL/well	Cat. no.	Pack size
96 well microplate, low volume	15.0	Total V-shape, 5.6 mm diameter	100	5-80	<a href="#">60180-P210</a>	50
96 well microplate, round well	14.7	Flat bottom, 7 mm diameter	350	10-300	<a href="#">60180-P205</a>	100
				10-300	<a href="#">60180-P215</a>	10
	14.7	U-shape, 7 mm diameter	270	10-250	<a href="#">60180-P206</a>	100
					<a href="#">60180-P216</a>	10
					<a href="#">60180-P207</a>	100
96 well mid height plates, round well	41.6	U-shape, 7 mm diameter	1200	50-1100	<a href="#">60180-P217</a>	10
					<a href="#">60180-P228</a>	50
					<a href="#">60180-P201</a>	50
96 deep well plate, square well	44.4	V-shape, 8 mm diameter	2000	50-1900	<a href="#">60180-P211</a>	5
					<a href="#">60180-P202</a>	50
384 well microplate	14.4	U-shape, square, micro titer plate	58	2-35	<a href="#">60180-P212</a>	5
					<a href="#">60180-P203</a>	60
	30.2	V-shape, square, deep well plate	300	5-240	<a href="#">60180-P213</a>	10
					<a href="#">60180-P204</a>	48
					<a href="#">60180-P214</a>	6



# Well plates and mats Continued

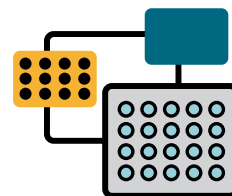
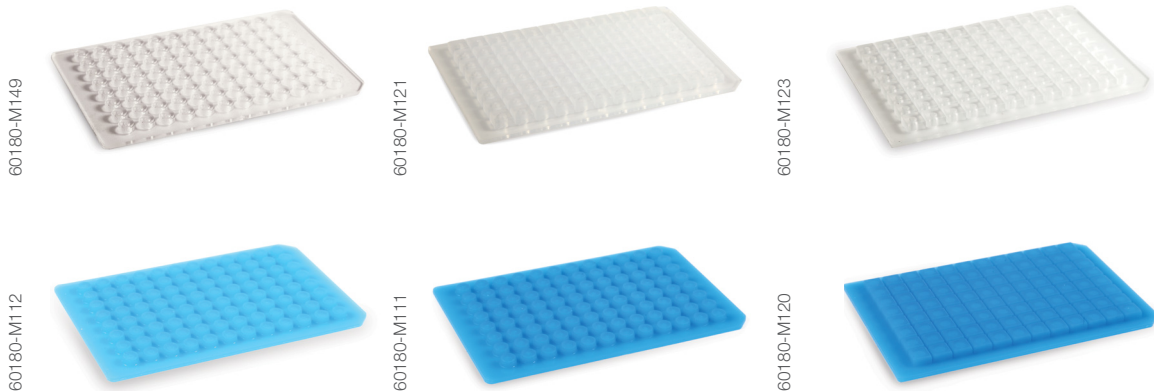
Performance level 2 for high-throughput applications

## WebSeal mats, non-sterile

For certified well plates with 7 mm round well cavities,  
8 mm square wells or 384 plates

### Description

- Manufactured of pure silicone with or without PTFE coating
- The footprint permits plates to be securely stacked without robotic arm interference
- Eliminates cross contamination of samples
- Dry heat autoclavable with excellent chemical compatibility, withstand low temperature to  $-80^{\circ}\text{C}$
- Resists coring and tearing
- Superior resealability after multiple injections
- Available pre-slit for easy penetration and reduced vacuum formation





# Well plates and mats Continued

Performance level 2 for high-throughput applications

## WebSeal mats, non-sterile Continued

For certified well plates with 7 mm round well cavities,  
8 mm square wells or 384 plates

Description	Color	Material	Well design	Pre-slit	Cat. no.	Pack size
WebSeal mat (alcohol resistant), round well		EVA	96 round well, 7 mm diameter		<a href="#">60180-M179</a>	100
WebSeal CLR silicone mat, round well			96 round well – flat base, 5.6 mm diameter, cross	No	<a href="#">60180-M210</a>	50
			96 round well – flat base, 7 mm diameter, large penetration area		<a href="#">60180-M105</a>	
			96 round well – 7 mm diameter, step, small penetration area	Yes	<a href="#">60180-M116</a>	5
					<a href="#">60180-M113</a>	
WebSeal CLR silicone mat, square well	Clear	Silicone	96 square well – flat base, 8 mm diameter, flat base with cross	No	<a href="#">60180-M185</a>	50
			96 square well – flat base, 8 mm diameter, large penetration area	Yes	<a href="#">60180-M121</a>	
					<a href="#">60180-M123</a>	5
			384 square well for 384 well plates	No	<a href="#">60180-M126</a>	
				Yes	<a href="#">60180-M150</a>	
WebSeal mat (solvent resistant), round well			96 round well – flat base, step, 7 mm diameter	No	<a href="#">60180-M186</a>	50
				Yes	<a href="#">60180-M111</a>	
WebSeal mat (solvent resistant), square well	Blue	Silicone/PTFE	96 square well – flat base, 8 mm diameter, large penetration area	No	<a href="#">60180-M112</a>	
				Yes	<a href="#">60180-M120</a>	5
			384 square well for 384 well plates	No	<a href="#">60180-M122</a>	
				Yes	<a href="#">60180-M125</a>	
WebSeal mat			96 round well – dome base, 7.2 mm diameter	No	<a href="#">60180-M126</a>	
				Yes	<a href="#">60180-M131</a>	
				No	<a href="#">60180-M108</a>	
				Yes	<a href="#">60180-M115</a>	

# WebSeal Performance level 3 products



## Well plates and mats

Performance level 3 for high performance analysis

### WebSeal Plate+ plates

#### Glass coated microplates

##### Description

- High quality polypropylene microplates coated with 200nm thick layer of silicon dioxide
- Plate+ provides microplates with a chemical resistance similar to glass while retaining the advantages of polypropylene
- Cost-effective alternative to inserted glass vials
- Excellent for applications where plastic microplates are not applicable
- Plate+ is chemically and thermally resistant and will tolerate temperatures from -80° C to +80° C
- Lightweight, precision molded, cost-effective alternative to solid glass plates



Description	Total height	Well format	Total volume (µL)	Working volume (µL)	Cat. no.	Pack size
96 well microplate, round well	14.7	U-shape, 7.0 mm diameter	300	250	<a href="#">60180-P330</a>	10
		V-shape, 7.0 mm diameter	220	190	<a href="#">60180-P332</a>	10
		Flat bottom, 7.0 mm diameter	370	300	<a href="#">60180-P334</a>	10
96 well mid height plate, round well	14.6	V-shape, 7 mm diameter	220	190	<a href="#">60180-P333</a>	100
	26.5	U-shape, 8 mm diameter	1100	50 to 900	<a href="#">60180-P350</a>	10
	33	U-shape, 7 mm diameter	1100	50 to 900	<a href="#">60180-P343</a>	10
	40.6	U-shape, 7.2 mm diameter	1.2 mL	1.0 mL	<a href="#">60180-P336</a>	10
96 deep well plate, square well	14.4	V-shape, 8 mm diameter	145	100	<a href="#">60180-P341</a>	100
	43.7	V-shape, 8 mm diameter	2.4 mL	2.0 mL	<a href="#">60180-P338</a>	10
384 well microplate	15.0	Square-rounded, flat, micro titer plate	120	90	<a href="#">60180-P340</a>	10
	22.0	Square-rounded, U-shape, deep well plate	240	180	<a href="#">60180-P342</a>	6



# Well plates and mats Continued

## Performance level 3 for high performance analysis

### WebSeal glass inserted plate kits

#### With 96-position mats

##### Description

- Convenient wellplate kits with pre-assembled glass vials
- Replacement parts for kits available separately
- Unique cutting tool allows removal of individual samples with the seal in place, eliminating cross contamination
- Mats with solid plugs are used for sample storage

60180-K100



60180-K101



60180-K104



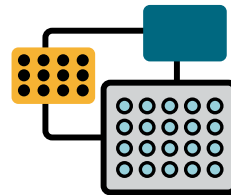
60180-K105



60180-K106



60180-K107





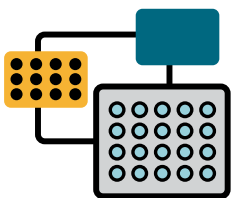
# Well plates and mats Continued

Performance level 3 for high performance analysis

## WebSeal glass inserted plate kits Continued

With 96-position mats

Kit type	Vial material	Total volume (µL)	Vial dimension (mm)	Profile	Mat material	Total height (mm)	Vial cat. no.	Mat cat. no.	Kit cat. no.	Pack size
96 well small volume microplate with sealing mat	Clear glass	500	6.5 x 31	Taper	Silicone/PTFE	32.0	<a href="#">60180-V100</a>	<a href="#">60180-M151</a>	<a href="#">60180-K100</a>	5
96 well small volume microplate with sealing mat and cutting tool	Clear glass	700	6.5 x 41.4	Taper	Silicone/PTFE	44.0	<a href="#">60180-V101</a>	<a href="#">60180-M151</a>	<a href="#">60180-K101</a>	5
	Clear glass	1100	7.45 x 38.5	Round	Silicone/PTFE	41.5	<a href="#">60180-V104</a>	<a href="#">60180-M153</a>	<a href="#">60180-K104</a>	5
96 deep well plate with sealing mat	Clear glass	1500	7.25 x 60.5	Round	Silicone/PTFE	64.5	<a href="#">60180-V106</a>	<a href="#">60180-M153</a>	<a href="#">60180-K106</a>	5
96 square well plate with sealing mat	Clear glass	1000	7.6 x 45	Constricted	Silicone/PTFE	47.3	—	<a href="#">60180-M111</a>	<a href="#">60180-K107</a>	1
96 square well plate with sealing mat	Clear glass	1000	7.6 x 45	Constricted	Precut	47.3	—	<a href="#">60180-M112</a>	<a href="#">60180-K108</a>	1



# WebSeal kit accessories

## WebSeal kit accessories

### WebSeal 96 well mats

Silicone/PTFE

60180-M151



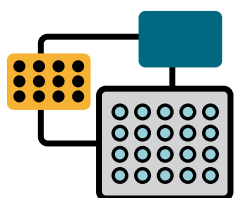
60180-M154



60180-M975



Kit type	Details	Pre-slit	Cat. no.	Pack size
96 well WebSeal mat	60180-K100, 60180-K101, 60180-K103	No	<a href="#">60180-M151</a>	
		Yes	<a href="#">60180-M152</a>	
96 well WebSeal mat	60180-K104, 60180-K106	No	<a href="#">60180-M153</a>	5
		Yes	<a href="#">60180-M154</a>	
96 well WebSeal mat, welled plugs	60180-K107 60180-K108	No	<a href="#">60180-M111</a>	
		Yes	<a href="#">60180-M112</a>	
WebSeal cutter for vial removal	—	—	<a href="#">60180-M975</a>	1



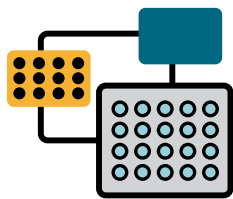
# WebSeal kit accessories

Continued

## Plate vials For 96 wells



Kit type	Vial material	Total volume (μL)	Vial dimension (mm)	Profile	Cat. no.	Pack size
Micro titer plate vial for 96 wells	Clear glass	500	6.5 x 31	Taper	<a href="#">60180-V100</a>	500
		700	6.5 x 41.4		<a href="#">60180-V101</a>	
Deep well plate vial for 96 wells	Clear glass	1100	7.45 x 38.5	Round	<a href="#">60180-V104</a>	
		1500	7.25 x 60.5		<a href="#">60180-V106</a>	





# WebSeal kit accessories

Continued

## Well plates and racks

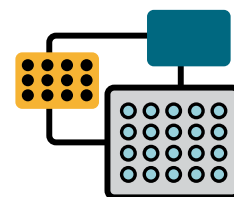
60180-P400



60180-P401



Kit type	Vial material	Total volume (μL)	Profile	Total height (mm)	Cat. no.	Pack size
Plastic 96 round well micro titer plate (60180-K100)	—	800	V-shape, 7 mm diameter	31.5	<a href="#">60180-P400</a>	5
PP 96 round well micro rack (60180-K101, K102)	PP	—	U-shape, 7 mm diameter	41.6	<a href="#">60180-P211</a>	1
PP 96 well square well plate (60180-K107/108)	PP	2000	U-shape, square	44.0	<a href="#">60180-P403</a>	1
PP 96 well square well plate (60180-K106)	PP	2000	V-shape, square	44.0	<a href="#">60180-P212</a>	5



# WebSeal kit accessories

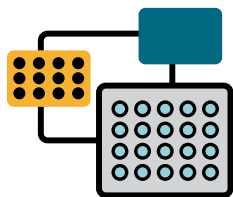
Continued

## Plate vials and accessories

For 96 wells



Kit type	Vial material	Total volume (μL)	Vial dimension (mm)	Profile	Septum	Cat. no.	Pack size
Deep well plate vial for 96 wells	Clear glass	350	6 x 42.5	Taper	—	<a href="#">60180-V109</a>	960
Square well vial for 96 Wells		1000	7.6 x 45.9	Round	—	<a href="#">60180-V110</a>	960
PE cap, red, center hole for 96 Well Plate Inserts	—	—	—	—	Silicone/ PTFE, pre-slit, 45°	<a href="#">60180-C100</a>	96
Micro-tube-rack-system, positions (for 60180-K104)	—	—	—	—	—	<a href="#">60180-P407</a>	96



# WebSeal kit accessories

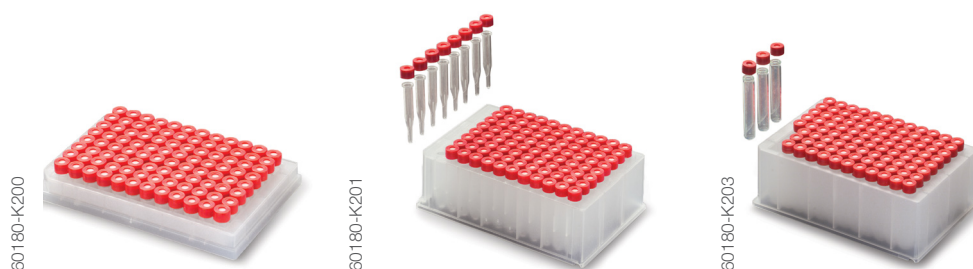
Continued

## WebSeal clear glass inserted plate kits

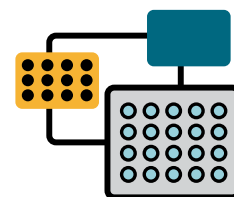
With individual closures

### Description

- 96 position block systems with glass inserts are used when the pure PP block is not inert enough
- Inserts manufactured from clear, Type 1 Class A or amber, Type 1 Class B borosilicate glass
- Inserts are sealed individually with a PE Cap Seal and can be easily removed and used externally without risk of losing sample
- The products can be obtained as individual components or as completely assembled, ready-to-use convenience blocks



Kit type	Total volume (µL)	Vial dimension (mm)	Profile	Septum	Vial cat. no.	Cap cat. no.	Kit cat. no.	Pack size
96 well microplate	100	5.7 x 15.5	Flat bottom	Silicone/PTFE, pre-slit, 45°	<a href="#">60180-V108</a>		<a href="#">60180-K200</a>	
96 deep well Plate	350	6 x 42.5	Taper	Silicone/PTFE, 45°	<a href="#">60180-V109</a>	<a href="#">60180-C100</a>	<a href="#">60180-K201</a>	1
96 square well plate	1000	7.6 x 45.9	Round	Silicone/PTFE, 45°	<a href="#">60180-V110</a>		<a href="#">60180-K202</a>	
				Silicone/PTFE, pre-slit, 45°			<a href="#">60180-K203</a>	



# WebSeal kit accessories

Continued

## Barcoded well plates

For Thermo Scientific™ Vanquish™ HPLC and UHPLC systems

### Description

- These well plates provide advanced sample security and sample integrity.
- This secure choice offers a tested portfolio for chromatography applications
- Barcoded well plates have an assured plate fit and a pre-applied orientation barcode in the correct reader position; therefore there is no risk of placing the plate incorrectly
- The secured side orientation in the autosampler alleviates the risk of starting the sequence in the wrong plate orientation
- The instrument controls plate orientation and verifies the plate before implementing the sequence

60180-P206-216B

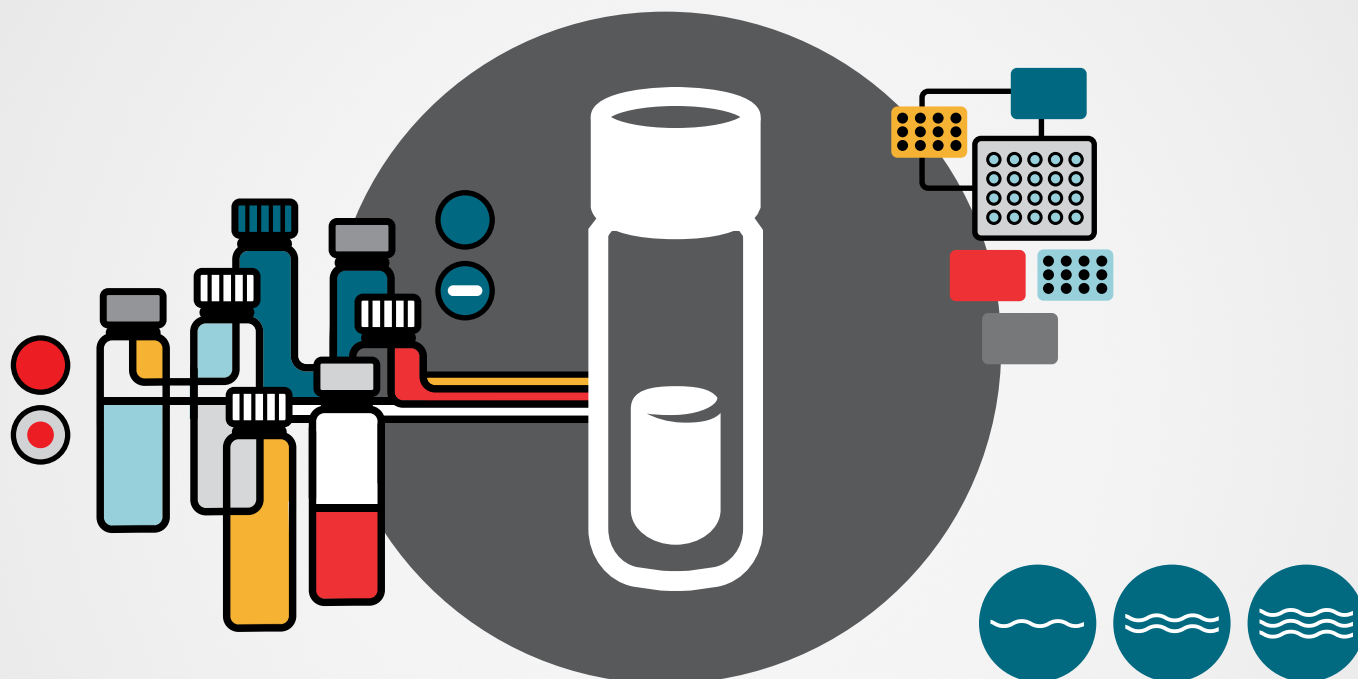


60180-P207-217B



Description	Total height	Well format	Total volume μL/well	Working volume range μL/well	Cat. no.	Pack size
96 well microplate, round well, barcoded	14.7	U-shape, 7 mm diameter	270	10-250	<a href="#">60180-P206B</a>	100
					<a href="#">60180-P216B</a>	10
	14.7	V-shape, 7 mm diameter	220	10-190	<a href="#">60180-P207B</a>	100
					<a href="#">60180-P217B</a>	10
96 well mid height plate, round well, barcoded	31.6	U-shape, 8 mm diameter	1300	50-1000	<a href="#">60180-P103B</a>	5
					<a href="#">60180-P133B</a>	50
	41.6	U-shape, 7 mm diameter	1000	50-900	<a href="#">60180-P201B</a>	5
					<a href="#">60180-P211B</a>	
44.0	V-shape, square	2000	50-1900	<a href="#">60180-P105B</a>	50	
				<a href="#">60180-P135B</a>		

For mats see previous pages with mats for 7 or 8 mm cavity diameter



Expect reproducible results with sample prep, columns and vials



Don't see what you need? We would be happy to discuss your specific requirements. Please contact your local sales representative for custom orders.

 Learn more at [thermofisher.com/surestart](https://thermofisher.com/surestart)