

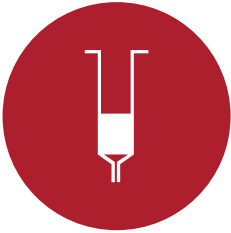
Chromatography consumables

## Connected chromatography solutions

Chromatography consumables catalog

# Comprehensive products to support your chromatography workflows

## Sample preparation solutions



## Sample handling solutions



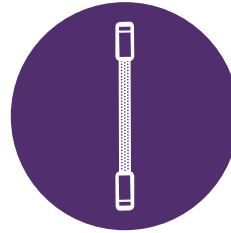
## Low-flow LC columns and accessories



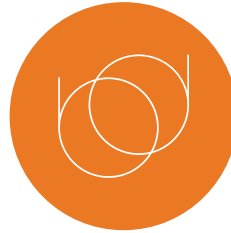
## BioLC columns and accessories



## LC columns and accessories



## GC columns and accessories

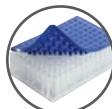


Thermo Scientific™ products:

- SMART Digest™ kits
- SOLA™ SPE products
- HyperSep™ SPE products
- TurboFlow™ and online sample preparation products
- QuEChERS products
- Automated micro solid-phase extraction (μSPE) products
- Syringes and syringe filters



- SureSTART™ AVCS™ closures and SureStop vials
- SureSTART™ Gold grade purity glass vials and vial kits
- SureSTART™ low residual microsampling vials and vial kits
- MS certified vials
- Polyspring vial inserts
- Electronic crimping and decrimping tools
- WebSeal™ well-plates and sealing mats for chromatography



- EASY-Spray™ HPLC columns for top-down and bottom-up proteomics
- Double nanoViper PepMap™ Neo HPLC columns for top-down and bottom-up proteomics
- μPAC™ HPLC columns for bottom-up proteomics



- MAbPac™ size exclusion chromatography
- MAbPac™ and ProPac™ charged variant profiling
- MAbPac™ intact and subunit analysis
- HILIC and mixed-mode glycan analysis
- DNAPac™ oligonucleotide and gene therapy analysis
- Vanquish™ UHPLC peptide analysis



- Accucore™ U/HPLC columns
- Acclaim™ U/HPLC columns
- Hypersil GOLD™ U/HPLC columns
- Hypercarb™ HPLC columns
- Application specific HPLC columns
- Hypersil™ BDS and Hypersil™ classical HPLC columns
- LC accessories
- Preparative HPLC columns



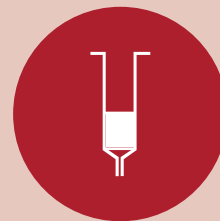
- TracePLOT™ GC columns
- TraceGOLD™ packed GC columns
- GuardGOLD™ capillary GC columns
- LinerGOLD™ liners
- Super Clean™ gas cartridge filters
- GC consumables
- Gas management
- GC equipment
- GC reagents



# Our portfolio

## Sample preparation solutions

Save time, improve reproducibility, and extend the lifetime of your High/Ultra High Performance Liquid Chromatography (HPLC/UHPLC) and gas chromatography (GC) columns with our comprehensive range of sample preparation products. Achieve high sensitivity, selectivity, and recovery with advanced solid-phase extraction (SPE) consumables.



## Sample handling solutions

We provide a broad selection of sample handling and containment solutions from all your chromatography requirements. Our vials, closures and well plates, come with the lowest levels of extractables and leachables, are made from glass that has low compound adsorption, and the highest level of standards and certification available in the marketplace. Whether you have routine and robust samples, or you need to ensure the highest level of confidence and compliance, our market leading portfolio of storage and autosampler vials and closure, well plates and sample handling accessories has everything you'll need.



## Low-flow LC columns and accessories

Low-flow chromatography is ideal when detailed sample information is required from small sample volumes, such as proteomics and intact protein analysis. The Thermo Scientific range of nano-, capillary-, and micro-flow columns offer excellent sensitivity and resolution in easy-to-use formats.



## BioLC columns and accessories

Achieve ultrahigh resolution and high efficiency separations of proteins, peptides, monoclonal antibodies, biosimilars, carbohydrates, oligonucleotides and more. Our unique column chemistries for biological samples have a long-standing reputation for providing excellent reproducibility and durability under a broad range of pH, temperature, and mobile phase compositions.



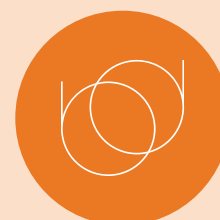
## LC columns and accessories

As a leader in LC column technology including silica, polymer and porous graphitic carbon manufacturing, bonded phase production and column packing for 40 years, you can rely on the quality of Thermo Scientific high performance liquid chromatography (HPLC) products: a comprehensive range of innovative columns, accessories and equipment for fast and reproducible analytical and prep HPLC and ultra-high performance liquid chromatography (UHPLC) analysis.



## GC columns and accessories

We offer a broad portfolio of GC columns and accessories designed to give optimal system performance for today's challenging analyses. Our range of GC accessories include all the tools needed by today's gas chromatographers.



# Product selection tools and additional resources

## Sample handling selection guide



### 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.



SureSTART™ Selection Guide

Selecting your vial and well plate has never been easier.

**About this guide**

Have you ever struggled with finding the right sample handling solution for your application? You will struggle no longer! This simple guide will find the perfect solution product for you in just a few clicks.

[Get started](#)

- Application specific vials**  
Ensure what goes into the well comes out - and that the well you choose is fit for purpose for your application set-up. This guide will take you right to your vial.
- Plates for high throughput**  
If you are a high throughput lab you may be interested in finding a plate rather than a vial to speed up your throughput. As plate compatibility is dependent on your instrument this guide will find the plate that works with your instrument type.
- Low cost vials at your fingertips**  
Find the correct vial for your application - and budget. If cost is a key purchasing criteria for you then we've got you covered as this guide takes all your lab requirements into consideration.

## Sample handling cross reference tool



### Already purchasing an existing product from us or someone else?

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



SureSTART Cross Reference Tool

Designed for cross referencing chromatography vials, caps and inserts, finding an equivalent product is easy. Using this cross-reference tool, there are 2 easy options for you to find an equivalent Thermo Scientific™ SureSTART™ product. All you need to know is your current catalogue number/ part number.

**Option 1: Input SKUs Directly**

Either type or copy/paste a list of SKUs into the text field below:

**Option 2: Upload CSV**

Upload the spreadsheet:  Don't have a data file? [Download a sample .csv file](#)

# Product selection tools and additional resources

## Septa selection tool

? **Choosing the right septa can be complex!**  
There are a number of factors that should be considered including: needle type, vial type, solvents and temperature that the septa will be exposed to. Let us help you find the right septa with this easy-to-use tool.



## LC columns selection guide

? **Find your columns with ease!**  
Finding the correct column can be a challenge, so we have made it easy for you. This guide will take you directly to the right product for you, so that you can start your method today.



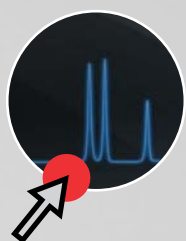
# More information



## Chromatography columns and consumables

For more information on our range of chromatography columns and consumables, including the latest applications, educational resources, selection guides and product literature, please visit

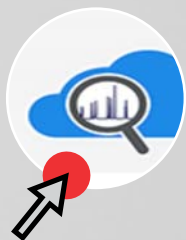
[thermofisher.com/chromatographyconsumables](https://thermofisher.com/chromatographyconsumables)



## Instrumentation and key applications

For more information on our instrumentation and key applications, please visit

[thermofisher.com/chromatography](https://thermofisher.com/chromatography)



## AppsLab

Gain access to our applications expertise on cloud-based Thermo Scientific™ AppsLab library of analytical applications for a comprehensive fully searchable method repository

[appslab.thermofisher.com](https://appslab.thermofisher.com)



## Webinars

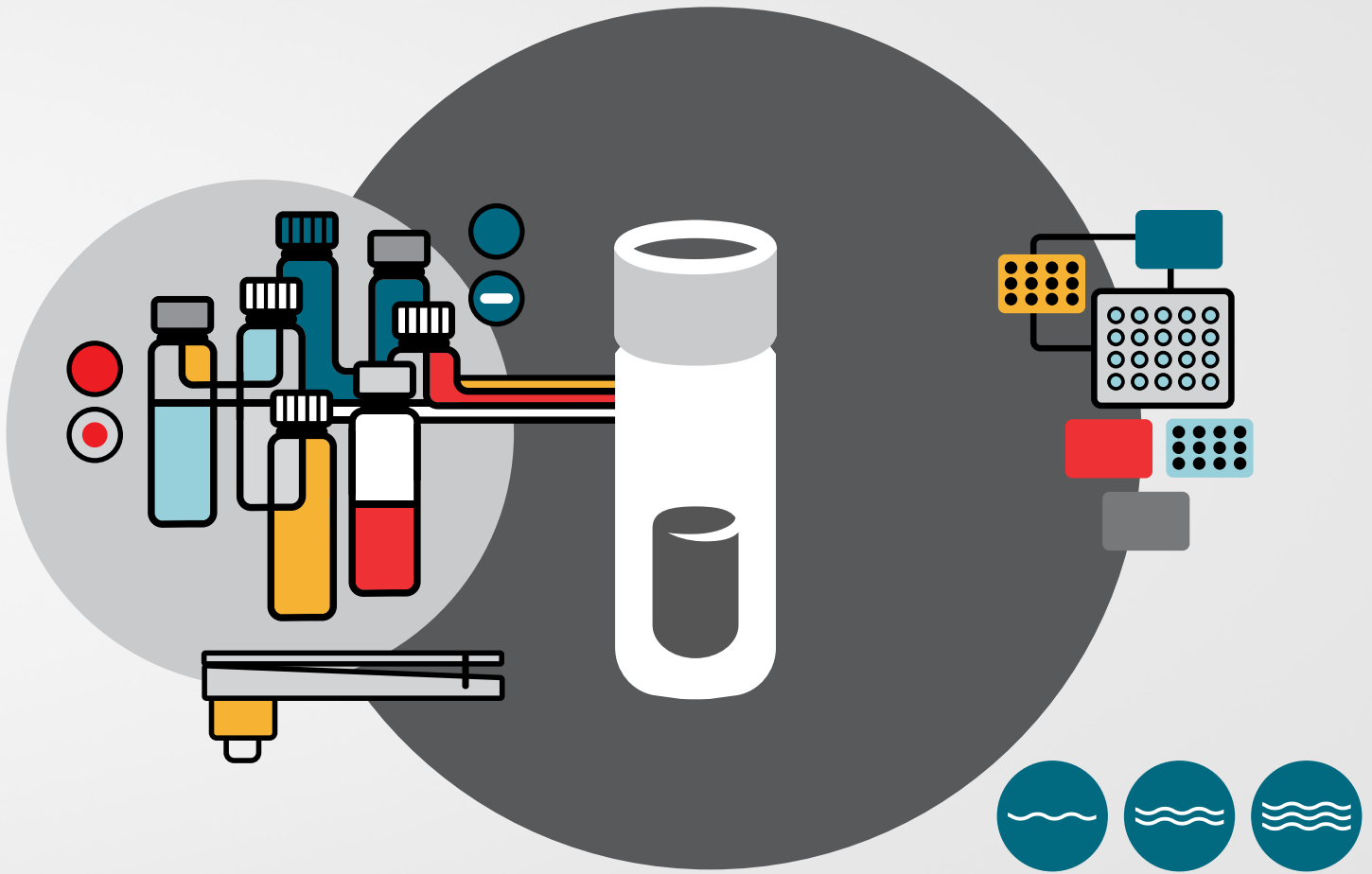
Analytical and life science webinars live and on-demand



## NIBRT collaboration information

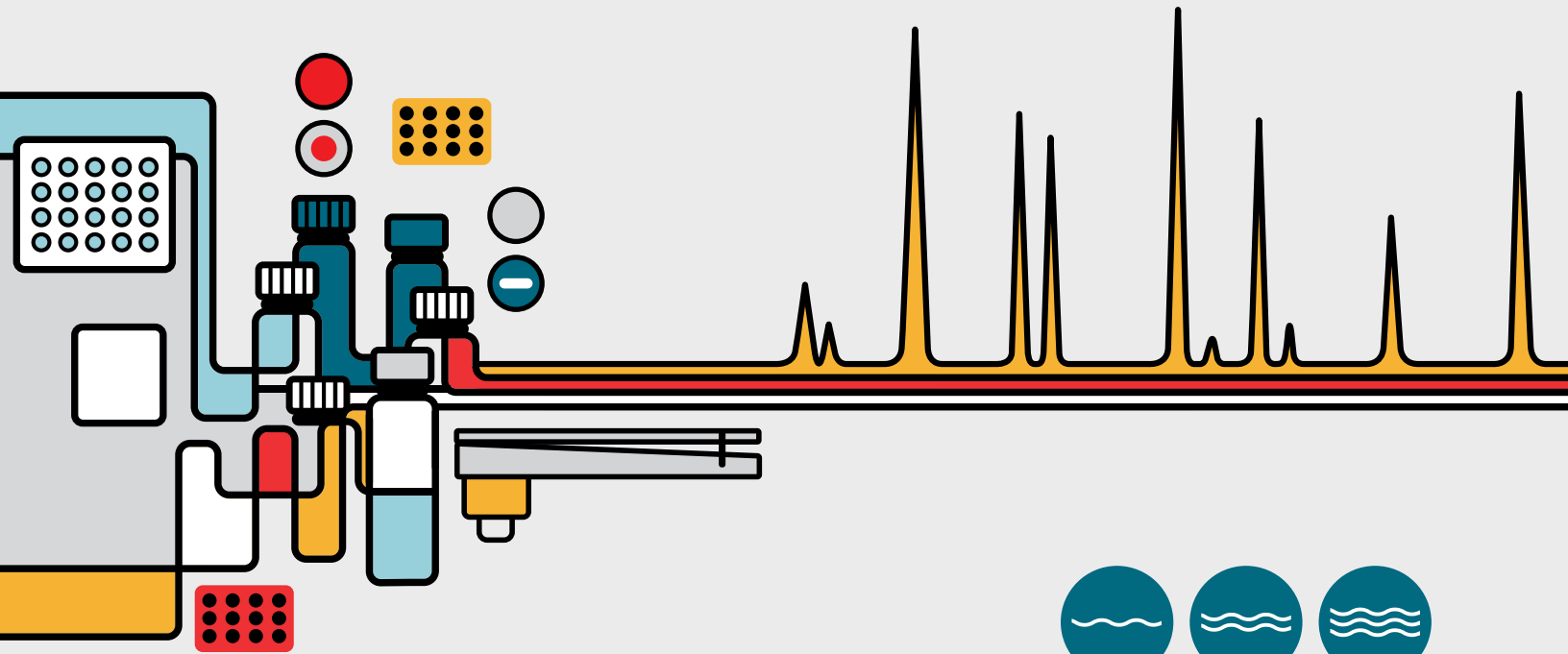
A collaboration built for Biopharma between the National Institute for Bioprocessing Research and Training (NIBRT) and Thermo Fisher Scientific

[thermofisher.com/nibr](https://thermofisher.com/nibr)



## SureSTART collection

Streamlined choice. Trusted quality





# Introduction

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

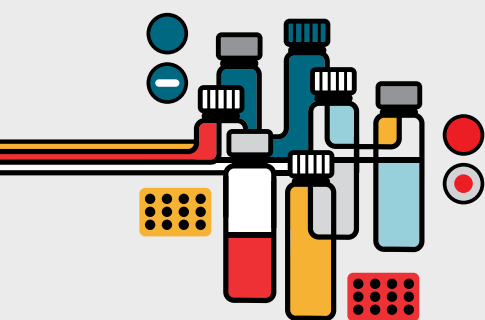
## Excellence from start to finish

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 Scientific™, Thermo Scientific™ Chromacol™ and Thermo Scientific™ Sun-SRI™ product names.

All these products are 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—and a write-on patch that comes as standard. Making it easier for analysts to select the right product and have it labelled correctly right from the start.

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.



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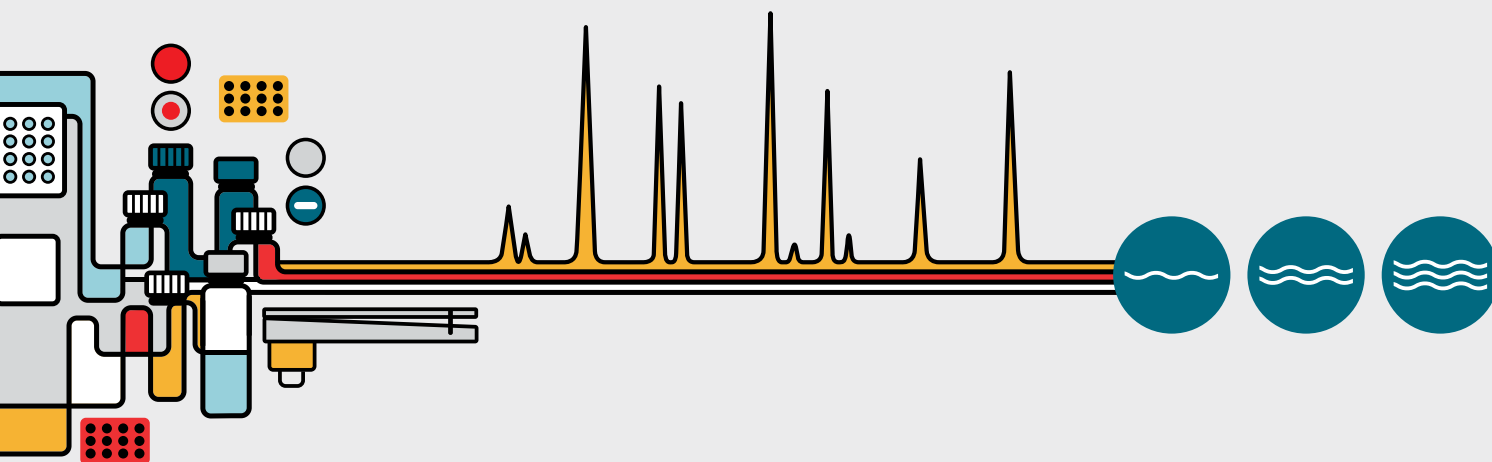
# Why Thermo Scientific SureSTART collection?

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	Comments
 <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.



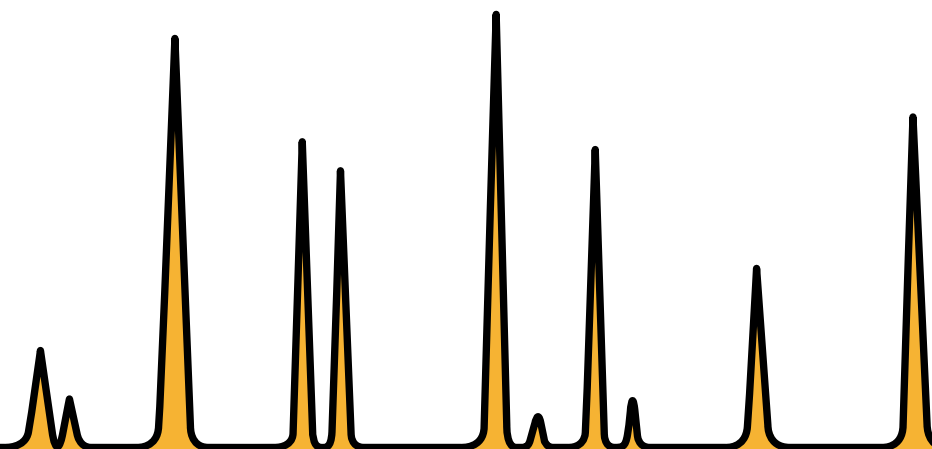
**Performance level 1**  
Everyday analysis:  
Chromatography approved



**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.



**SureSTART™ Selection Guide**

Selecting your vial and well plate has never been easier.

**About this guide**

Have you ever struggled with finding the right sample handling solution for your application? You will struggle no longer! This simple guide will find the perfect solution product for you in just a few clicks.

[Get started](#)

- Application specific vials**  
Ensure what goes into the vial comes out – and that the vial you choose is fit for purpose for your application set up. This guide will take you right to your vial.
- Plates for high throughput**  
If you are a high throughput lab you may be interested in finding a plate rather than a vial to speed up your throughput. As plate compatibility is dependent on your instrument this guide will find the plate that work with your instrument type.
- Low cost vials at your fingertips**  
Find the correct vial for your application - and budget. If cost is a key purchasing criteria for you then we've got you covered as this guide takes all your lab requirements into consideration.



### Already purchasing a product?

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



**SureSTART Cross Reference Tool**

Designed for cross referencing chromatography vials, caps and inserts, finding an equivalent product is easy. Using this cross-reference tool, there are 2 easy options for you to find an equivalent Thermo Scientific™ SureSTART™ product. All you need to know is your current catalogue number/ part number.

**Option 1: Input SKUs Directly**

Either type or copy/paste a list of SKUs into the text field below

**Option 2: Upload CSV**

[Choose file](#) [Don't have a data file? Download a sample .csv file](#)

# 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>*Silanised 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?
Good resealability required	-40°C to 120 °C	-40°C to 110 °C	-60°C to 200 °C	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



## Septa Selection Tool

An easy-to-use tool that ensures you find the right septa for your experimental requirements.

### About this tool

Choosing the right septa can be complex. There are a number of factors that should be considered including: needle type, vial type, and solvents and temperature that the septa will be exposed to. Let us help you find the right septa for your requirements with this easy-to-use tool.

[Get Started](#)

### Why use the Septa Selection Guide?

**Needle / autosampler issues**

If you are experiencing needle or autosampler issues (e.g. needle bending or blocking...) you may need to change the type of septa you are using.

You may need to consider a pre-slit septa or changing the hardness and / or thickness of your current septa.

**Septa compatibility with solvents.**

If you are having reproducibility issues it might be down to your septa. Some septa are better for non-polar solvents and others are more suitable for polar solvents.

**New experimental parameters**

Are you doing a new experiment and can't decide whether your current septa is suitable?

# 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

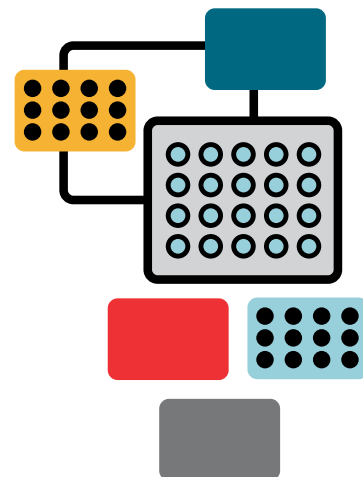
# Certified integrity and consistency



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 US FDA, USP, and EU Pharmacopeia standards
- Chemically and thermally resistant well plates are made of the highest quality materials.
- Our autosampler WebSeal well-plates 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 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).

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	—

### 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



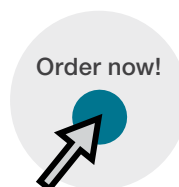
### Comments

- 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
Available packs		
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

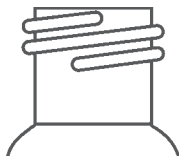
Performance Level 1 for everyday analysis



#### Comments




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

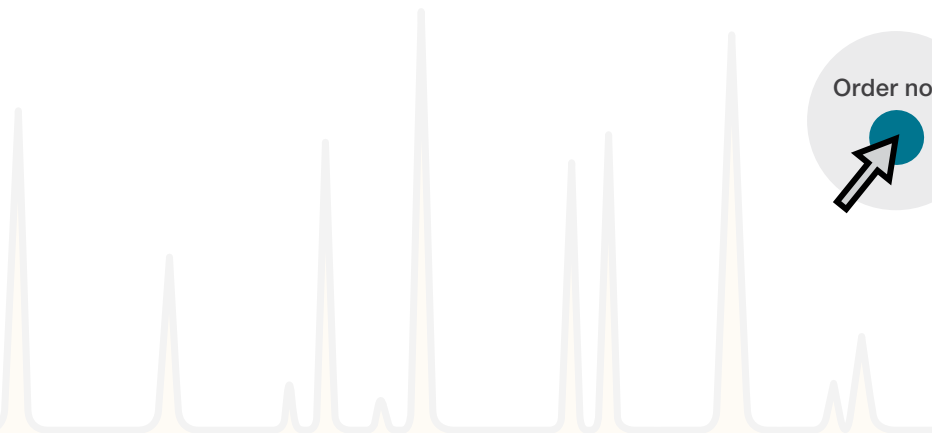
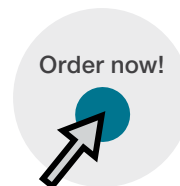
For use with 9 mm screw caps, or 9 mm AVCS screw caps



Vial color and material	Clear glass	Amber glass
Total volume	2 mL	
Usable volume	1.5 mL	
Residual volume	170 µL	



Available packs		
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

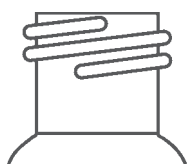
Performance Level 1 for everyday analysis



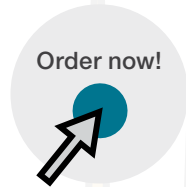
#### Comments

- Short thread screw
- 9 mm
- Specification certified

For use with <2 mL and 2 mL screw vials



Cap color and material	—	—	—	—	Bonded	Bonded
	—	—	—	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
Septum thickness	1 mm					
Septum hardness	60 shore	45 shore	55 shore	55 shore	45 shore	45 shore
<b>Available packs</b>						
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>
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

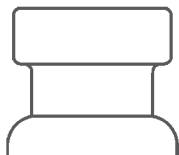
Performance Level 1 for everyday analysis



#### Comments




- 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	



Available packs		
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>

Order now!







# Crimp vials and associated caps Continued

## (2 mL, 11 mm caps)

### 11 mm crimp caps

Performance Level 1 for everyday analysis

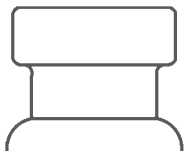


#### Comments

- 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



Available packs		
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 crimpers and decrimpers
- Electronic crimpers and decrimpers





# Snap vials and associated caps

(<2 mL vials, 11 mm caps)

## <2 mL polypropylene snap microvials

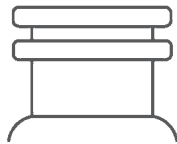
Performance Level 1 for everyday analysis



### Comments




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

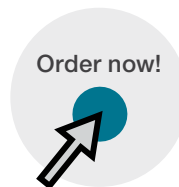
For use with 11 mm snap caps



	Clear polypropylene		
Vial color and material	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



Available packs				
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

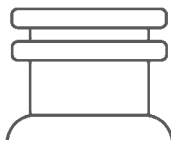
Performance Level 1 for everyday analysis




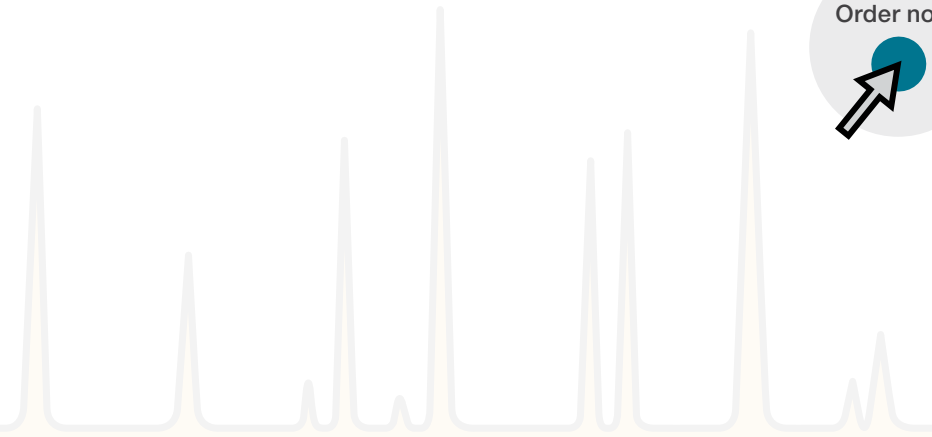
#### Comments

- 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 membrane cap
Septum color and material	Membrane thickness 0.5 mm
Septum thickness	This cap comes with no septa
Septum hardness	
<b>Available packs</b>	
100/pack 	<a href="#">6ERC11PE</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



#### Comments




- 6 mm x 31 mm (diameter x height) (size x height) conical with polyspring base
- 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	Clear glass with clear polypropylene polyspring
Total volume	0.30 mL
Usable volume	0.25 mL
Residual volume	4 µL



Available packs	
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

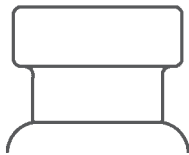
Performance Level 1 for everyday analysis





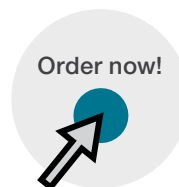
### Comments

- Crimp
- 22.50 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
<b>Available packs</b>	
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

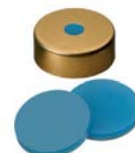
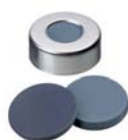
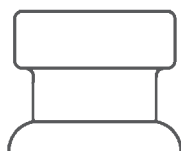
Performance Level 1 for everyday analysis



#### Comments

- 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	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			
Septum hardness	50 shore	45 shore	50 shore	45 shore
<b>Available packs</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="#">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 crimpers and decrimpers
- Electronic crimpers and decrimpers





# Stoppers

## 20 mm stopper

Performance Level 1 for everyday analysis



### Comments

- Specification certified

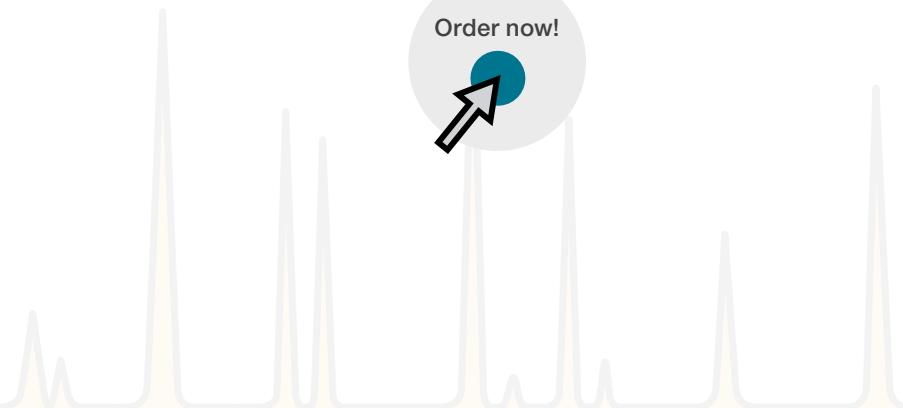
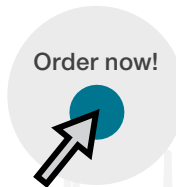
For use with vials (e.g. 10 mL/20 mL crimp vials) with diameter neck size of 20 mm



Product description	Stopper (20 mm)
Color and material	Grey bromobutyl
Septum thickness	3 mm
Septum hardness	45 shore



Available packs	
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>



# Performance level 2: High-throughput analysis

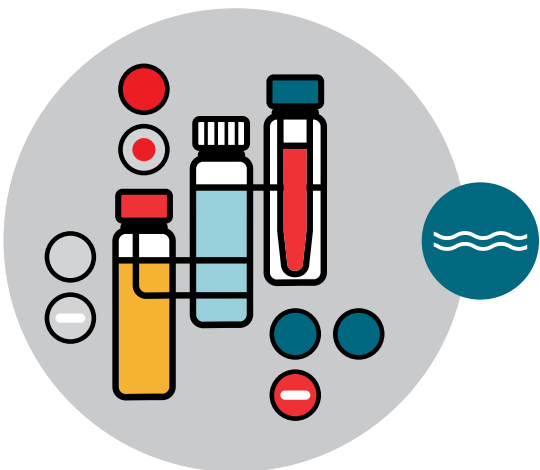
## When robustness and reproducibility are key

### 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 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 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

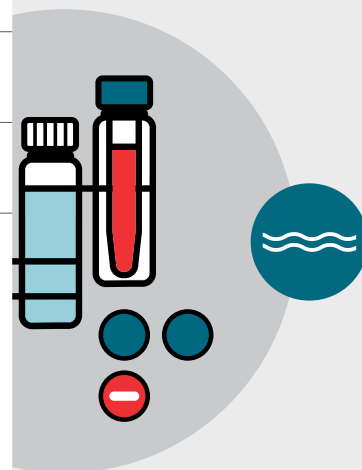
#### Lot traceable

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



# Performance level 2: High-throughput analysis

Vials	Caps
1.7 mL glass high recovery screw microvials for <2 mL sample	9 mm screw caps
2 mL glass screw vials	11 mm crimp caps
2 mL glass crimp vials	11 mm snap caps 11 mm crimp caps
Inserts for 2 mL vials	—
4 mL glass screw vials	13 mm screw caps
10 mL glass screw vials	
10 mL glass crimp headspace vials	20 mm crimp caps
20 mL glass screw vials	
20 mL glass crimp headspace vials	
20 mm stoppers and septa	
Kits	
Specification certified	EPA
Scintillation	—





# Screw vials and associated caps

(<2 mL – 2 mL vials, 9 mm caps)

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

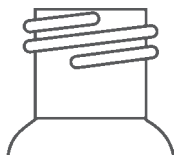
Performance Level 2 for high-throughput applications



### Comments




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

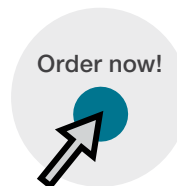
For use with 9 mm screw caps, or 9 mm AVCS screw caps



Vial color and material	Clear glass
Total volume	1.7 mL
Usable volume	1.3 mL
Residual volume	4 µL



Available packs	
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

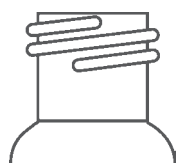
Performance Level 2 for high-throughput applications



#### Comments

- 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	Amber glass, silanized
Total volume		2.0 mL	
Usable volume		1.5 mL	
Residual volume		170 µL	



#### Available packs

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 screw caps

Performance Level 2 for high-throughput applications



### Comments

- Short thread screw
- 9 mm
- Specification certified

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
Septum thickness	1 mm					
Septum hardness	45 shore	45 shore	45 shore	45 shore	45 shore	45 shore



### Available packs

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>



# Crimp vials and associated caps

## (2 mL vials, 11 mm caps)

### 2 mL glass crimp vials

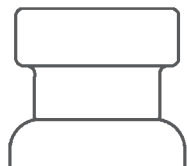
Performance Level 2 for high-throughput applications



#### Comments

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

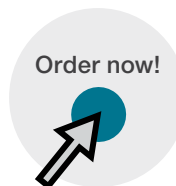
For use with 11 mm crimp caps, or 11 mm snap caps



Vial color and material	Clear glass	Amber glass
Total volume	2 mL	
Usable volume	1.7 mL	
Residual volume	170 µL	



Available packs		
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

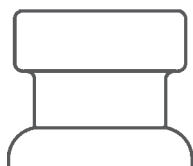
Performance Level 2 for high-throughput applications



#### Comments




- 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/ivory PTFE
Septum thickness	1 mm	
Septum hardness	45 shore	60 shore



Available packs		
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 crimpers and decrimpers
- Electronic crimpers and decrimpers





# Snap vials and associated caps

(2 mL vials, 11 mm caps)

## 2 mL glass snap vials

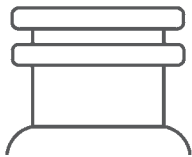
Performance Level 2 for high-throughput applications



### Comments




- 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	



Available packs		
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

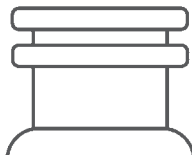
Performance Level 2 for high-throughput applications



#### Comments

- Snap closure (11 mm)
- Specification certified

For use with 11 mm glass or plastic snap vials

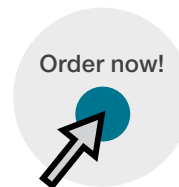


Cap color and material	Blue polyethylene	Blue polyethylene	Red polyethylene	Red polyethylene
Septum color and material	White silicone/ red PTFE	Natural rubber/ clear TEF	White silicone/ red PTFE	Natural rubber/ clear TEF
Septum thickness	1 mm			
Septum hardness	45 shore	60 shore	55 shore	60 shore



#### Available packs

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>







# Screw vials and associated caps

## (4 mL vials, 13 mm caps)

### 4 mL glass screw vials

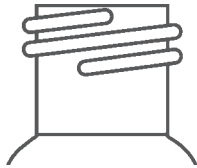
Performance Level 2 for high-throughput applications



#### Comments

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

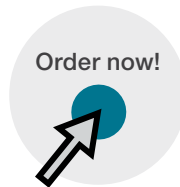
For use with 13 mm screw caps



Vial color and material	Clear glass	Amber glass
Total volume	4.0 mL	
Usable volume	3.5 mL	
Residual volume	800 µL	



Available packs		
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

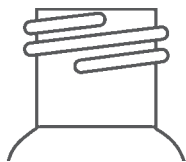
Performance Level 2 for high-throughput applications



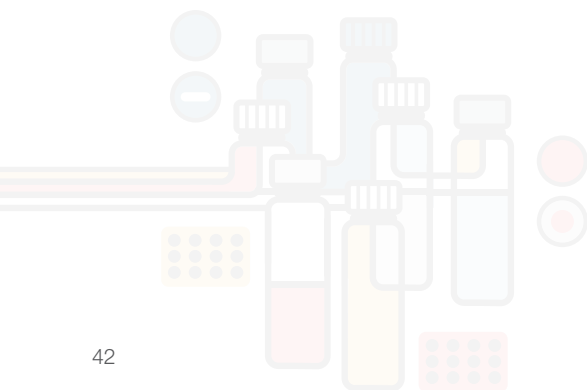
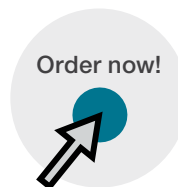
#### Comments

- 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
Septum thickness	White silicone/red PTFE	White silicone/blue PTFE
Septum hardness	1.5 mm	
Available packs	55 shore	45 shore
100/pack	<a href="#">6ASC13ST15</a>	<a href="#">6PSC13STS15W</a>





# Screw vials and associated caps Continued

## (4 mL vials, 13 mm caps)

### 10 mL glass screw headspace vials

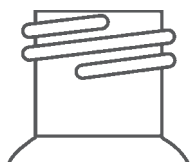
Performance Level 2 for high-throughput applications



#### Comments

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

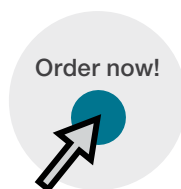
For use with 18 mm screw caps



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



Available packs		
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>





# Screw vials and associated caps Continued

## (4 mL vials, 13 mm caps)

### 20 mL glass screw headspace vials

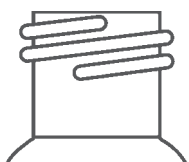
Performance Level 2 for high-throughput applications



#### Comments




- Screw
- 22.5 mm x 75 mm (diameter x height) round bottom base
- Marking spot
- Specification certified

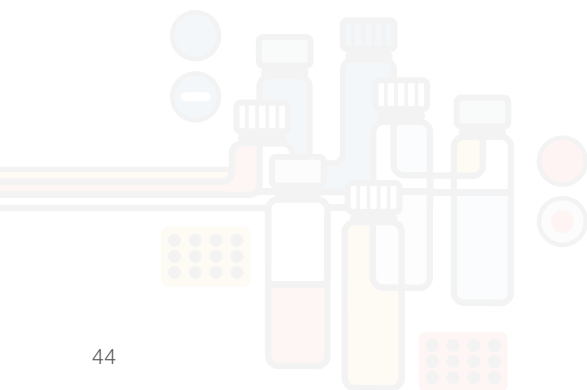
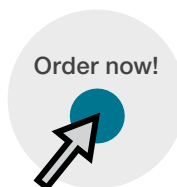
For use with 18 mm screw caps



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



Available packs		
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>





# Headspace crimp vials and associated caps

(10 mL – 20 mL vials, 20 mm caps)

## 10 mL glass crimp headspace vials

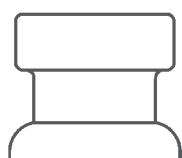
Performance Level 2 for high-throughput applications



### Comments

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

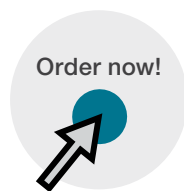
For use with 20 mm crimp caps



Vial color and material	Clear glass	Amber glass
Total volume	10 mL	
Usable volume	8 mL	
Residual volume	0.8 mL	



Available packs		
100/pack		<a href="#">6ACV10-1R</a> <span style="margin-left: 150px;"><a href="#">6ACV10-2R</a></span>
10 x 100/pack		<a href="#">6ACV10-1RT</a> <span style="margin-left: 150px;"><a href="#">6ACV10-2RT</a></span>
50 x 100/pack		<a href="#">6ACV10-1RF</a> <span style="margin-left: 150px;"><a href="#">6ACV10-2RF</a></span>





# 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



#### Comments

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

For use with 20 mm crimp caps



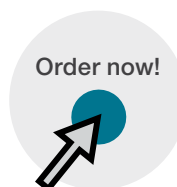
Vial color and material	Clear glass		Amber glass
Vial diameter and length	22.50 x 75.0	23.00 x 75.5	23.00 x 75.5
Total volume	20 mL		
Usable volume	18 mL		
Residual volume	0.8 mL		



#### Available packs

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 Perkin-Elmer 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



### Comments

- 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
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



### Available packs

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 crimpers and decrimpers
- Electronic crimpers and decrimpers





# Stoppers and septa

## 20 mm stoppers and septa

Performance Level 2 for high-throughput applications



### Comments




- Specification certified

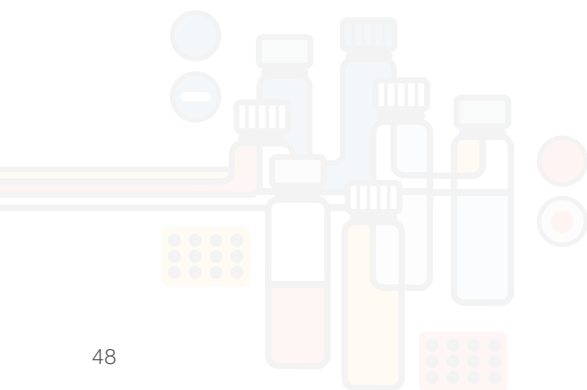
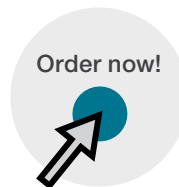
For use with vials (e.g. 10 mL/20 mL crimp vials) with diameter neck size of 20 mm



Product description	Stopper (20 mm)	Septum (20 mm)
Color and material	Grey bromobutyl	White silicone/beige PTFE
Septum thickness	3.0 mm	3.2 mm
Septum hardness	45 shore	



Available packs		
100/pack 	<a href="#">6A20BS</a>	<a href="#">6A20ST1</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>







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

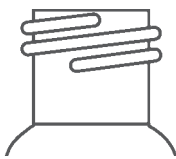
## Specification certified screw vial and cap kits


Performance Level 2 for high-throughput applications

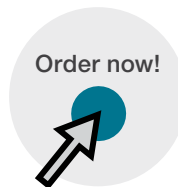


### Comments

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



Key attributes	AVCS				
Vial color and material	Clear glass	Amber glass	Clear glass	Clear glass	Amber glass
Vial total volume	2 mL				
Cap color and material	Blue polypropylene				
Septum color and material	Red silicone/ ivory PTFE	Red silicone/ ivory PTFE	Red PTFE/white silicone/red PTFE	White silicone/ red PTFE	White silicone/ red PTFE
Available packs					
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

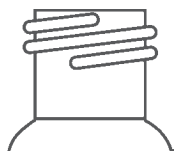
## Specification certified screw vial and cap kits Continued

Performance Level 2 for high-throughput applications

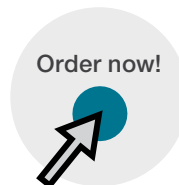


### Comments

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



<b>Key attributes</b>	SureStop/ AVCS	SureStop/ AVCS	AVCS	AVCS	Bonded	Bonded
	–	–	Soft septa	Preslit septa	Preslit septa	–
<b>Vial color and material</b>	Clear glass	Amber glass	Clear glass	Clear glass	Clear glass	Clear glass
<b>Vial total volume</b>	2 mL					
<b>Cap color and material</b>	Blue polypropylene	Blue polypropylene	Blue polypropylene	Blue polypropylene	Grey polypropylene	Black polypropylene
<b>Septum thickness</b>	White silicone/ red PTFE	White silicone/ red PTFE	Blue silicone/ clear PTFE	White silicone/ blue PTFE	White silicone/ red PTFE	White silicone/ red PTFE
<b>Available packs</b>						
100/pack	<a href="#">6AK592W</a>	<a href="#">6AK594W</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

## EPA screw vial and cap kits

Performance Level 2 for high-throughput applications

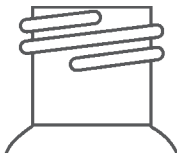


### Comments

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

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.

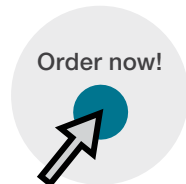
EPA Screw Vials convenience kits are recommended for discrete water sampling under EPA 40 CFR 136 “Guidelines for Establishing Test Procedures for the Analysis of Pollutants” and EPA 40 CFR 141 “National Interim Primary Drinking Water Regulations: Control of Trihalomethanes in Drinking Water”.



Vial color and material	Clear glass	Amber glass	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)			White screw cap (PP) (15 mm)		
Septum color and material	PE foam/white PTFE closed top					



Available packs							
100/pack		<a href="#">6AK4CCT</a>	<a href="#">6AK4ACT</a>	–	–	–	–
2 x 100/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

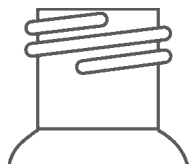
## EPA screw vial and cap kits Continued



Performance Level 2 for high-throughput applications

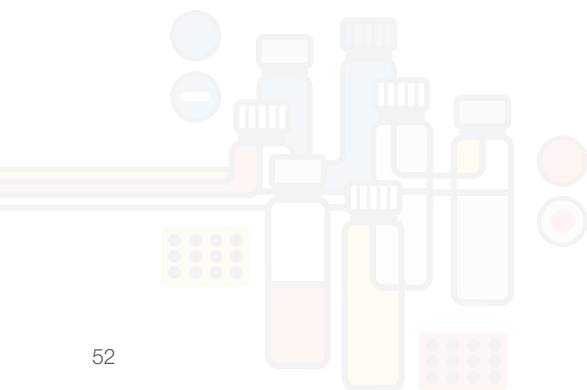
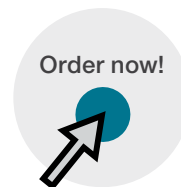


### Comments

- 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	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)	
Septum color and material	PE foam/white PTFE closed top			
<b>Available packs</b>				
100/pack 	—	—	<a href="#">6AK20CCTAS</a>	<a href="#">6AK20ACTAS</a>
2 x 100/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



### Comments

- 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)			
Septum color and material	Clear silicone/white open top		PE foam/white PTFE closed top	



<b>Available packs</b>					
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 screw cap			
Septum color and material	Silver polypropylene foil			
<b>Available packs</b>				
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, whilst maintain 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 silanised 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

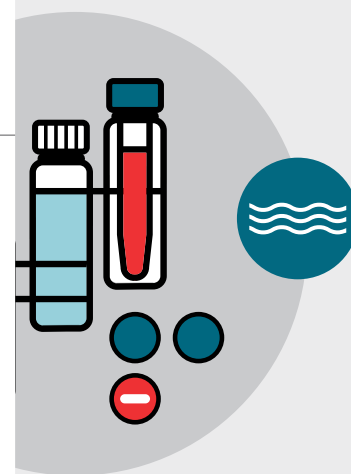
- All Thermo Scientific SureSTART vials are dimensionally verified.
- Inspected by automated optical and gauge inspection to ensure critical dimensions and tolerances.
- Meet all relevant requirements of US, EU, JPN Pharmacopeia.
- Uniform and defect-free

### 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 microvials	
1.5 mL total recovery glass screw microvials	
1.7 mL high recovery glass screw microvials	9 mm screw caps
2 mL glass screw vials	
2 mL GOLD-grade glass screw vials	
Glass crimp microvials	
2 mL GOLD-grade glass crimp vial	
2 mL glass crimp vials	11 mm crimp caps
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	MSCERT and MSCERT+
TOC	—





# 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

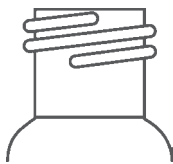
Performance Level 3 for high performance analysis




### Comments

- 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
Available packs	
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



#### Comments

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

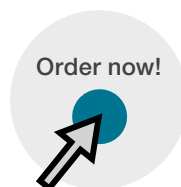
For use with 9 mm screw caps, or 9 mm AVCS screw caps



Vial color and material	Clear glass	Amber glass
Total volume	300 µL	
Usable volume	250 µL	
Residual volume	4 µL	



Available packs		
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="#">6PSV9-03FIVAPF</a>





# Screw vials and associated caps Continued

## (<2 mL – 2 mL vials, 9 mm caps)

### 1.5 mL total recovery glass screw microvial

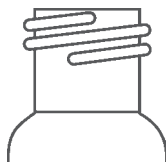
Performance Level 3 for high performance analysis



#### Comments


- Short thread screw
- 12 mm x 32 mm (diameter x 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
Total volume	1.5 mL
Usable volume	1.1 mL
Residual volume	1 µL



<b>Available packs</b>	
100/pack 	<a href="#">6PSV9-TR1</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

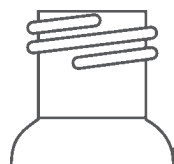
Performance Level 3 for high performance analysis



#### Comments

- 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



Available packs	
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

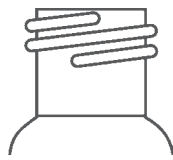
Performance Level 3 for high performance analysis






#### Comments

- 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
<b>Available packs</b>	
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



Comments
<ul style="list-style-type: none"> <li>• Screw</li> <li>• 12 mm x 32 mm (diameter x height) flat bottom base</li> <li>• Marking spot</li> <li>• Specification certified</li> </ul>
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			



Available packs		6PSV9-1P	6PSV9-S1P	6PSV9-1PSS	6PSV9-2PSS
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 Continued

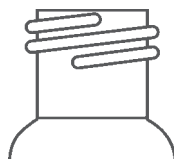
Performance Level 3 for high-throughput applications



#### Comments

- Short thread screw
- Specification certified

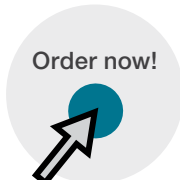
For use with <2 mL - 2 mL screw vials



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



Available packs						
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

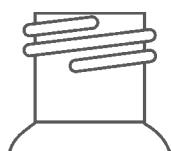
Performance Level 3 for high-throughput applications



### Comments

- Short thread screw
- Specification certified

For use with <2 mL - 2 mL screw vials



	AVCS cap	AVCS cap	Bonded cap	Bonded cap	AVCS cap
Cap components	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				
<b>Available packs</b>					
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

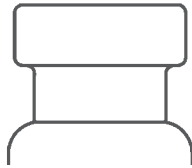
Performance Level 3 for high performance analysis



### Comments




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

For use with 11 mm crimp caps

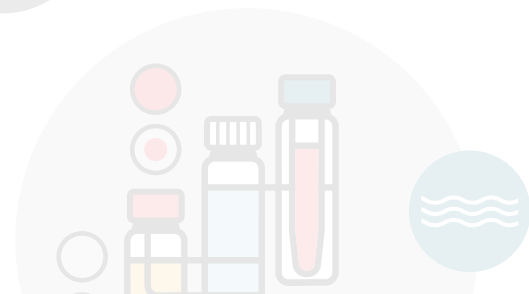


Vial color and material	Clear glass	Amber glass
Total volume	300 µL	
Usable volume	250 µL	
Residual volume	4 µL	



Available packs		
100/pack 	<a href="#">6PCV11-03FIVP</a>	<a href="#">6PCV1103FIVAP</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>

Order now!







# Crimp vials and associated caps Continued

## (<2 mL – 2 mL, 11 mm caps)

### 2 mL GOLD-grade crimp vials

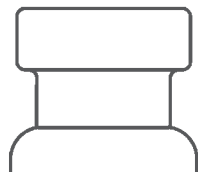
Performance Level 3 for high performance analysis




#### Comments

- 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
Available packs	
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

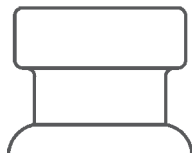
Performance Level 3 for high performance analysis






#### Comments

- 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
<b>Available packs</b>	
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

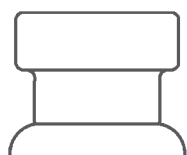


#### Comments

- 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	—	Soft septa	Soft septa
Septum thickness	—	—	Magnetic cap, pre-slit
Septum color and material	Red PTFE/ white silicone/red PTFE	Silver aluminium	Silver magnetic steel
Septum thickness	—	1 mm	—
Septum hardness	45 shore	30 shore	30 shore
<b>Available packs</b>			
100/pack	<a href="#">6PCC11TST</a>	<a href="#">6PCC11ST101</a>	<a href="#">6PCCMST101X</a>



#### Learn more about:

- Manual crimpers and decrimpers
- Electronic crimpers and decrimpers





# Snap vials and associated caps

(<2 mL – 2 mL vials, 11 mm caps)

## Glass snap microvials

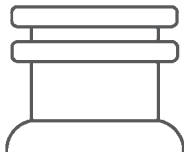
Performance Level 3 for high performance analysis



### Comments

- 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



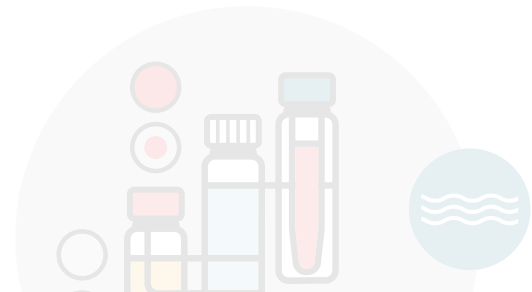
Vial color and material	Clear glass	Amber glass
Total volume	300 µL	
Usable volume	250 µL	
Residual volume	4 µL	



### Available packs

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>

Order now!





# Snap vials and associated caps Continued

## (<2 mL – 2 mL vials, 11 mm caps)

### 1.5 mL total recovery glass snap microvials

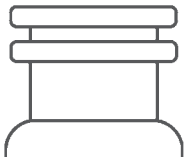
Performance Level 3 for high performance analysis



#### Comments

- 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

#### Available packs

100/pack



[6PRV11-TR1](#)

10 x 100/pack



[6PRV11-TR1T](#)

50 x 100/pack



[6PRV11-TR1F](#)

Order now!





# Snap vials and associated caps Continued

(<2 mL – 2 mL vials, 11 mm caps)

## High recovery glass snap microvials

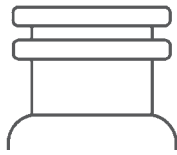
Performance Level 3 for high performance analysis



### Comments

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




For use with 11 mm snap caps

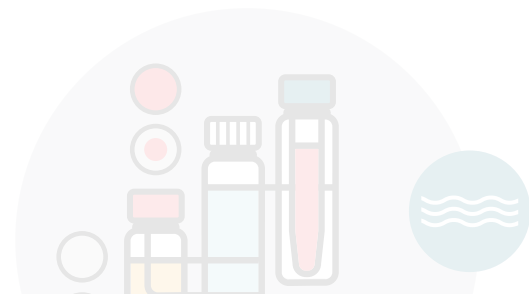
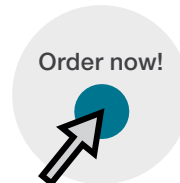


Vial color and material	Silanized glass	Clear glass
Total volume	1.7 mL	1.5 mL
Usable volume	1.5 mL	1.2 mL
Residual volume	4 µL	



### Available packs

100/pack 	<a href="#">6PRV11-S1V</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)

### Glass snap vials

Performance Level 3 for high performance analysis




Comments	
<ul style="list-style-type: none"> <li>• Snap</li> <li>• 12 mm x 32 mm (diameter x height)</li> <li>• Marking spot</li> <li>• Specification certified</li> </ul>	
For use with 11 mm snap caps	



Vial color and material	Clear glass
Total volume	2 mL
Usable volume	1.5 mL



Available packs	
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

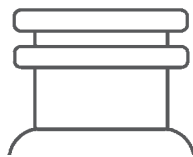
Performance Level 3 for high performance analysis



#### Comments

- Snap closure (11 mm)
- Specification certified

For use with <2 mL and 2 mL snap vials



Key attributes	Pre-slit	–	–	Star pre-slit	–	–	–	–
Cap color and material	Blue polyethylene	Blue polyethylene	Blue polyethylene	Clear polyethylene	Red polyethylene	Red polyethylene	Red polyethylene	Red polyethylene
Septum color and material	White silicone/blue PTFE	White silicone/red PTFE	Blue silicone/clear PTFE	White silicone/red PTFE	Red silicone/blue PTFE	White silicone/red PTFE	White silicone/red PTFE	Red silicone/clear PTFE
Septum thickness	54 shore	54 shore	45 shore	54 shore	54 shore	54 shore	54 shore	45 shore
Septum hardness	1 mm	1 mm	1 mm	1 mm	1.3 mm	1.3 mm	1.3 mm	1 mm



Available packs	
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> <a href="#">6PRC11ST1R</a> <a href="#">6PRC11ST1R</a> <a href="#">6PRC11ST101R</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> <a href="#">6PRC11ST1RT</a> <a href="#">6PRC11ST1RT</a> <a href="#">6PRC11ST101RT</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> <a href="#">6PRC11ST1RF</a> <a href="#">6PRC11ST1RF</a> <a href="#">6PRC11ST101RF</a>







# Inserts

## (2 mL vials)



Watch this short  
microsampling  
video

## Inserts for 2 mL vials

Performance Level 3 for high-throughput applications



### Comments

- 6 mm x 31 mm (diameter x 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	0.5mL clear flat bottom glass insert
Total volume	200 µL	300 µL	300 µL	400 µL	500 µL
Usable volume	150 µL	250 µL	250 µL	350 µL	450 µL
Residual volume	2 µL	4 µL	4 µL	4 µL	35 µL
Height	31 mm	30 mm	30 mm	31 mm	31 mm
Inner diameter	6 mm	6 mm	6 mm	6 mm	6 mm
Base style	Conical base	Conical base	Conical base	Conical base	Flat bottom



Available packs					
100/pack		—	<a href="#">6PME03C1SSP</a>	<a href="#">6PME03C1SP</a>	<a href="#">6PME04C1</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>

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

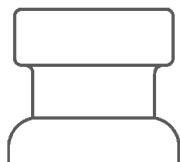
Performance Level 3 for high performance analysis



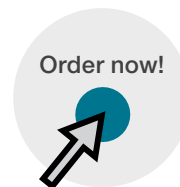
### Comments

- 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
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
Available packs				
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)

### 20 mm crimp caps

Performance Level 3 for high performance analysis

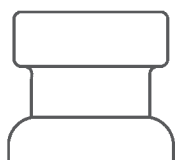





#### Comments

- 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



	—	Magnetic	Magnetic	Magnetic
Cap color and material	Silver aluminium	Red aluminium/ magnetic tinplate	Silver aluminium/ magnetic tinplate	Blue 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
Septum thickness	45 shore	45 shore	54 shore	54 shore
Septum hardness	3 mm	3 mm	3 mm	3 mm, 1.5 mm at thinned area
Available packs				
100/pack 	<a href="#">6PCC20-ST3</a>	<a href="#">6PBCC20-ST3</a>	<a href="#">6PBCC20-STH</a>	<a href="#">6PBCC20-STME</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 crimpers and decrimpers
- 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 very 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

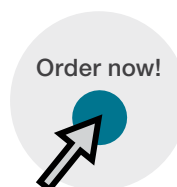
Performance Level 3 for high performance analysis



Comments
<ul style="list-style-type: none"> <li>• Short thread screw kit</li> <li>• 12 mm x 32 mm (diameter x height) fixed conical glass insert</li> <li>• No marking</li> <li>• Specification certified</li> </ul>
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
<b>Available packs</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



### Comments

- Short thread screw kit
- 12 mm x 32 mm (diameter x 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
Available packs	
100/pack	<a href="#">6PKG592W</a>

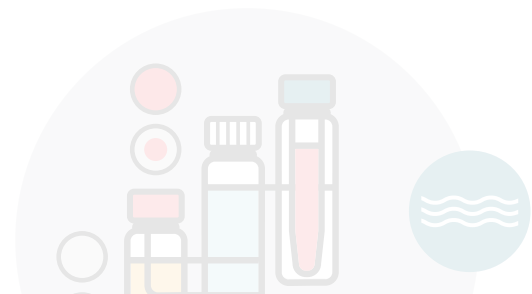


### Learn more about our quality materials:

- 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

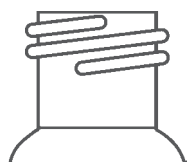
Performance Level 3 for high performance analysis



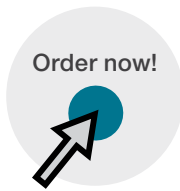
### Comments

- 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



	–	–	–	SureStop vials	SureStop vials	SureStop vials
Key attributes	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	
Septa thickness	1 mm					
Available packs						
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

## MSCERT kits

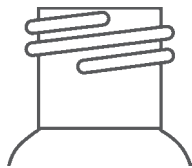
Performance Level 3 for high performance analysis



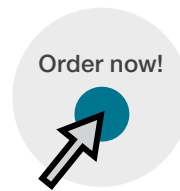
### Comments

- 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	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			
Available packs				
100/pack	<a href="#">6PMSCK534W</a>	<a href="#">6PMSCK535W</a>	<a href="#">6PMSCK540W</a>	<a href="#">6PMSCK541W</a>







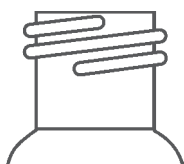
# Specification certified, LC/GC certified, MSCERT and MSCERT+ kits Continued

## MSCERT kits Continued

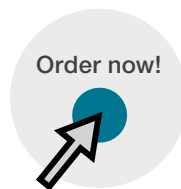
Performance Level 3 for high performance analysis



Comments				
<ul style="list-style-type: none"> <li>• Short thread screw kit</li> <li>• 12 mm x 32 mm (diameter x height) flat bottom base</li> <li>• Marking spot</li> <li>• MSCERT certified</li> </ul>				
For use with short thread screw cap closure				



Key attributes	Pre-slit septa			
	Bonded caps			
	—	—	SureStop vials	SureStop vials
Vial total volume	2 mL	—	—	—
Vial color and material	Amber 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			
Available packs				
100/pack	<a href="#">6PMSCK651W</a>	<a href="#">6PMSCK641W</a>	<a href="#">6PMSCK601W</a>	<a href="#">6PMSCK611W</a>





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

## MSCERT+ kits

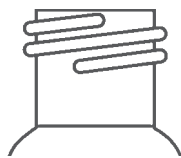
Performance Level 3 for high performance analysis



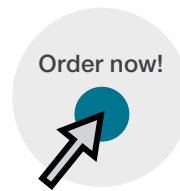
### Comments

- Short thread screw kit
- 12 mm x 32 mm (diameter x 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				
Available packs					
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

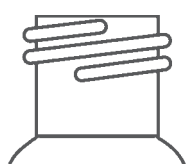
Performance Level 3 for high performance analysis



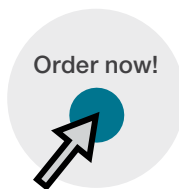
### Comments

- 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	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			
<b>Available packs</b>				
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

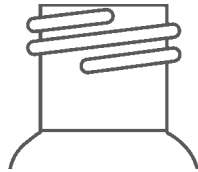
Performance Level 3 for high performance analysis



### Comments

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

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
Available packs	
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




### Comments

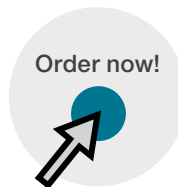
- TOC certification (20 ppb)
- TOC certification (10 ppb)

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)
<b>Available packs</b>		
72/pack 	<a href="#">6PK40TOC20</a>	<a href="#">6PK40TOC10</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	Red manual crimper	Red manual crimper	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
Available packs					
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>



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
Available packs					
1/pack 	—	<a href="#">60180-DCR13</a>	<a href="#">60180-DCR11</a>	—	<a href="#">60180-DCR20</a>





# 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



Product description	Electronic hand-held battery-operated crimper (black). Generation 4			
Suitable for	8 mm crimp caps	11 mm crimp caps	13 mm crimp caps	20 mm crimp caps
Available packs				
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



Product description	Electronic hand-held battery-operated decrimper (black). Generation 4			
Suitable for	—	11 mm crimp caps	13 mm crimp caps	20 mm crimp caps
Available packs				
1/pack	—	<a href="#">60180-EDCB11</a>	<a href="#">60180-EDCB13</a>	<a href="#">60180-EDCB20</a>

## Electronic crimper for FTFO and Flip-Off crimper



Product description	13 mm electronic crimper for FTFO	20 mm electronic Flip-Off crimper
Available packs		
1/pack	<a href="#">60180-ECR13FO</a>	<a href="#">60180-ECR20FO</a>





# Electronic crimpers and decrimping tools

Continued

## Electronic high-power programmable crimp station

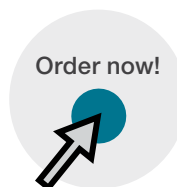


<b>Product description</b>	Electronic high-power crimp station (without crimp heads) (black). Generation 2		
<b>Available packs</b>			
1/pack	<a href="#">60180-ECRHB</a>		

## 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>Available packs</b>			
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>Available packs</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>Available packs</b>					
1/pack		<a href="#">ECMJ-8</a>	<a href="#">ECMJ-11</a>	<a href="#">ECMJ-13</a>	<a href="#">ECMJ-20</a>



	13 mm Flip-Off crimp head	20 mm Flip-Off crimp head	
<b>Available packs</b>			
1/pack		<a href="#">ECMJ-13FO</a>	<a href="#">ECMJ-20FO</a>



## Accessories for electronic high-power programmable decrimper

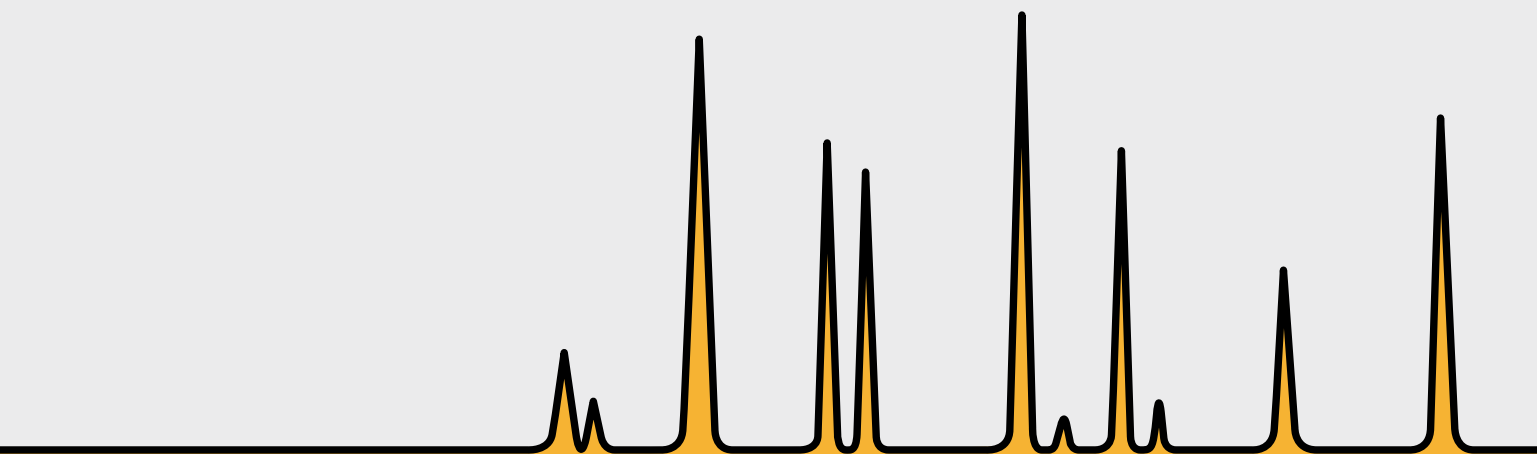
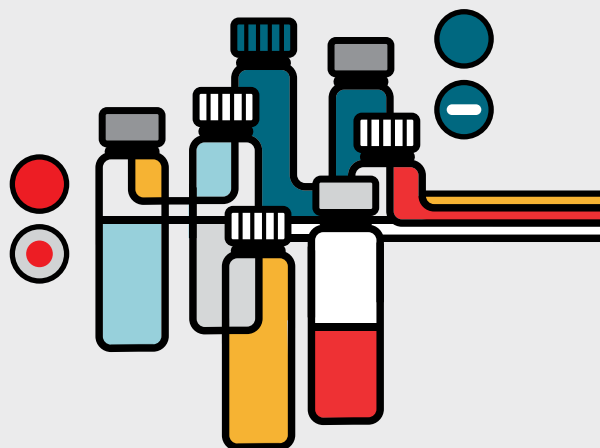


<b>Product description</b>	11 mm decrimp head	13 mm decrimp head	20 mm decrimp head	
<b>Available packs</b>				
1/pack		<a href="#">ECDJ-11</a>	<a href="#">ECDJ-13</a>	<a href="#">ECDJ-20</a>





Exchangeable jaw sets  
for crimping or decrimping of  
aluminum and stainless steel  
seals on various diameter vials



# 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

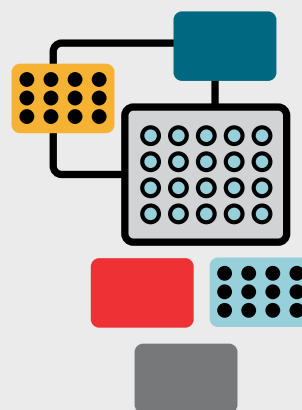
- Low volume and high recovery cavity

#### 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



#### Comments

- 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° 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



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
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		1300	50-1000	<a href="#">60180-P103</a>	5
	45.0	U-shape, 8 mm diameter, deep-well plate	2000	50-1900	<a href="#">60180-P133</a>	50
96 deep well plate, square well	31.0	U-shape, square, mid height plate	1600	50-1300	<a href="#">60180-P104</a>	5
	44.0	V-Shape, square, deep-well plate	2000	50-1900	<a href="#">60180-P124</a>	50
384 well microplate	15.5	V-Shape, square, micro titer plate	145	4-120	<a href="#">60180-P155</a>	96
	22.0	V-shape, square, mid-height plate	252	5-240	<a href="#">60180-P105</a>	5
	22.0	V-shape, square, mid-height plate			<a href="#">60180-P109</a>	10
				<a href="#">60180-P129</a>	100	
				<a href="#">60180-P107</a>	5	
				<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



#### Comments

- 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



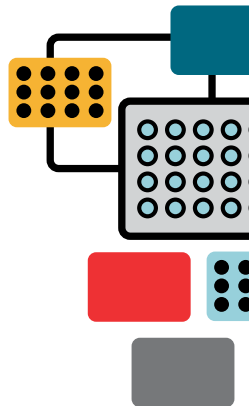


# Well plates and mats Continued

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		Silicone	96 round well, 8 mm diameter, flat base with cross		<a href="#">60180-M184</a>	50
WebSeal mats alcohol resistant), round well	Clear	EVA	96 round well, 8 mm diameter	No	<a href="#">60180-M101</a>	5
					<a href="#">60180-M171</a>	50
WebSeal CLR silicone mat, round well		Silicone	96 round well – flat base, 8 mm diameter, large penetration area		<a href="#">60180-M134</a>	
				Yes	<a href="#">60180-M183</a>	
WebSeal mats (solvent resistant), round well	Blue	Silicone/PTFE		No	<a href="#">60180-M102</a>	5
				Yes	<a href="#">60180-M103</a>	
WebSeal mats (alcohol resistant), square well		EVA	96 square well - flat base		<a href="#">60180-M177</a>	
				No	<a href="#">60180-M178</a>	50
					<a href="#">60180-M121</a>	
				Yes	<a href="#">60180-M123</a>	5
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
					<a href="#">60180-M126</a>	
				Yes	<a href="#">60180-M150</a>	5
					<a href="#">60180-M186</a>	50
Sealing tape, -40°C - 90°C		PE/silicone		No	<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)		Polyolefin/rubber	N/A	No	<a href="#">60180-M145</a>	
Re-sealing tape with 3 layer no adhesive at cavity area	Clear	PET/silicone/PET		Yes	<a href="#">60180-M146</a>	
					<a href="#">60180-M176</a>	25
Hand held sealing tape applicator	Gold	N/A		N/A	<a href="#">60180-M950</a>	2
Hand held mat applicator	Black				<a href="#">60180-M999</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



#### Comments

- Polypropylene microplates are manufactured from ultra low bleed high purity basis resin
- Plates are fully LOT 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

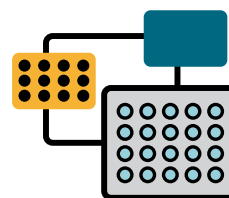
60180-P201



60180-P202



60180-P204







# Well plates and mats Continued

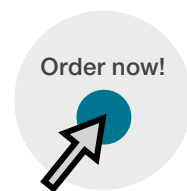
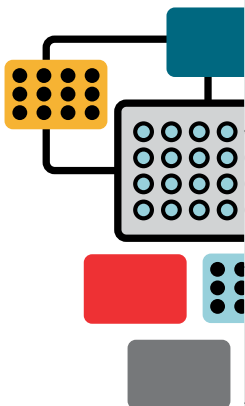
Performance Level 2 for high-throughput applications

## WebSeal well plates Continued

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
		Flat bottom, 7 mm diameter	350	10-300	<a href="#">60180-P205</a>	100
				10-300	<a href="#">60180-P215</a>	10
96 well microplate, round well	14.7	U-shape, 7 mm diameter	270	10-250	<a href="#">60180-P206</a>	100
					<a href="#">60180-P216</a>	10
		V-shape, 7 mm diameter	220	10-190	<a href="#">60180-P207</a>	100
					<a href="#">60180-P217</a>	10
96 well mid height plates, round well	41.6	U-shape, 7 mm diameter	1200	50-1100	<a href="#">60180-P201</a>	50
	41.6			<a href="#">60180-P211</a>	5	
96 deep well plate, square well	44.4	V-shape, 8 mm diameter	2000	50-1900	<a href="#">60180-P202</a>	50
				<a href="#">60180-P212</a>	5	
384 well microplate	14.4	U-shape, square, micro titer plate	58	2-35	<a href="#">60180-P203</a>	60
				<a href="#">60180-P213</a>	10	
	30.2	V-shape, square, deep well plate	300	5-240	<a href="#">60180-P204</a>	48
				<a href="#">60180-P214</a>	6	





# Well plates and mats Continued

Performance Level 2 for high-throughput applications

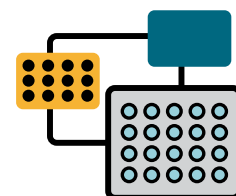
## WebSeal mats, non-sterile

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



### Comments

- 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°C
- Resists coring and tearing
- Superior resealability after multiple injections
- Available pre-slit for easy penetration and reduced vacuum formation



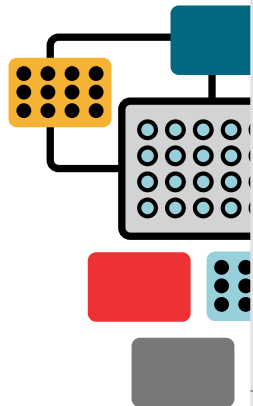


# Well plates and mats Continued

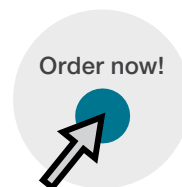
Performance Level 2 for high-throughput applications

## 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 mats (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>	
			384 square well, flat base with cross for 384 microtiter plates	No	<a href="#">60180-M186</a>	50
WebSeal mat (solvent resistant), round well			96 round well – flat base, step, 7 mm diameter	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>	
			384 square well for 384 well plates	No	<a href="#">60180-M122</a>	5
				Yes	<a href="#">60180-M125</a>	
WebSeal mat for Plate+			96 round well – dome base, 7.2 mm diameter	No	<a href="#">60180-M123</a>	
				Yes	<a href="#">60180-M124</a>	



# WebSeal Performance Level 3 products



## Well plates and mats

Performance Level 3 for high performance analysis

### WebSeal Plate+ Glass coated microplates



#### Comments

- 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	14.6	U-shape, 7.2 mm diameter	300	250	60180-P300	10
		V-shape, 7.2 mm diameter	220	190	60180-P302	
		Flat bottom, 7.2 mm diameter	370	300	60180-P304	
96 well mid height plate, round well	41.5	U-shape, 7.2 mm diameter	1.2 mL	1.0 mL	60180-P306	
96 deep well plate, square well	44.0	V-shape, 8 mm diameter	2.4 mL	2.0 mL	60180-P308	
384 well microplate	14.4	Square-rounded, flat, micro titer plate	120	90	60180-P310	
	22.0	Square-rounded, U-shape, deep well plate	240	180	60180-P312	6



# Well plates and mats Continued

## Performance Level 3 for high performance analysis

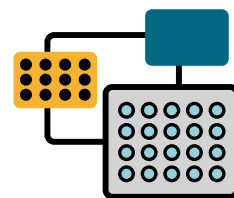
### WebSeal glass inserted plate kits

With 96-position mats



#### Comments

- Convenient wellplate kits with pre-assembled glass vials
- Replacement parts for kits available separatel
- 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





# Well plates and mats Continued

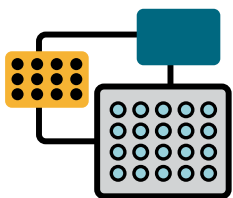
Performance Level 3 for high performance analysis

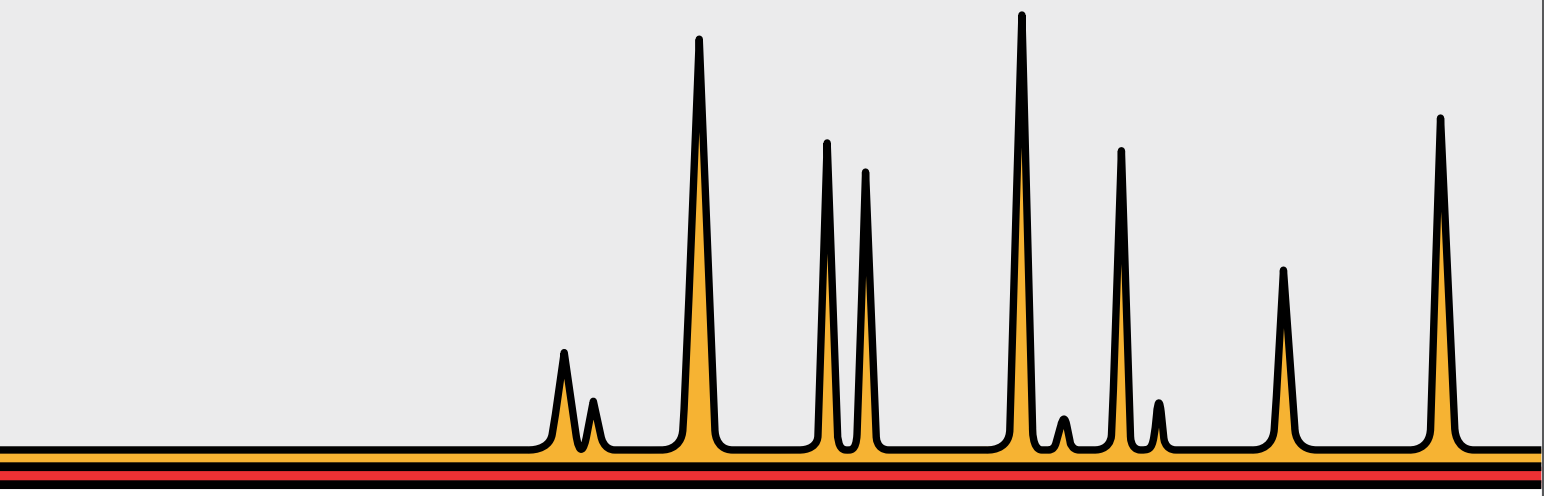
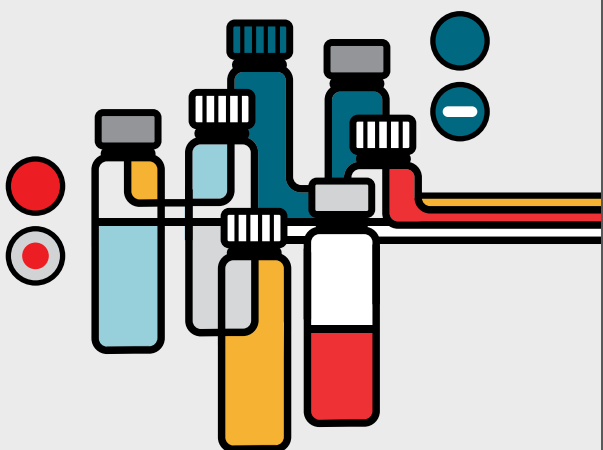
## WebSeal glass inserted plate kits Continued

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
						44.0	<a href="#">60180-V101</a>	<a href="#">60180-M151</a>	<a href="#">60180-K101</a>	
96 well small volume microplate with sealing mat and cutting tool	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
						64.5	<a href="#">60180-V106</a>	<a href="#">60180-M153</a>	<a href="#">60180-K106</a>	
96 deep well plate with sealing mat	Clear glass	1500	7.25 x 60.5	Constricted	Silicone/PTFE	47.3	—	<a href="#">60180-M111</a>	<a href="#">60180-K107</a>	1
96 square well plate with sealing mat						47.3	—	<a href="#">60180-M112</a>	<a href="#">60180-K108</a>	
96 square well plate with sealing mat		1000	7.6 x 45		Precut	47.3	—	<a href="#">60180-M112</a>	<a href="#">60180-K108</a>	





# WebSeal kit accessories



## WebSeal kit accessories

### WebSeal 96 well mats Silicone/PTFE



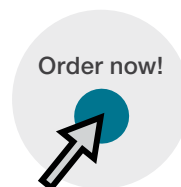
60180-M151



60180-M154



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	No	<a href="#">60180-M111</a>	
	60180-K108	Yes	<a href="#">60180-M112</a>	
WebSeal cutter for vial removal	—	—	60180-M975	1







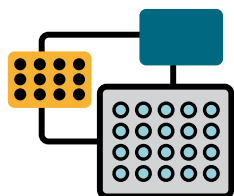
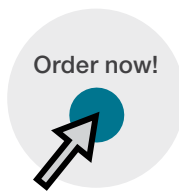
# WebSeal kit accessories

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

PP



60180-P400



60180-P401



Kit type	Vial material	Total volume (μL)	Profile	Total height (mm)	Cat. no.	Pack of
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>	
PP 96 well square well plate (60180-K107/108/109)	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		<a href="#">60180-P212</a>	5

Order now!





# WebSeal kit accessories

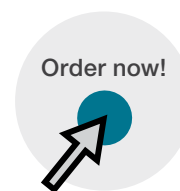
Continued

## Plate vials and accessories

For 96 wells



Kit type	Vial material	Total volume (µL)	Vial dimension (mm)	Profile	Septum	Cat. no.	Pack of
Micro titer plate vial for 96 wells	Clear glass	100	5.7 x 15.5	Flat bottom	—	<a href="#">60180-V108</a>	960
Deep well plate vial for 96 wells		350	6 x 42.5	Taper	—	<a href="#">60180-V109</a>	
Square well vial for 96 Wells		1000	7.6 x 45.9	Round	—	<a href="#">60180-V110</a>	
MTRS vial for 96 wells		800	7.6 x40		—	<a href="#">60180-V111</a>	
PE cap, red, center hole for 96 Well Plate Inserts	—	—	—	—	Silicone/PTFE, pre-slit, 45°	<a href="#">60180-C100</a>	96
8mm PE plug, blue, for 60180-K204	—	—	—	—	PE plug	<a href="#">60180-C101</a>	
DW-block, PP, 96 positions	—	1200	—	U-shape	—	<a href="#">60180-P405</a>	
Micro-tube-rack-system, PP, 96 positions	—	—	—	—	—	<a href="#">60180-P407</a>	





# WebSeal kit accessories

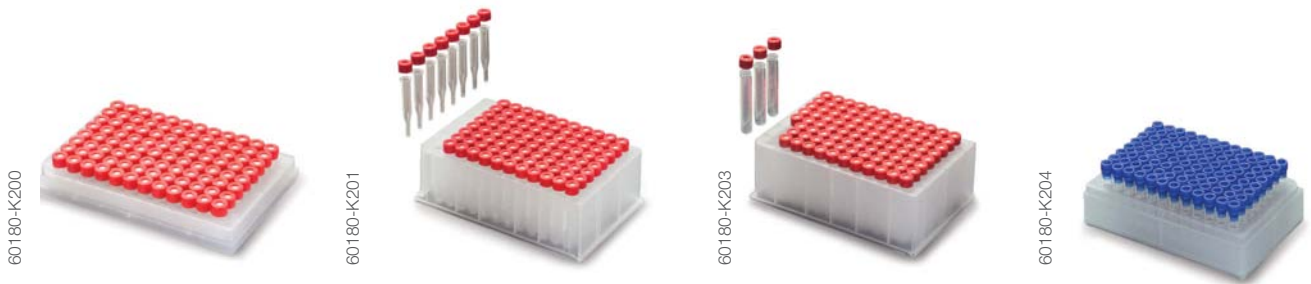
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## WebSeal clear glass inserted plate kits

With individual closures

### Comments

- 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		<a href="#">60180-V109</a>	<a href="#">60180-C100</a>	<a href="#">60180-K201</a>	
96 square well plate	1000	7.6 x 45.9	Round	Silicone/PTFE, 45°	<a href="#">60180-V110</a>		<a href="#">60180-K202</a>	1
				Silicone/PTFE, pre-slit, 45°			<a href="#">60180-K203</a>	
96 micro-tube-rack-system	800	7.6 x 40		PE plug	<a href="#">60180-V111</a>	<a href="#">60180-C101</a>	<a href="#">60180-K204</a>	



# WebSeal kit accessories

Continued

## Barcoded well plates

### For Thermo Scientific™ Vanquish™ Systems

#### Comments

- 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

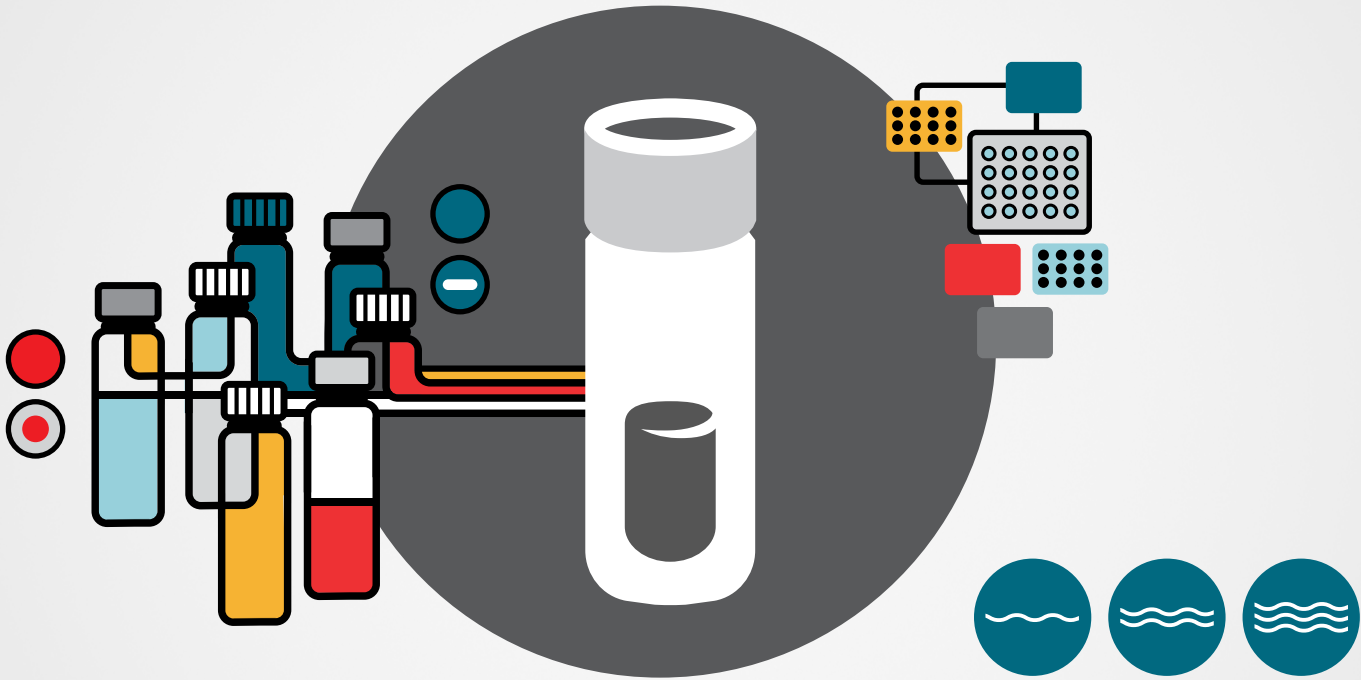


60180-P207-217B



Description	Total height	Well format	Total volume $\mu\text{L}/\text{well}$	Working volume range $\mu\text{L}/\text{well}$	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
		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>	
96 deep well plate, square well, barcoded	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



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