



Waters

Waters Quality Parts[®], Chromatography Columns and Supplies Catalog

2005—2006

For Complete  Confidence

www.waters.com

Dear Colleague,

We are pleased to present the newly combined 2005-2006 Waters Quality Parts®, Chromatography Columns and Supplies Catalog. This is a newly formatted catalog combining the Waters Chromatography Columns and Supplies Catalog with the Waters Quality Parts® and Supplies Catalog. We hope this combination simplifies access to information and products and enhances our efforts to make this catalog a true informational resource.

Along with an extensive product offering (also available online at www.waters.com—click on Shop), application guides, and discussions on theory and separation modes, we have included the Waters Column Brand classification, based on the new USP L1 discussion forums.

Our goal is to help make you and your separations as successful as possible by offering a variety of avenues to get the information you need when you need it.

Achieving the highest quality separations—whether the critical need is sample enrichment, isolation, purification, higher throughput or information about chemical structure or composition – demands not only the best technology, but a partner with a full set of capabilities to deliver that technology to you in a way that ensures your success.

You can find out about our capabilities when you telephone one of our 54 worldwide offices, interact with our highly trained account specialists, visit our website, www.waters.com, to access 25,000+ applications in our Information Center (click on Applications), or attend an educational webcast (click on Web Seminars).

No other company is as dedicated to customer commitment, product capability and performance. We invite you to learn more about us, our technology, our resources and our capabilities—from our global presence and world-class manufacturing facilities, to our extraordinary technical support and product quality, backed by the best warranty in the business.

Mark Baynham Ph.D.

Director
Chemistry Operations Marketing

Pete Boler

Director
Services Marketing

Waters

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Waters Auto Sampler Vials

Waters is the leading manufacturer of analytical instrumentation and consumable products. We understand the importance of auto sampler vials to the performance of analytical instrumentation. There are many factors to consider in selecting the proper vial, such as:

- Needle design
- Autosampler tray design
- Chemical compatibility
- Cleanliness
- Optic and robotic specifications
- Volatility
- Sample volume

At Waters, we take all of these factors into consideration in the design, manufacture and delivery of our vials and accessories. Unlike our competition, who offer Type I, 33 expansion glass in North America and Type I, 51 expansion glass in Europe or Japan, Waters single source manufacturing produces Type I, 33 expansion glass, the lowest free ion glass available, for worldwide distribution.



What's New! Certified Vials

Waters has introduced a new line of vials - Certified for cleanliness by both LC and GC testing.

Why Certify Vials?

- Vials are manufactured by glass artisans and engineers who don't understand the requirements of use in HPLC and GC/MS
- We understand the requirement of HPLC which enables us to introduce LC testing capability to vials
- We can make vials and certify the product for its intended use!
- Time to raise the bar! Think through manufacturing process, anticipate possible problem areas, test to make sure we are delivering problem free product.
- This type of testing is radically different for the vials industry

Certificate of Analysis

Glass is 33 expansion glass with low ion content. No detectable limits of K, Ca, Mg, Al, Fe, Ba, Zn, Mn	Material	Description
	Glass	Borosilicate, Type I, Class A, 33 Expansion Glass
Tightest tolerances in the industry	Dimensional Test	Height
		Diameter
		Bottom Thickness
Septum tested for reduced volatiles	Cap/Septum	Neck / Thread
		Dimension
HPLC Certified for cleanliness	Chemical Test	Sealing Test
		Cleanliness Test – Level II (GC Head Space Test)
		HPLC Gradient Test

Waters Certified Vials offer solutions to common problems with conventional sample vials

Common Problem:	Solution: Benefit of Waters Design
Improper venting, vacuum and inconsistent sample draw down volume	Preslit Septa
Cap and septa dislodging during shipping and use	LectraBond Cap and Septa are bonded using a patented (non-solvent) process eliminating dislodging
These designs eliminate the labor required for inserting the LVI into the vial and with wide neck openings are easier to pipette samples into. These vials Sample limited applications requiring labor and time for inserting LVIs into vials.	Waters Total Recovery and Maximum Recovery one piece vials accommodate large volume with minimum residual volumes.
Damaged injection needle due to narrow vial opening	12 x 32 mm Vials with 6 mm neck opening
Sample loss due to hydrogen bonding to glass surface of vial	Deactivated Vials where gas phase silanization process is used to deactivate glass surfaces

Choosing the Right Vial and Septum for Your Application

Septa Selection Guide

PTFE Septa

Recommended for single injection applications. Ideal for use in MS applications. Excellent solvent resistance and chemical compatibility rating. Does not reseal upon puncturing. Not recommended for long-term sample storage.

PTFE/Silicone Septa

Recommended for multiple injections and sample storage. Demonstrates excellent resealing characteristics. PTFE chemical resistance until punctured, then the septa will have chemical compatibility of silicone. Working temperature range of $-40\text{ }^{\circ}\text{C}$ to $200\text{ }^{\circ}\text{C}$.

Preslit PTFE/Silicone Septa

Provides for adequate venting to prevent vacuum formation in sample vial, delivering excellent sample-draw reproducibility. Eliminates coring from bottom draw-port needles. Good resealing capabilities. Recommended for multiple injections. PTFE chemical resistance until punctured, then the septa will have chemical compatibility of silicone. Working temperature range of $-40\text{ }^{\circ}\text{C}$ to $200\text{ }^{\circ}\text{C}$.

Vial Selection Guide

Type 1, 33 Expansion Borosilicate Glass

The most chemically-inert glass available, generally used in high precision labs to prevent alteration of test results. It has an expansion coefficient of approximately $33 \times 10^{-7}/^{\circ}\text{C}$ and is composed primarily of silicon and oxygen, with trace amounts of boron and sodium.

Type 1, 51 Expansion Borosilicate Glass

More alkaline than 33 Expansion glass and is adequate for many laboratory uses. It has an expansion coefficient of $51 \times 10^{-7}/^{\circ}\text{C}$ and is composed primarily of silicon and oxygen with trace amounts of boron. All amber glassware is 51 expansion glass.

Deactivated Glass (DV)

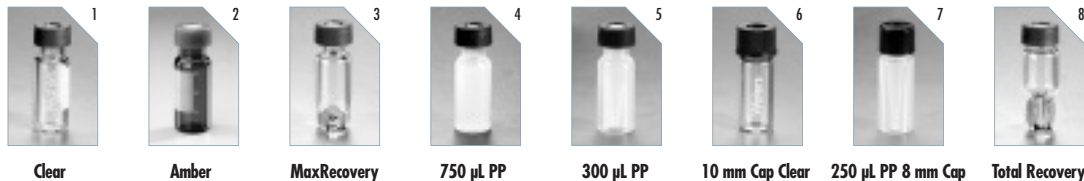
For glass-sensitive compounds. Glass vials are treated with gas phase reactive organosilane to produce a hydrophobic glass surface. Vials treated by this procedure can be stored indefinitely. To order deactivated vials add DV to the end of the standard Waters vials part number. Deactivated vials are not available for all part numbers.

Polypropylene Plastic

A nonionic, nonreactive plastic. It can be used where even Class A and B glass are inappropriate. Polypropylene vials can be incinerated while still sealed, minimizing exposure to potentially hazardous substances. Maximum temperature use: $135\text{ }^{\circ}\text{C}$.



Screw Cap 12 x 32 mm Vials for Alliance® and ACQUITY UPLC™



Combination Packs: Vial, Cap, and Septum

Combination pack with bonded silicone/PTFE Septa	186000272C	186000846C	186000326C	186002635	186002640	WAT270946C*	186000384C
COMBO deactivated	186000272DV	186000846DV	186000326DV			WAT270946DV*	186000384DV
Combination pack with bonded preslit silicone/PTFE Septa	186000307C	186000847C	186000327C	186002636	186002639		186000385C
COMBO deactivated	186000307DV	186000847DV	186000327DV				186000385DV

Vial Only

Vials Only	186000273	186000848	186002802	186002634	186002626	WAT0063300	WAT094172	186002805
Vials Only DEACTIVATED	186000273DV	186000848DV						

Injectable Volumes

Max Volume Injection	1.10 mL	1.10 mL	1.5 mL	400 µL	280 µL	1.10 mL	230 µL	950 µL
Max Residual Volume	0.750 mL	0.750 mL	4 µL	300 µL	20 µL	0.750 mL	20 µL	9 µL

Inserts

300 µL w/poly spring	WAT094170	WAT094170				WAT094170		
300 µL w/poly spring DV	WAT094170DV	WAT094170DV				WAT094170DV		
Max Volume Injection	230 µL	230 µL				230 µL		
Max Residual Volume	20 µL	20 µL				20 µL		
150 µL w/poly spring	WAT094171	WAT094171				WAT094171		
150 µL w/poly spring DV	WAT094171DV	WAT094171DV				WAT094171DV		
Max Volume Injection	144 µL	144 µL				144 µL		
Max Residual Volume	6 µL	6 µL				6 µL		

Cap and Septa

Cap Black						WAT058875	WAT210684
Cap with Silicone/PTFE Septum						WAT058874	WAT094174
Septa PTFE/Silicone 8 mm preslit							WAT058876
Septa silicone/PTFE							WAT210685
Septa PTFE							WAT058886

LectraBond™ Cap and Septum

Blue LectraBond™ Screw Cap	186000274	186000274	186000274	186000274	186000274		186000274
Red LectraBond™ Screw Cap	186002129	186002129	186002129	186002129	186002129		186002129
Green LectraBond™ Screw Cap	186002130	186002130	186002130	186002130	186002130		186002130
Blue LectraBond™ Screw Cap Preslit	186000305	186000305	186000305	186000305	186000305		186000305
Red LectraBond™ Screw Cap Preslit	186002128	186002128	186002128	186002128	186002128		186002128
Green LectraBond™ Screw Cap Preslit	186002127	186002127	186002127	186002127	186002127		186002127

All packs 100 each

*septum not bonded

Compatible Systems

Alliance® 2690/2695	•	•		•	•	•	•	•
Alliance® 2790/2795	•	•	•	•	•	•	•	
ACQUITY UPLC™	•	•	•	•	•	•	•	

Certified Vials are indicated in BLUE.

Snap Cap 12 x 32 mm Vials for Alliance® and ACQUITY UPLC™



Combination Pack: Vial, Cap and Septum

Combination pack with bonded silicone/PTFE Septa	186002638	186002642	18600234(DV)
Combination pack with bonded preslit silicone/PTFE Septa	186002637	186002641	

Vial

Vials Only	WAT094219	WAT094220	186000984	186002627	186002628	WAT094222	WAT094223	186002814	PSL408789	186000302
Deactivated Vial	WAT094219DV	WAT094220DV	186000984DV							

Injectable Volumes

Max Volume Injection	1.10 mL	1.10 mL	950 µL	400 µL	280 µL	1.10 mL	1.10 mL	400 µL	100 µL	950 µL
Max Residual Volume	0.750 mL	0.750 mL	9 µL	300 µL	20 µL	0.750 mL	0.750 mL	300 µL	30 µL	9 µL

Inserts

300 µL w/poly spring	WAT094170	WAT094170				WAT094170	WAT094170			
300 µL w/poly springDV	WAT094170DV	WAT094170DV				WAT094170DV	WAT094170DV			
Max Volume Injection	230 µL	230 µL				230 µL	230 µL			
Max Residual Volume	20 µL	20 µL				20 µL	20 µL			
150 µL w/poly spring	WAT094171	WAT094171				WAT094171	WAT094171			
150 µL w/poly spring DV	WAT094171DV	WAT094171DV				WAT094171DV	WAT094171DV			
Max Volume Injection	144 µL	144 µL				144 µL	144 µL			
Max Residual Volume	6 µL	6 µL				6 µL	6 µL			

Snap Cap and Septa - Silicone/PTFE

Blue	186000303	186000303	186000303	186000303	186000303			186000303	186000303	186000303
Black	186002649	186002649	186002649	186002649	186002649			186002649	186002649	186002649
Red	186002650	186002650	186002650	186002650	186002650			186002650	186002650	186002650

Snap Cap and Preslit Septa - Silicone/PTFE

Blue	186000304	186000304	186000304	186000304	186000304			186000304	186000304	186000304
Black	186002648	186002648	186002648	186002648	186002648			186002648	186002648	186002648
Red	186002647	186002647	186002647	186002647	186002647			186002647	186002647	186002647

Snap Cap and PTFE Septa

Blue	186000328	186000328	186000328	186000328	186000328			186000328	186000328	186000328
Black	186002645	186002645	186002645	186002645	186002645			186002645	186002645	186002645
Red	186002646	186002646	186002646	186002646	186002646			186002646	186002646	186002646

Crimp Caps

Crimp Cap Silicone/PTFE Septum						PSL404219	PSL404219			
crimp Cap PTFE/Silicone/PTFE Septum						PSL404231	PSL404231			
Crimper 1 each						PSL904301	PSL904301			

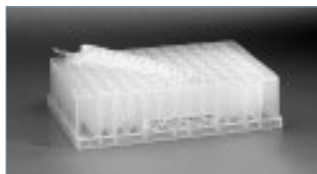
Compatible Systems

Alliance® 2690/2695	•	•	•	•	•	•	•	•	•	•
Alliance® 2790/2795	•	•	•	•	•	•	•	•	•	•
ACQUITY UPLC™	•	•	•	•	•	•	•	•	•	•

Screw Cap

SAMPLE VIALS AND ACCESSORIES

Collection Plates



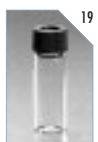
All Plates

96-Well Plates		Part	Pack Size
○	96-Well Plate PP, Square 50pk 2 mL	WAT058958	50
○	96-Well Plate PP, Square 50pk 1 mL	WAT058957	50
○	96-Well Plate PP, Square 50pk 350 µL	WAT058943	50
	Sealing Cap, PE 50 pack square well	WAT058959	50
	Sealing Cap PTFE/Silicone 5pk Square Well	18600857	5
●	96-Well Round PP Plates, 350 µL	186002643	100
●	96-Well Round PP Plates, 1 mL	186002481	50
	Cap-Mat PP round well (for 186002643 and 186002481)	186002483	50
●	96-Well Square PP 2 mL	186002482	50
	Cap Mat Square Well PP (186002482)	186002484	50
○	96-Well Plate Round Well 350 µL	186002485	50
	PP cap mat to fit 186002485	186002486	50
Quick Load Glass Inserts for 96-well Plates		Part	pack size
	700 µL Glass - Quick Load	186001437	1 pack available in DV also
	1 mL Glass - Quick Load	186001436	1 pack available in DV also
	Plates for Quick Load Glass - widest opening for inserts	186001438	20
○	96-Well Plate with 700 µL Glass Insert	186000349	1 pack available in DV also
○	96-Well Plate with 1 mL Glass Insert	186000855	18 pack available in DV also
	Sealing cap for 700 µL Glass Square Well PTFE/Silicone	18600857	5 pk
	Sealing cap for 1 mL round Well - seals in the glass PTFE/Silicone	18600856	10 pack
384 Well Plates		Part	pack size
●	384 Well 100 µL Well Square	186002631	50
●	384-Well 250 µL Square Well	186002632	50
	Clear Peelable Heat Seal	186002788	100 roll
	Peelable Heat Seal	186002789	100 pack
Heat Sealer		Part	
	115 Volt Plate Sealer	186002786	
	240 Volt Plate Sealer	186002787	
	Roller for Mats	186002633	1

Compatible Systems

- ACQUITY UPLC™
- Alliance® HT

GPC 2000 Vials



4 mL Screw Cap



10 mL Crimp Top

Components

Vial	186000840	WAT223176
Black Screw Cap	600000162	
PTFE Septa	WAT072714*	
Aluminum Crimp Cap		600000138
Aluminum/PTFE/Silicone		

*144 Pack

Waters 15 x 45 mm Vials for 717



4 mL Screw Neck



Amber Screw Neck



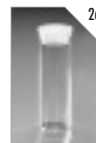
Total Recovery



PP Screw neck Vial



PP Conical



Glass Shell Vial



Amber Glass Shell Vial

Combination Pack

Vial LectraBond PTFE/Silicone Septa	186000838C	186001133C	186002629C			
Combo Deactivated	186000838DV	186001133DV				
Vial LectraBond preslit PTFE/Silicone Septa	186000839C	186001134C	186002630C			
Combo Deactivated	186000839DV	186001134DV				
Vial and PP snap cap				WAT022475	WAT025051	WAT025050

Components

Vial Only	186000840	186001135	186002520	186000999			
Vial Deactivated	186000840DV	186001135DV					
Max Volume Injection	2.4 mL	2.4 mL	2.4 mL	2 mL	2.95 mL	2.4 mL	2.4 mL
Max Residual Volume	1.6 mL	1.6 mL	1.6 mL	1 mL	50 µL	1.6 mL	1.6 mL
Black Cap LectraBond PTFE/Silicone	186000841	186000841	186000841	186000841			
Black Cap LectraBond preslit PTFE/Silicone	186000842	186000842	186000842	186000842			
Black Phenol Cap 144 pk	WAT072711	WAT072711	WAT072711	WAT072711			
PTFE Septa 1440 pk	WAT073005	WAT073005	WAT073005	WAT073005			
PTFE Septa 144 pk	WAT072714	WAT072714	WAT072714	WAT072714			
Self Sealing Septa 144 pack	WAT022861	WAT022861	WAT022861	WAT022861			
250 µL glass insert	WAT072704	WAT072704		WAT072704			
250 Deactivated	WAT072704DV	WAT072704DV					
Max Volume Injection	244 µL	244 µL					
Max Residual Volume	6 µL	6 µL					
250 µL glass insert 144 pack	WAT015199	WAT015199					
250 Deactivated	WAT015199DV	WAT015199DV					
Max Volume Injection	230 µL	230 µL					
Max Residual Volume	20 µL	20 µL					
250 µL Plastic Conical Insert (PMP) 144 pack	WAT072030	WAT072030					
Max Volume Injection	230 µL	230 µL					
Max Residual Volume	20 µL	20 µL					
Springs for LVI 100 pack	WAT072708	WAT072708					
250 µL PP insert 1000 pack	186001729	186001729					

48 Position Carousel

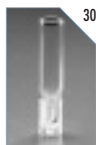
Waters 8 x 40 mm Vials



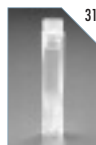
1 mL shell



Amber



Total Recovery



PP Conical

Vials for 96 Position Carousel

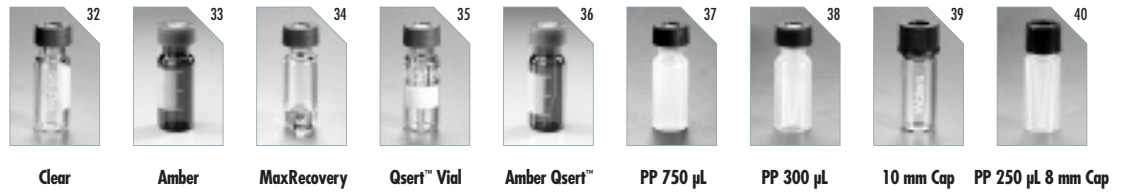
Shell Vial and Snap Cap	WAT025054C	WAT025053C	186000837C	WAT022476
Deactivated Version	WAT025054DV	WAT025053DV	186000837DV	
Pack Size	250	250	100	100
Max Volume Injection	600 µL	600 µL	700 µL	650 µL
Max Residual Volume	400 µL	400 µL	6 µL	50 µL
150 µL glass insert	WAT072294 (DV)	WAT072294 (DV)		
Spring for LVI	WAT072289	WAT072289		
Max Volume Injection	144 µL	144 µL		
Max Residual Volume	6 µL	6 µL		
PE Snap Caps 1000 pack	WAT078515	WAT078515	WAT078515	WAT078515
200 µL PE grad Insert with poly spring 1000 pack	186001728	186001728		
1 mL Shell Vial assembled 500 pack for dissolution system	WAT022479			

Certified Vials are indicated in BLUE.

96 Position Carousel

SAMPLE VIALS AND ACCESSORIES

Screw Cap 12 x 32 mm (9 mm cap) Vials for Compatible Systems



Combination Pack: Vial, Cap, and Septum

Combination pack with bonded silicone/PTFE Septum	186000272C	186000846C	186000326C	186001126C	186001130C	186002635	186002640	WAT270946C
COMBO deactivated	186000272DV	186000846DV	186000326DV	186001126DV	186001130DV			WAT270946DV
Combination pack with bonded preslit silicone/PTFE Septum	186000307C	186000847C	186000327C	186001128C	186001131C	186002636	186002639	
COMBO deactivated	186000307DV	186000847DV	186000327DV	186001128DV	186001131DV			

Vial Only

Vials Only	186000273	186000848	186002802	186002804	186002803	186002634	186002626	WAT0063300	WAT094172
Vials Only DEACTIVATED	186000273DV	186000848DV							

Inserts

300 µL w/poly spring	WAT094170	WAT094170						WAT094170
300 µL w/poly spring DV	WAT094170DV	WAT094170DV						WAT094170DV
Max Volume Injection	230 µL	230 µL						230 µL
Max Residual Volume	20 µL	20 µL						20 µL
150 µL w/poly spring	WAT094171	WAT094171						WAT094171
150 µL w/poly spring DV	WAT094171DV	WAT094171DV						WAT094171DV
Max Volume Injection	144 µL	144 µL						144 µL
Max Residual Volume	6 µL	6 µL						6 µL

Cap and Septum

Cap Black								WAT058875	WAT210684
Silicone/PTFE Septum								WAT058874	WAT094174
Septa PTFE/Silicone 8 mm preslit									WAT058876
Septa silicone/PTFE 1.4 mm									WAT210685
Septa PTFE 8 mm									WAT058886

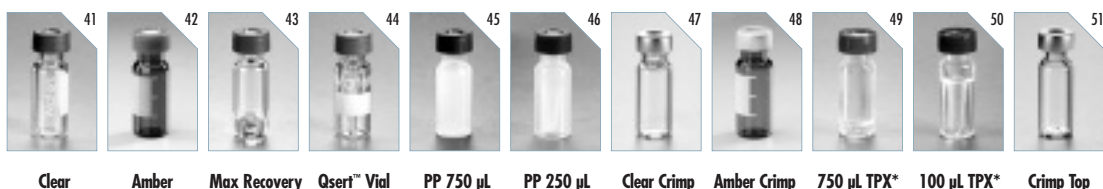
LectraBond™ Cap and Septum

Blue LectraBond™ Screw Cap	186000274	186000274	186000274	186000274	186000274	186000274	186000274		
Red LectraBond™ Screw Cap	186002129	186002129	186002129	186002129	186002129	186002129	186002129		
Green LectraBond™ Screw Cap	186002130	186002130	186002130	186002130	186002130	186002130	186002130		
Blue LectraBond™ Screw Cap Preslit	186000305	186000305	186000305	186000305	186000305	186000305	186000305		
Red LectraBond™ Screw Cap Preslit	186002128	186002128	186002128	186002128	186002128	186002128	186002128		
Green LectraBond™ Screw Cap Preslit	186002127	186002127	186002127	186002127	186002127	186002127	186002127		

Compatible Systems

Agilent Technologies	•	•	•	•	•	•	•		
Alcott								•	•
Antek								•	•
Beckman	•	•	•	•	•	•	•	•	•
CTC								•	•
Dynatech	•	•	•	•	•	•	•		
Finnigan	•	•	•	•	•	•	•		
Fisons	•	•	•	•	•	•	•		
Gilson	•	•	•	•	•	•	•		
Hitachi	•	•	•	•	•	•	•	•	•
LDC	•	•	•	•	•	•	•	•	•
Perkin-Elmer	•	•	•	•	•	•	•	•	•
Shimadzu	•	•	•	•	•	•	•	•	•
Spark								•	•
Spectra-Physics	•	•	•	•	•	•	•	•	•
Thermo	•	•	•	•	•	•	•	•	•
Thermal Separations								•	•
Varian	•	•	•	•	•	•	•	•	•

SAMPLE VIALS AND ACCESSORIES



Clear Amber Max Recovery Qsert™ Vial PP 750 µL PP 250 µL Clear Crimp Amber Crimp 750 µL TPX* 100 µL TPX* Crimp Top

Combination Pack: Vial, Cap, and Septa

Combination pack with bonded silicone/PTFE Septa				186001124(DV)	186002638	186002642					
Combination pack with bonded preslit silicone/PTFE Septa				186001125(DV)	186002637	186002641					
Combination pack with PTFE Septa				186001127(DV)							
Vials Only	WAT094219	WAT094220	186000984		186002627	186002628	WAT094222	WAT094223	186002814	PSL408789	PSL403682
Deactivated Vial	WAT094219DV	WAT094220DV	186000984DV								

Inserts

300 µL w/poly spring	WAT094170	WAT094170					WAT094170	WAT094170		
300 µL w/poly springDV	WAT094170DV	WAT094170DV					WAT094170DV	WAT094170DV		
Max Volume Injection	230 µL	230 µL					230 µL	230 µL		
Max Residual Volume	20 µL	20 µL					20 µL	20 µL		
150 µL w/poly spring	WAT094171	WAT094171					WAT094171	WAT094171		
150 µL w/poly spring DV	WAT094171DV	WAT094171DV					WAT094171DV	WAT094171DV		
Max Volume Injection	144 µL	144 µL					144 µL	144 µL		
Max Residual Volume	6 µL	6 µL					6 µL	6 µL		

Snap Cap and Septa - Silicone/PTFE

Blue	186000303	186000303	186000303	186000303	186000303	186000303		186000303	186000303
Black	186002649	186002649	186002649	186002649	186002649	186002649		186002649	186002649
Red	186002650	186002650	186002650	186002650	186002650	186002650		186002650	186002650

Snap Cap and Preslit Septa - Silicone/PTFE

Blue	186000304	186000304	186000304	186000304	186000304	186000304		186000304	186000304
Black	186002648	186002648	186002648	186002648	186002648	186002648		186002648	186002648
Red	186002647	186002647	186002647	186002647	186002647	186002647		186002647	186002647

Snap Cap and PTFE Septa

Blue	186000328	186000328	186000328	186000328	186000328	186000328		186000328	186000328
Black	186002645	186002645	186002645	186002645	186002645	186002645		186002645	186002645
Red	186002646	186002646	186002646	186002646	186002646	186002646		186002646	186002646

Crimp Cap

Crimp Cap Silicone/PTFE Septum							PSL404219	PSL404219		PSL404219
Crimp Cap PTFE/Silicone/PTFE Septum							PSL404231	PSL404231		PSL404231
Crimper 1 each							PSL904301	PSL904301		PSL904301
Aluminum Crimp Cap 12 mm rubber/Chlorobutyl/PTFE										PSL412115
Aluminum Crimp Cap 12 mm teflon 0.25 mm thick										PSL408027
PTFE Septa										PSL408026

Compatible Systems

Agilent Technologies	•	•	•	•	•	•	•	•	•	•
Alcott							•	•		•
Antek							•	•		•
Beckman	•	•	•	•	•	•	•	•	•	•
CTC							•	•		•
Dynatech	•	•	•	•	•	•	•	•	•	•
Finnigan	•	•	•	•	•	•	•	•	•	•
Fisons	•	•	•	•	•	•	•	•	•	•
Gilson	•	•	•	•	•	•	•	•	•	•
Hitachi	•	•	•	•	•	•	•	•	•	•
LDC	•	•	•	•	•	•	•	•	•	•
Perkin-Elmer	•	•	•	•	•	•	•	•	•	•
Shimadzu	•	•	•	•	•	•	•	•	•	•
Spark							•	•		•
Spectra-Physics	•	•	•	•	•	•	•	•	•	•
Thermal Separations							•	•		•
Varian	•	•	•	•	•	•	•	•	•	•

*TPX - Polymethylpentene

Snap Cap

SAMPLE VIALS AND ACCESSORIES

15 x 45 mm Vials and Accessories



Combination Pack

Vial LectraBond™ PTFE/Silicone Septa	186000838C	186001133C	186002629C			
Combo Deactivated	186000838DV	186001133DV				
Vial LectraBond™ preslit PTFE/Silicone Septa	186000839C	186001134C	186002630C			
Combo Deactivated	186000839DV	186001134DV				
Vial and PP snap cap				WAT022475	WAT025051	WAT025050

Components

Vial Only	186000840	186001135	186002520	186000999		
Vial Deactivated	186000840DV	186001135DV				

LectraBond™ Cap and Septa

Black Cap LectraBond PTFE/Silicone	186000841	186000841	186000841			
Black Cap LectraBond preslitPTFE/Silicone pack size	186000842	186000842	186000842	1000	48	

Cap, Septa, and Inserts

Black Phenol Cap 144 pk	WAT072711	WAT072711	WAT072711			
PTFE Septa 1440 pk	WAT073005	WAT073005	WAT073005			
PTFE Septa 144 pk	WAT072714	WAT072714	WAT072714			
Self Sealing Septa 144 pack	WAT022861	WAT022861	WAT022861			
250 µL glass insert	WAT072704	WAT072704	WAT072704			
250 Deactivated	WAT072704DV	WAT072704DV	WAT072704DV			
250 µL glass insert 144 pack	WAT015199	WAT015199	WAT015199			
250 Deactivated	WAT015199DV	WAT015199DV	WAT015199DV			
250 µL Plastic Conical Insert (PMP) 144 pack	WAT072030	WAT072030	WAT072030			
Springs for LVI 100 pack	WAT072708	WAT072708	WAT072708			
250 µL PP insert 1000 pack	186001729	186001729	186001729			

Compatible Systems

Bruker	•	•	•	•	•	•
Kontron	•	•	•	•	•	•
Perkin-Elmer	•	•	•	•	•	•
Shimadzu	•	•	•	•	•	•
Tosoh	•	•	•	•	•	•
Unicam	•	•	•	•	•	•

48 Position Carousel

Listing of Vial Descriptions

Screw Cap 12 x 32 mm Vials for Alliance® and ACQUITY UPLC™

1. Clear 12 x 32 Type 1, 33-expansion glass, screw neck with Quick Thread Design, (6 mm opening, 9 mm cap).
2. Amber 12 x 32 Type 1, 51-expansion glass screw neck with Quick Thread Design (6 mm opening, 9 mm cap).
3. Waters Maximum Recovery Vial, 12 x 32 Type 1 33-expansion glass, screw neck with Quick Thread Design (6 mm opening, 9 mm cap).
4. Polypropylene 12 x 32 750 µL screw neck with Quick Thread Design (6 mm opening, 9 mm cap). Reformulate clean PP vial.
5. Polypropylene 12x32 300 µL screw neck with Quick Thread Design (6 mm opening, 9 mm cap). Reformulate clean PP vial.
6. Clear 12 x 32 Type 1, 33-expansion glass, screw neck (6 mm opening, 10 mm cap).
7. Polypropylene 12x32 250 µL screw neck vial (6 mm opening, 8 mm cap).
8. Waters Alliance® Total Recovery Vial Clear 12 x 32 Type 1, 33-expansion glass, screw neck with Quick Thread Design, (6 mm opening, 9 mm cap).

Snap Cap 12 x 32 mm Vials for Alliance® and ACQUITY UPLC™

9. Clear 12 x 32 Type 1, 33-expansion glass, snap cap vial (6 mm opening, 9 mm cap).
10. Amber 12 x 32 Type 1, 51-expansion glass snap cap vial (6 mm opening, 9 mm cap).
11. Waters Maximum Recovery Vial, 12 x 32 Type 1 33-expansion glass, snap cap vial (6 mm opening, 9 mm cap).
12. Polypropylene 12 x 32 750 µL snap cap vial (6 mm opening, 9 mm cap). Reformulate clean PP vial.
13. Polypropylene 12 x 32 300 µL snap cap vial (6 mm opening, 9 mm cap). Reformulate clean PP vial.
14. Clear 12 x 32 Type 1, 33-expansion glass, crimp top vial (6 mm opening, 12 mm cap).
15. Amber 12 x 32 Type 1, 51-expansion glass, crimp top vial (6 mm opening, 12 mm cap).
16. Polymethylpentene 12 x 32 700 µL snap cap vial (6 mm opening, 9 mm cap).
17. Polymethylpentene 12 x 32 100 µL snap cap vial (6 mm opening, 9 mm cap).
18. Waters Alliance® Total Recovery Vial Clear 12 x 32 Type 1, 33-expansion glass, snap cap vial (6 mm opening, 9 mm cap).

GPC 2000 Vials

19. 4 mL glass screw neck vial Type 1, 33-expansion glass for GPC 2000
20. 10 mL crimp top glass vial for GPC 2000

Waters Vials for 717

21. Clear 15 x 45 Type 1, 33-expansion glass, screw neck vial.
22. Amber 15 x 45 Type 1, 51-expansion glass, screw neck vial.
23. Waters Total Recovery screw neck vial clear glass 15 x 45 Type 1, 33-expansion glass
24. Polypropylene 15 x 45 3 mL round bottom screw neck vial 1,000 pack
25. Polypropylene snap cap vial with conical bottom, PE snap caps 48 pack
26. 4 mL glass shell vial with polyethylene snap cap Type 1 51- Expansion glass
27. 4 mL amber shell vial with polyethylene snap cap Type 1 51- Expansion glass
28. 1 mL clear glass shell vial (8 x 40 mm) Type 1 51 expansion glass with polyethylene snap cap 250 pack
29. 1 mL amber glass shell vial (8 x 40 mm) Type 1 51- expansion glass with polyethylene snap cap 250 pack
30. Total Recovery clear glass vial (8 x 40 mm) with polyethylene snap cap Type 1 51 expansion Glass
31. 700 µL polypropylene Vial (8 x 40 mm) with polyethylene snap cap

Screw Cap 12 x 32 mm (9 mm Cap) Vials for Compatible Systems

32. Clear 12 x 32 Type 1, 33-expansion glass, screw neck with Quick Thread Design, (6 mm opening, 9 mm cap).
33. Amber 12 x 32 Type 1, 51-expansion glass screw neck with Quick Thread Design (6 mm opening, 9 mm cap).
34. Waters Maximum Recovery Vial, 12 x 32 Type 1 33-expansion glass, screw neck with Quick Thread Design (6 mm opening, 9 mm cap).
35. Qsert™ Vial clear screw cap glass vial, Quick Thread Design with fused in glass insert (6 mm opening, 9mm cap)
36. Qsert™ Vial amber screw cap glass vial, Quick Thread Design with fused in glass insert (6 mm opening, 9mm cap)
37. Polypropylene 12 x 32 750 µL screw neck with Quick Thread Design (6 mm opening, 9 mm cap). Reformulate clean PP vial.
38. Polypropylene 12x32 300 µL screw neck with Quick Thread Design (6 mm opening, 9 mm cap). Reformulate clean PP vial.
39. Clear 12 x 32 Type 1, 33-expansion glass, screw neck (6 mm opening, 10 mm cap).
40. Polypropylene 12x32 250 µL screw neck vial (6 mm opening, 8 mm cap).

Snap Cap 12 x 32 mm (9 mm Cap) Vials for Compatible Systems

41. Clear 12 x 32 Type 1, 33-expansion glass, snap cap vial (6 mm opening, 9 mm cap).
42. Amber 12 x 32 Type 1, 51-expansion glass snap cap vial (6 mm opening, 9 mm cap).
43. Waters Maximum Recovery Vial, 12 x 32 Type 1 33-expansion glass, snap cap vial (6 mm opening, 9 mm cap).
44. QsertVial clear snap cap glass vial with fused in glass insert (6 mm opening, 9 mm cap)
45. Polypropylene 12 x 32 750 µL snap cap vial (6 mm opening, 9 mm cap). Reformulate clean PP vial.
46. Polypropylene 12 x 32 300 µL snap cap vial (6 mm opening, 9 mm cap). Reformulate clean PP vial.
47. Clear 12 x 32 Type 1, 33-expansion glass, crimp top vial (6 mm opening, 12 mm cap).
48. Amber 12 x 32 Type 1, 51-expansion glass, crimp top vial (6 mm opening, 12 mm cap).
49. Polymethylpentene 12 x 32 700 µL snap cap vial (6 mm opening, 9 mm cap).
50. Polymethylpentene 12 x 32 100 µL snap cap vial (6 mm opening, 9 mm cap).
51. Clear 12 x 32 crimp top vial

15 x 45 mm Vials and Accessories

52. Clear 15 x 45 Type 1, 33-expansion glass, screw neck vial.
53. Amber 15 x 45 Type 1, 51-expansion glass, screw neck vial.
54. Waters Total Recovery screw neck vial clear glass 15 x 45 Type 1, 33-expansion glass
55. Polypropylene 15 x 45 3 mL screw neck vial 1,000 pack
56. Polypropylene Snap Cap vial with conical bottom, PE snap caps 48 pack
57. 4 mL Glass Shell Vial with polyethylene snap cap Type 1 51- Expansion glass
58. 4 mL Amber Shell Vial with polyethylene snap cap Type 1 51- Expansion glass

Note: all product are 100 packs unless noted otherwise

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Outside the U.S.A., please refer to the back of this catalog for the address and telephone number of your local Waters office.



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