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Gone

HPLC vials and well plates

Every drop counts

Recover up to 8x more residual sample*

Maximize your sample recovery with Thermo Scientific™ Vanquish™ UHPLC Systems, enhanced with Vial Bottom Detection (VBD) technology. With VBD, virtually the entire sample volume in a vial is now injectable. **Make every drop count!**

Autosamplers typically use bottom or side draw needles that are programmed by default to stop approximately 2 mm above the vial bottom to prevent damage, leaving residual sample behind. This loss can be costly when sample volumes are limited, as valuable sample is lost. Manually setting needle depth to reach lower into the vial can damage the needle or container if there is any change to the container or specification.

VBD technology in Thermo Scientific™ Vanquish™ UHPLC autosamplers solves this sample loss problem and enables you to maximize sample recovery, eliminating the need to overfill containers and therefore reducing costs.

VBD automatically adapts to the vial or well plate bottom height with a specially designed needle, enhancing versatility and reliability while reducing sequence failure rates.

*Based on a Thermo Scientific™ Vanquish™ LC System without VBD and needle height set to "safe" vs Vanquish LC System with VBD enabled using a Thermo Scientific™ SureSTART™ Total Recovery Glass Vial PN: 6PSV9-TR1

Choosing the right vials and well plates

Vials and well plates are crucial for every chromatographic workflow, affecting performance, reproducibility, and accuracy.

The Thermo Scientific™ SureSTART™ collection offers a wide range of compatible vials, caps, inserts, and well plates to help ensure sample security and consistent, accurate results.

Below is a list of recommend vials and well plates tested and deemed compatible with VBD technology to achieve maximum sample volume extraction.



[Find your perfect vial with the SureSTART selection guide](#)

Table 1. Thermo Scientific SureSTART vials and closures and Thermo Scientific SureSTART WebSeal well-plate and mats tested with VBD

Product type	Description	Residual volume with VBD†	Catalog No.	Quantity
Thermo Scientific™ SureSTART™ Vials	2 mL Clear Glass Screw Top Vial , (9 mm short thread), Level 2	73 µL	6ASV9-1P	100 Pack
	Total Recovery Clear Glass Screw Top Microvial for <2 mL samples , (9 mm short thread), Level 3	0.5 µL	6PSV9-TR1	100 Pack
	High Recovery 1.7 mL Clear Glass Screw Top Microvial for <2 mL samples , (9 mm short thread), Level 2	0.5 µL	6ASV9-V1	100 Pack
	0.2 mL Amber TPX Screw Top Microvial with Glass Insert for <2 mL samples , (9 mm short thread) with fixed conical-shaped glass insert, Level 3	2.5 µL	60180-1655	100 Pack
	High Recovery Clear Glass Snap Top Microvial for <2 mL samples , (11 mm snap top), Level 3	4.0 µL	6PRV11-15V	100 Pack
Thermo Scientific™ SureSTART™ Caps	Bonded Black Screw Cap , (9 mm) (PP: white silicone/red PTFE septa: 1.0 mm thicknes), Level 3	–	6PSC9STB1	100 Pack
	Blue Snap Cap , (11 mm) (PE: white silicone/red polyimide septa: 1.0 mm thicknes), Level 2	–	6ARC11SPI1	100 Pack
Thermo Scientific™ SureSTART™ WebSeal™ Well plates	96-well Microtiter Plate , 5.6 mm round diameter, total V-bottom, (100 µL), polypropylene, barcoded, Level 2	0.5 µL	60180-P210B	50 plates
	96-well deep well plates , 7 mm round diameter, round U-bottom, (1.0 mL), polypropylene, barcoded, Level 2	1.0 µL	60180-P201B	50 plates
	Plate and 384-well Microtiter Plates , square-rounded V-bottom, (125 µL), glass coated polypropylene, barcoded, Level 3	0.5 µL	60180-P340B	10 plates
Thermo Scientific™ SureSTART™ WebSeal™ Mats	96-Well Plate Sealing Mat , 5.6 mm round diameter, clear silicone, flat base, cross, for 60180-P210B , Level 2	–	60180-M210	50 mats
	96-Well Plate Sealing Mat , 7 mm diameter, clear silicone, flat base, thinned penetration line, for 60180-P201B , Level 2	–	60180-M187	50 mats
	384-Well Plate Sealing Mat , square, flat base, pre-slit, for 60180-P340B , Level 1	–	60180-M150	5 mats

†Please note these are figures generated with in-house testing by injecting caffeine in 100% water. You may see different results based on the vials used and your sample matrix.

Learn more at thermofisher.com/surestart

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