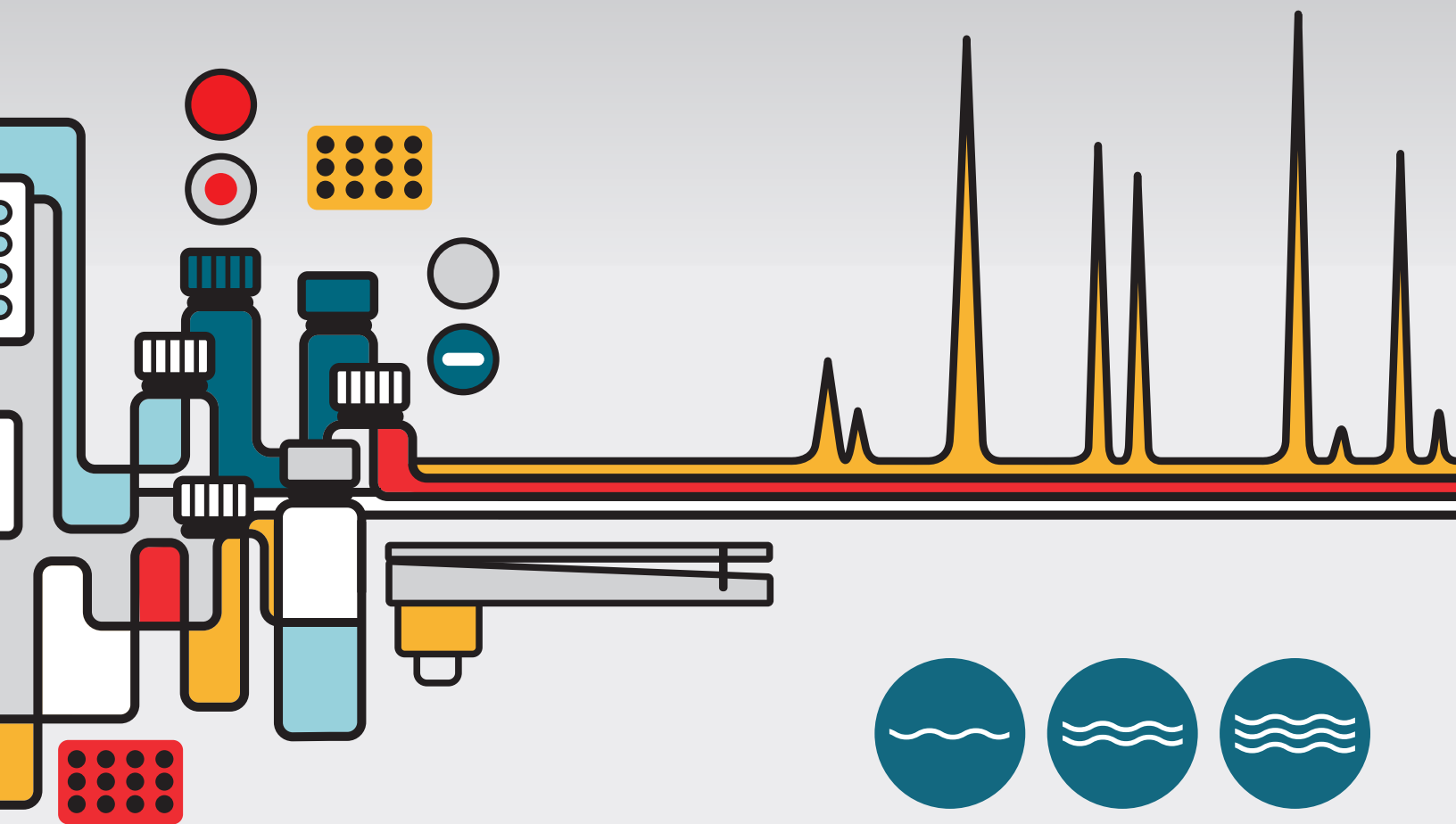


Vials and well plates

SureSTART collection

Streamlined choice. Trusted quality.



For best results, start your analysis off right.

The best analysis starts with the right workflow products. Using our Thermo Scientific™ SureSTART™ vials and well plates, your valuable samples have the security and integrity they need to deliver excellent results. Available in three different performance levels, you will find it easy to select products best suited to your analytical, performance or value needs. What's more, you'll have full confidence that every SureSTART product meets specification—ensuring there's no weak link in your workflow.

SureSTART vials and well plates collection

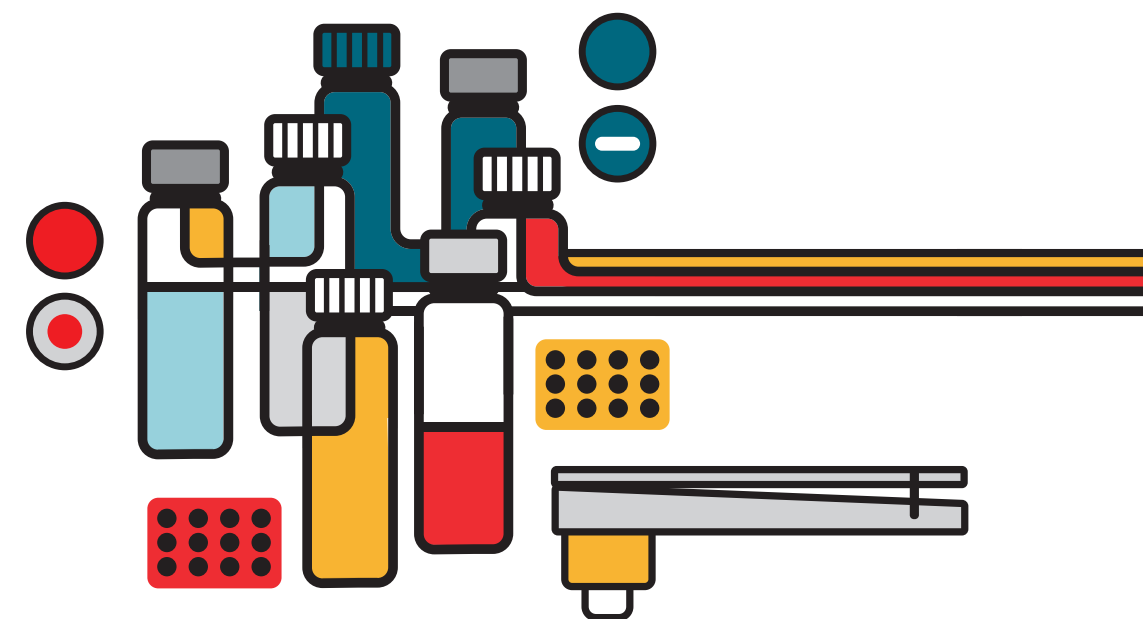
Excellence from start to finish

The SureSTART collection is a comprehensive range of vials, caps, inserts, kits, well plates, mats and accessories that provides 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. And that's why you can find three different waves on 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 labeled 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.

One Collection. Three Performance Levels. Introducing SureSTART.



Why SureSTART collection?

Five reasons why to choose our portfolio



Stringent quality checks for all our SureSTART products

- Ensure you have products to support your application and regulatory requirements
- Innovative products developed for our customers who need extra performance for their most challenging analyses
- Be confident that you're getting the most precise and consistent measurement of your most challenging analytes—always



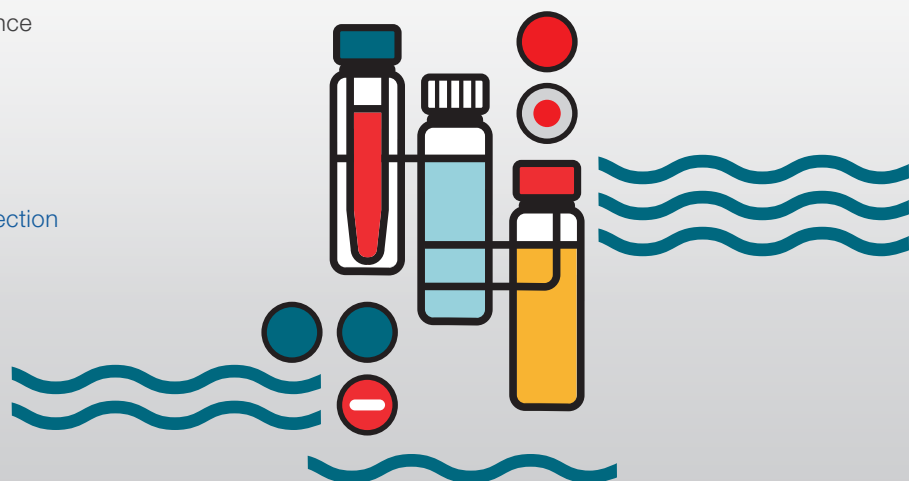
Complete compatibility for all add-on and integrated chromatography autosamplers

- The SureSTART Collection will support all your chromatography and mass spectrometry instruments in your lab
- Collection contains vial, caps, inserts, kits, as well as autosampler well plates, mats and kits
- Contains a broad selection of products within each of the performance levels to satisfy every laboratory's performance and price needs



Three distinct performance levels to meet your price and performance needs

- Differentiated by performance and value—selecting the right product is simple, clear and easy (especially with our NEW performance level “waves” on our vials)
- Our collection is also packed with certified and innovative products to support routine and complex analyses
- Convenient ordering: Multiple ways to purchase products.
- Easy-to-use online support tools: Assistance finding the right product that's compatible with experiments and instrument specifications.



Keep your valuable samples safe and secure for testing with our market leading products

- Made from the highest quality materials, you will spend much less time reviewing background peaks or hunting for analytes that have shifted retention times
- Using our patented technology, our products prevent analyte loss from either the cap top or compound adsorption to the glass surface



The more you buy the more you save

- Buy in bulk and save—three different pack sizes available, each with their own part numbers
- If your budget fluctuates even further, why not try products from our different performance levels to see if they meet your analytical requirements

[Meet the people behind Thermo Scientific SureSTART collection](#)

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 accessories has everything you will need.

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



SureSTART Performance level 1
Everyday analysis:
Chromatography approved



SureSTART Performance level 2
High throughput:
Robust and reproducible



SureSTART Performance level 3
High performance:
Selective and sensitive



Product

Detector type

Non-MS

MS

MS

Comments

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.

Suitable for routine QA/QC applications using MS technology. Compound concentrations are at easily detectable or low levels of detection.

Suitable for challenging applications, and research-focused applications, using MS technology. Compound concentrations are at/near the method detection limit.

[View catalog](#)

Which SureSTART product is right for you?

Choosing your vials and inserts

There are several factors to consider when choosing a vial or well plate for your application. The table below will help guide you through this process to determine what type of product/performance level is most suitable for your application requirements.

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

Compound polarity			Compound volatility		Compound stability	
Non-polar	Polar	Highly polar	Volatile	Non-volatile	Light-stable	Light-sensitive
↓	↓	↓	↓	↓	↓	↓
Glass vials SureSTART Performance level 1, 2 and 3	GOLD-grade glass* SureSTART Performance level 3	GOLD-grade glass vials *Silanised glass vials **Polypropylene (PP) vials SureSTART Performance level 1 (PP), and 3 (GOLD-grade and silanised)	Crimp top vial *SureStop vial Screw thread vial Headspace vials	Screw thread vial Snap-It vial Crimp top vial	Clear vials	Amber vials

*These products can be found in SureSTART Performance level 3
**Not recommended for GC applications

[SureStop/AVCS vials and cap technology](#)

[Autosampler vial inserts with spring, the better choice](#)



Performance level 1: Everyday analysis

Chromatography approved

Meet your chromatographic needs

Choose the right products for your chromatographic analyses. Our SureSTART Performance level 1 provides cost optimized products suitable for all GC and HPLC/UHPLC instrument types, and are quality tested to deliver the performance, sample security, reproducibility you need for everyday analyses. Achieve your results with our accessible range of vials and caps.

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.

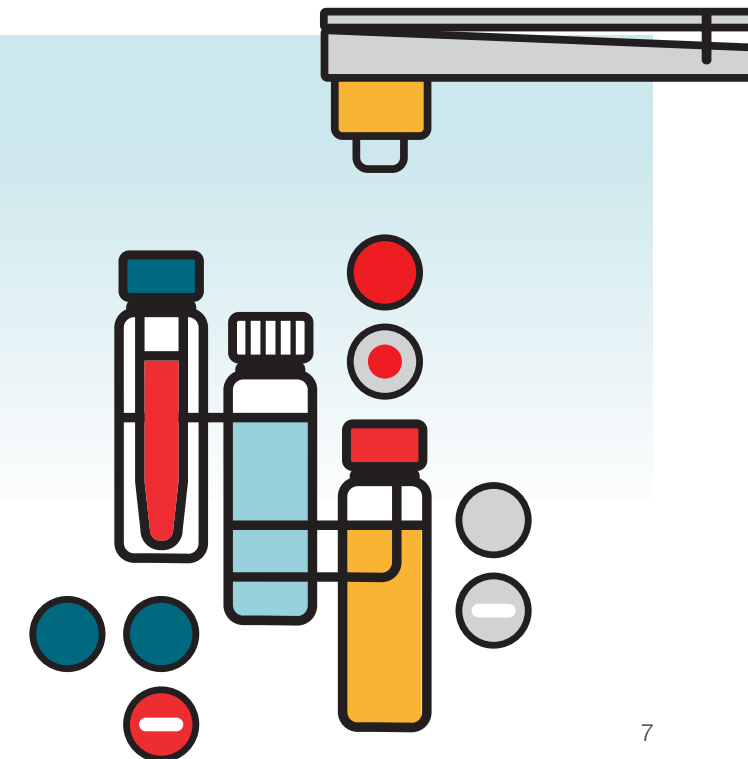
Level 1 – Vials & caps

2 mL Glass Crimp Top Vials	2 mL Glass Screw Top Vials	2 mL Polypropylene Screw Top Microvials for <2 mL Samples	2 mL Polypropylene Snap Top Microvials for <2 mL Samples	20 mL Glass Crimp Top Headspace Vials
11 mm Crimp Caps	9 mm Screw Caps	9 mm Screw Caps	11 mm Snap Caps or 11 mm Crimp Caps	20 mm Crimp Caps

Manual crimpers and decrimpers

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

[Learn more](#)





Performance level 2: High-throughput analysis

When robustness and reproducibility are key

Ensure compliance for your high-throughput samples in regulated environments

Get the performance you need for high throughput analysis to deliver high quality GC and HPLC/UHPLC data with an uninterrupted workflow. Our Performance level 2 range has very low metal content and extractables and leachables, so that you have the assurance that each product conforms to the same high levels of standards that you are working with to meet to your regulatory requirements.

If you need products that support routine analyses, using technologies such as single or triple quadrupole MS systems, our Performance level 2 products are here for you—select the products with the two waves.

Level 2 – Vials & caps

2 mL Glass Crimp Top Vials	2 mL Glass Screw Top Vials	2 mL Glass Snap Vials	1.7 mL Glass High Recovery Screw Top Microvials	Polyspring Inserts for 2 mL Vials
11 mm Crimp Caps	9 mm Screw Caps	11 mm Snap Caps or 11 mm Crimp	9 mm Screw Caps	

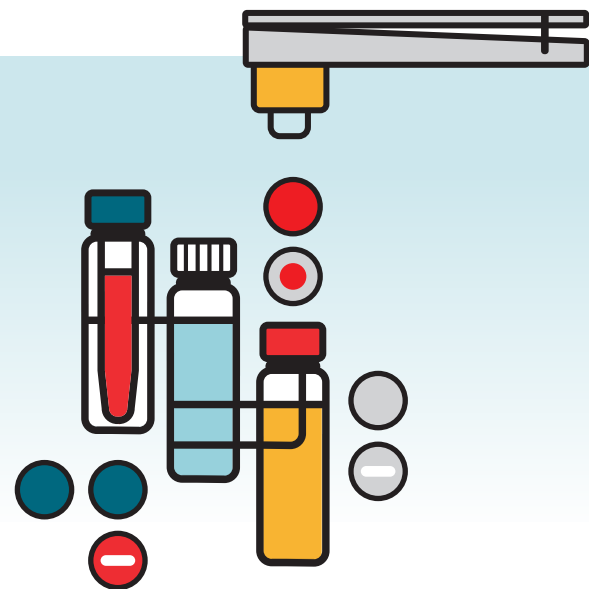
Level 2 – Headspace vials & caps

10 mL Glass Crimp Top Headspace Vials	20 mL Glass Crimp Headspace Vial	4 mL Glass Screw Top Headspace Vials	10 mL Glass Screw Top Headspace Vial	20 mL Glass Screw Top Headspace Vial
20 mm Crimp Caps	20 mm Crimp Caps	13 mm Screw Caps	18 mm Precision Screw Caps	18 mm Precision Screw Caps

Reduce repetitive strain when frequently using crimp caps and vials: Electronic crimpers and decrimpers

They are available as handheld and high-power models for 8, 11, 13 and 20 mm crimp vial caps. The handheld version are battery powered for convenient multi-place operation and the high power model provides exchangeable crimp and decrimp heads for more flexibility and especially magnetic cap sealing.

[Learn more](#)



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 SureSTART Performance level 3 products are packed in clean rooms to protect them against environmental factors, reduce low compound adsorption effects at trace levels, 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 need the ultimate performance for your challenging analytes, and are using MS technologies, such as a high-resolution/accurate-mass (HRAM) Thermo Scientific™ Orbitrap™ mass spectrometers, where you want to maintain the highest levels of sample security and integrity, our Performance Level 3 products will meet your needs—select the products with three waves.

Level 3 – Vials & caps

2 mL Glass Crimp Top Vials	2 mL Glass Screw Top Vials	2 mL Glass Snap Top Vials	2 mL GOLD Grade Glass Screw Top Vials	GOLD-Grade Insert for 2 mL Vials
11 mm Crimp Caps	9 mm Screw Caps	11 mm Snap Caps or 11 mm Crimp Caps	9 mm Screw Caps	

Level 3 – GOLD-Grade vials & inserts

Level 3 – Crimp top and screw top microvials & caps for <2 mL samples

Glass Crimp Top Microvials for <2 mL Samples	Glass Screw Top Microvials for <2 mL Samples	1.5 mL Total Recovery Glass Screw Top Microvials for <2 mL Sample	1.7 mL High Recovery Glass Screw Top Microvials for <2 mL Samples	0.2 mL TPX Screw Top Microvial with Glass Insert for <2 mL Samples
11 mm Crimp Caps	9 mm Screw Caps	9 mm Screw Caps	9 mm Screw Caps	9 mm Screw Caps

Level 3 - Snap top microvials & caps for <2 mL samples

Glass Snap Top Microvials for <2 mL Sample	1.5 mL Total Recovery Glass Snap Top Microvials for <2 mL Samples	High Recovery Glass Snap Top Microvials for <2 mL sample	Glass Inserts for 2 mL Vials	6, 10, and 20 mL Glass Crimp Top Headspace Vials
11 mm Snap Caps or 11 mm Crimp Caps	11 mm Snap Caps or 11 mm Crimp Caps	11 mm Snap Caps or 11 mm Crimp Caps		20 mm Crimp Caps

Level 3 – Headspace vials & caps

SureSTART certified vial and cap kits

Maintaining sample integrity before, during and after your analysis is key to aiding the detection of your analytes. The surface of the container you choose to store your sample in can greatly impact your analysis: as some analytes can be lost due to glass adsorption, and unanticipated contaminants from the vial or cap that may leach into your sample and affect your critical results. Our SureSTART collection provides high-quality certified kits that ensure the cleanliness, security and integrity of your most valuable samples, letting you have the highest level of confidence in your critical results.



Available for our SureSTART vial and cap kits, we can help every customer meet their certification and documentation needs. Whether you are running applications that require trace levels of detection or require certificates of analysis for the products used in your workflow, our SureSTART solutions have you covered.

Specification certified kits

Recommended for everyday analysis

All SureSTART vials are certified to meet physical parameter specifications as part of our manufacturing process. Most customers who do not need a certificate for their documentation records purchase these kits.

- Certified for physical parameter specifications

LC/GC certified kits

Certified vials for chromatographic analyses

- Tested and certified for up to 15 critical physical specifications to ensure that the vials and caps do not cause any technical/performance issues
- Tested and certified using LC-UV and GC-FID to ensure that there are no residual manufacturing agents present in the vial that could result in spurious chromatographic peaks to be present, which could interfere with your results
- A certificate is provided with each kit

LC-MS/GC-MS certified (MSCERT and MSCERT+) kits

Recommended for use with mass spectrometry systems

Our mass spectrometry certified vials carry our highest level of certification and are tested by both LC-MS and GC-MS for your most challenging, sensitive applications, to ensure that there are no extractables, leachables or residual manufacturing agents present in the vial that could affect your results. Tested for up to 15 critical physical specifications to ensure that the vials and caps do not cause any technical/performance issues.

Each kit comes with its own test results and certificate of analysis. These products are only sold as a kit to guarantee product cleanliness.

- MSCERT kits tested and certified for low background using LC-MS and GC-MS
- Recommended for low adsorption
- MSCERT+ kits cleaned for particle removal and then tested with LC-MS and GC-MS

MSCERT kits

Certified high-performance kits for use with mass spectrometry analyses

MSCERT+ kits:

Certified high-performance kits for use with mass spectrometry—with an additional level of security. In addition to all the quality checks that are performed for the MSCERT the MSCERT+ is:

- Pre-cleaned to provide the lowest ion content and particulate levels in the vial to protect sample integrity; guaranteeing there is no dirt or dust from the manufacturing present which might clog up your GC or LC column and affect column lifetime and system performance. Highly recommended for direct injection analysis (DIA).

SureSTART specification certified vial & cap kits	LC/GC certified screw vial & cap kits	MSCERT screw vial & cap kits	MSCERT+ screw vial & cap kits
Standard 2 mL screw top vial-cap kits; including SureStop vials with AVCS caps	Certified 2 mL screw top vial-cap kits; includes SureStop vials with AVCS caps	Certified 2 mL screw top vial-cap kits; includes SureStop vials with AVCS caps Use with mass spectrometry	Certified 0.2, 1.5, and 2 mL screw top vial-cap kits; includes SureStop vials with AVCS caps; precleaned vials Use with mass spectrometry
Tested & certified: Specification tested and certified	Tested & certified: 15 critical physical specifications Tested using LC-UV & GC-FID	Tested & certified: 15 critical physical specifications Tested using LC-MS & GC-MS	Precleaned. Tested & certified: 15 critical physical specifications Tested using LC-MS & GC-MS

SureStop vials with AVCS caps ensure a proper screw cap seal every time

Other certified kits

SureSTART specification certified EPA screw vial & cap kits	SureSTART specification certified scintillation screw vial & cap kits	TOC screw vial & cap kits
4, 8, 12, 16, 20, or 40 mL vial-cap kits For use with environmental analyses under EPA regulations	20 mL glass screw top vials with 24 mm caps For use with scintillation assays	Certified 40 mL glass screw top vials with 24 mm cap closures For use in total organic carbon analyses
Tested & certified: Specification tested and certified	Tested & certified: Specification tested and certified	Tested & certified: Total organic carbon levels <10 or <20 ppb certificate included

Thermo Scientific SureSTART well plates and mats

WebSeal chromatography well plates

WebSeal well plates are designed for today's chromatographers using well plate-compatible autosamplers. Rest assured with our WebSeal well plates, you will get all the advantages of using plates, along with the security of achieving reliable results, and our decades of experience as the market leader in sample containers for chromatography.

“ Are you running more than 500 samples per day?
Are you running analyses overnight?
Do you want to make your lab more efficient?
”

Today's laboratories need to optimize limited space and maximize analysis time all they can. That means being as efficient as possible with sample handling, sample preparation and sample transport.

Well plates are the perfect solution when there is a need for high throughput because they:

- Increase the capacity of standard autosamplers by up to 8 times the sample amount simply by switching from vials to autosamplers
- Well plates require less space than vials (in the autosampler and in cold storage)
- Collection offers 96 or even 384 sample positions
- Enable easy filling (with a multi-pipette) and quick sealing (with a mat versus vial caps)
- Easy transport within the lab or between labs

You can save time and money by replacing vials with well plates designed for UHPLC analysis. WebSeal well plates increase throughput and are compatible as part of a SPE/SLE manual or automated workflow. Our autosampler well-plates all conform to ANSI SLAS 4-2004 standards.



Performance level 1: Everyday analysis

- Ideal for non-regulated labs using water, water and polar solvents, polar solvents
- Commodity plates, seals, tapes
- GC tested



Performance level 2: High-throughput analysis

- Ideal for regulated labs using water, water and polar solvents, polar solvents
- Recommended for sensitive applications; lower sample concentrations; TIC and full chromatograms
- Low bleed plates and high-performance mats
- GC-MS and LC-MS tested



Performance level 3: High performance

- Ideal for regulated labs using: all solvents (including non-polar)
- Recommended for very sensitive applications; lowest sample concentrations; hydrophobic samples (e.g., proteins)
- Highest quality for high-end chromatography
- High performance products: WebSeal Plate+ unique glass-coated plastic plates, and plates with real glass inserts

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
↓	↓	↓	↓	↓	↓	↓	↓
WebSeal Plastic, chromatography tested	WebSeal certified products Plastic, MS tested	WebSeal Plate+ Plate with glass inserts	WebSeal plastic and certified	WebSeal Plate+ Plate with glass inserts	Flat bottom Where sample volume is not low	U-Bottom Where sample volume is low	V-Bottom Where sample volume is very low

Autosampler compatibility					
Agilent	CTC (PAL)	Thermo Scientific™ TriPlus RSH*	Shimadzu	Thermo Scientific™ Vanquish™**	Waters ACQUITY
↓	↓	↓	↓	↓	↓
Microtiter plate: 14-16 mm (also referred to as microwell and standard well plate) Mid well plate: 20-41 mm Deep well plate: >44 mm					Mid well plate

*TriPlus RSH with 6-drawer stack can accommodate 24 microtitre 15.5 mm plates microtitre well plate
**Vanquish system requires barcoded plates for complete automatic orientation



Chromatography Well Plates, Plastic	Chromatography Well Plates, Plastic with a Glass-Coated Well	Chromatography Well Plates, Pre-inserted vial kits
These chemically and thermally resistant plates are ideal for pharmaceutical applications, sample collection and storage, combinatorial chemistry and HTS applications	Coated with state-of-the-art glass technology (thickness of 200Å), to provide improved solvent stability and better reproducibility, especially for biomolecules that adsorb onto plastic walls.	Save time by using these convenient wellplate kits with pre-inserted glass vials.
WebSeal 96-Well Non-Coated Plastic Microplates	WebSeal Plate+ Glass Coated Plastic Well Plates	WebSeal 96-Well Plate Kits with Sealing Mats
	WebSeal Nonsterile Mats	WebSeal 96-Well Plate Kits with Individual Closures

Well plate essentials and accessories

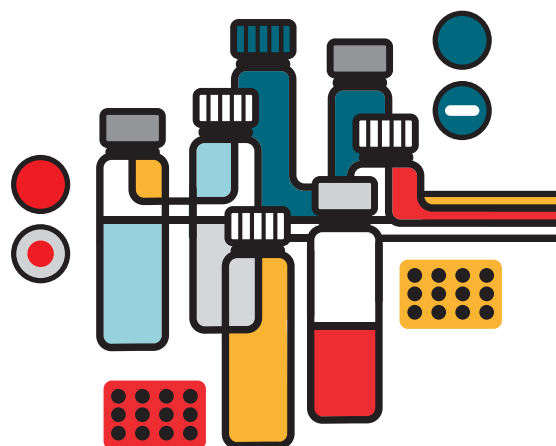
Well Plate Mats	Well Plate Tape and Accessories
Effectively seal well plates for sample storage and eliminate cross contamination with a unique cross cutting tool that allows for removal of individual samples with the seal in place.	Use quality WebSeal tape and accessories designed for WebSeal well plates
MicroMat CLR Silicone Mats for Well Plates	WebSeal Sealing Tapes
WebSeal 96 Well Mats for use with WebSeal™ Kits	Well Plate Accessories
WebSeal Nonsterile Mats	



Reduce the risk of mis-injection

To seal your plates correctly, it's important to use the right mat. Here's a helpful guide:

- **Silicone mats**—Using a silicone mat with the correct profile reduces evaporation of sample or solvent during the run and provides better consistency, and is ideal for long time storage.
- **Pre-slit mats**—Using pre-slit mats is effective for reducing mis-injections, and can be used again for confirmatory runs on the same plates without solvent loss. The slit allows the usage of pipette tips as well and multi pipettes.
- **Adhesive seals**—Adhesive seals are effective as a one-time seal, but cannot be used for repeat runs. Exception is the three-layer re-sealing tape without glue at the cavity area.



WebSeal Plate+ glass coated plastic plates (2nd generation)

Get ready for unmatched performance. Benefits of glass within a well plate format at a price you can afford.

Samples that require glass vials can now benefit from high-throughput analysis using these glass-coated well plates. Thermo Scientific™ WebSeal™ Plate+ products are coated with state-of-the-art technology for higher-density coating (thickness of 200 Å), to provide improved solvent stability and better reproducibility, especially for highly non-polar or biomolecules that adsorb onto plastic walls.

All the benefits of a plastic plate, plus features of a glass plate—for a lot less cost.

- **Remove issues observed with plastic plates**—Our 2nd-generation WebSeal Plate+ are the solution to pure plastic plates that cause poor solvent stability or loss of product due to adsorption onto plastic well walls. This technology used on our Plate+ well plate delivers the benefits of glass within a well plate format for today's busy laboratories.

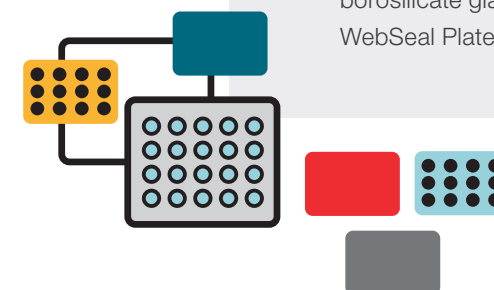
- **Better detection and reproducibility of analytes**—WebSeal Plate+ well plates offer an ultra-low adsorption surface for critical analytes; enabling ultra-trace-level analysis for strongly adsorbing analytes and biomolecules.
- **Reduce low biomolecule adsorption**—Adsorption on cavity walls is one of the main reasons for irreproducible results in bioanalysis. As the wall polarity in Plate+ is inverted, the risk of adsorption is significantly reduced.
- **Same performance, lower price**—WebSeal Plate+ glass-coated plastic well plates provide all the performance benefits of a glass well plate, but for a lot less cost.

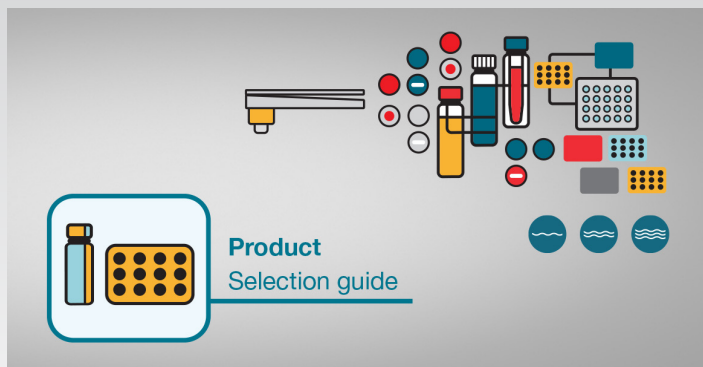


Spotlight on: glass used in our WebSeal Plate+ well plates

Pure silicon dioxide is deposited in a thin nanolayer on the WebSeal Plate+ products—a chemically pure-sol gel derived coating with a high proportion of siloxane bridge structures. Since it's derived from an organic silane, the deposited layer is free from any inorganic species or additives found in the structure of all formed glass products. That means it's an anion and cation-free glass surface

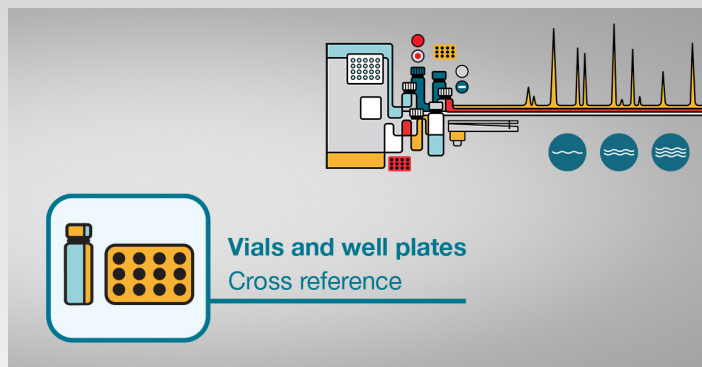
The homogenous layer has minimal hydrolytic extraction and conforms to any limits for a Type 1 hydrolytic extraction glass surface. While it's different from the borosilicate glass used for vials, you'll get the same performance from the WebSeal Plate+ glass surface as you would from our Performance level 3 vials.





Product selector tool

Use this tool to select the right vial/cap or well plate/mat combination for your analytical and budget requirements



Cross reference guide

Use this guide to find the equivalent SureSTART products for your current Thermo Scientific™ National™, Thermo Scientific™ Chromacol™ and Thermo Scientific™ Sun-SRI™ vial, insert, or cap products

Related products

Sample preparation

- Solid phase extraction and more
- Protein Digest & ImmunoAffinity kits
- Syringe filters

GC & LC systems

- HPLC and UHPLC systems
- GC systems

Columns

- HPLC and UHPLC columns
- GC columns
- GC column accessories

Mass spectrometry

- Liquid chromatography mass spectrometry (LC-MS)
- Gas chromatography mass spectrometry (GC-MS)

Learn more at thermofisher.com/surestart