

**Crimp-Top Vials, 2.0mL, 12 x 32mm, 11mm Crimp Finish**

White graduated marking spots are a standard feature unless otherwise noted.

**Crimp-Top Vials, Snap Seal™ Style—12 x 32mm, 11mm Crimp**

Description	100-pk.	1000-pk.
2.0mL Clear Glass Vial w/White Graduated Marking Spot	24383	24384
2.0mL Amber Glass Vial w/White Graduated Marking Spot	24385	24386
2.0mL Clear Glass Vial without Graduated Marking Spot	21152	21153

**11mm Aluminum Crimp Seals with Septa**

Description	100-pk.	500-pk.	1000-pk.
Silver Seal, PTFE/Natural Rubber Septa	21174	—	21175
Blue Seal, PTFE/Red Rubber Septa	24351	—	24352
Green Seal, PTFE/Red Rubber Septa	24353	—	24354
Red Seal, PTFE/Red Rubber Septa	24355	—	24356
Yellow Seal, PTFE/Red Rubber Septa	24357	—	24358
Mixed Colors, PTFE/Rubber Septa	—	21724	—
Silver Seal, PTFE/Silicone Septa	24359	—	24360
Blue Seal, PTFE/Silicone Septa	24361	—	24362
Green Seal, PTFE/Silicone Septa	24363	—	24364
Red Seal, PTFE/Silicone Septa	24365	—	24366
Yellow Seal, PTFE/Silicone Septa	24367	—	24368
Mixed Colors, PTFE/Silicone Septa	—	21725	—
Silver Seal, PTFE/Silicone/PTFE Septa	24369	—	24370

for **more** infosee **page 62** for electronic crimpers and decappers.**Convenience Kits: Vials, Caps, & Septa**

Vials packaged in a clear-lid tray. Caps with septa packaged in a plastic bag.

Description	100-pk.	1000-pk.
2.0mL Clear Vial, <b>deactivated</b> , PTFE/Natural Rubber Silver Seal	24671	24672
2.0mL Amber Vial, <b>deactivated</b> , PTFE/Natural Rubber Silver Seal	24673	24674
2.0mL Clear Vial, untreated, PTFE/Natural Rubber Silver Seal	21196	21197
2.0mL Amber Vial, untreated, PTFE/Natural Rubber Silver Seal	21198	21199
2.0mL Clear Vial, untreated, PTFE/Silicone Silver Seal	24646	24647
2.0mL Amber Vial, untreated, PTFE/Silicone Silver Seal	24648	24649

**9mm Short-Cap, Screw-Thread Vials, 12 x 32mm, 9mm Opening**  
**Fit all 2.0mL, 12 x 32mm, Crimp-Top Vial Based Autosamplers.**

- Shorter screw cap allows the robotic autosampler to function properly.
- Wider opening prevents syringe problems.
- Dimensions are effectively identical to the crimp-top vial.
- Variety of colors and liner material.

**9mm Short-Cap, Screw-Thread Vials, 12 x 32mm, 9mm Opening**

Description	100-pk.	1000-pk.
2.0mL Clear Vial, w/White Graduated Marking Spot	21140	21141
2.0mL Amber Vial, w/White Graduated Marking Spot	21142	21143
2.0mL Clear Vial, without Graduated Marking Spot	21154	21155

**9mm Thread Pre-Assembled Short-Cap, Screw-Vial Closures**

Description	100-pk.	500-pk.	1000-pk.
Blue Cap, PTFE/Red Rubber Liner	24473	—	24474
Mixed Colors, PTFE/Red Rubber Liner	—	24668	—
Blue Cap, PTFE/Silicone Liner	24485	—	24486
Green Cap, PTFE/Silicone Liner	24487	—	24488
Yellow Cap, PTFE/Silicone Liner	24493	—	24494
Mixed Colors, PTFE/Silicone Liner	—	24669	—
Blue Cap, PTFE/Silicone/PTFE Liner	24497	—	24498
Black Cap, PTFE/Silicone/PTFE Liner	24495	—	24496
Mixed Colors, PTFE/Silicone/PTFE Liner Cap	—	24670	—

## Crimpers and Decappers

Safer than removing caps with pliers, knife or screwdriver blade!



Decapper



Crimper

### Aluminum Seal Crimpers and Decappers

The crimper is adjustable for optimized sealing performance and is comfortable enough for prolonged use. If you need to save, transfer, or dispose of your samples, our decapper allows you to remove a crimp-top cap safely and easily. Far safer than removing caps with pliers, knife or screwdriver blades, etc. If you aren't currently using a seal decapper, we recommend you order one today!

Description	qty.	cat.#
8mm Crimper	ea.	21735
8mm Decapper	ea.	21736
11mm Crimper	ea.	21170
11mm Decapper	ea.	21171
13mm Crimper	ea.	21739
13mm Decapper	ea.	21740
20mm Crimper	ea.	21737
20mm Decapper	ea.	21738



### Hand-held Rechargeable Crimpers and Rechargeable Decappers

- Easy to use; comfortable grip.
- Hundreds of operations from one charge.
- Adjustable crimping force.
- All kits include battery charger.



Powered by a standard Black and Decker Versapak® battery, these electronic tools for 11mm or 20mm caps will cycle hundreds of times on a single charge. The cycle is controlled precisely, through an internal counter, and is adjusted with two buttons on the side of the case. The tools fit comfortably in the hand and weigh approximately 600 grams. The jaws can be positioned easily around closely-spaced vials in standard autosampler trays. Each kit includes the tool, a Versapak® Gold rechargeable battery, which uses environmentally friendly NiMH technology, and a charger. Recharging generally takes 6-9 hours.

### Decapping has never been easier!

one . . .

two . . .

three!



The Electronic Crimper fits around vials in standard autosampler trays. The adjustable setting provides a precision crimp, vial after vial.



Description	qty.	cat.#
11mm Electronic Crimper (110 volt battery charger)	kit	22853
11mm Electronic Crimper (220 volt European battery charger)	kit	22853-EUR
11mm Electronic Crimper (220 volt UK battery charger)	kit	22853-UK
11mm Electronic Decapper (110 volt battery charger)	kit	22854
11mm Electronic Decapper (220 volt European battery charger)	kit	22854-EUR
11mm Electronic Decapper (220 volt UK battery charger)	kit	22854-UK
20mm Electronic Crimper (110 volt battery charger)	kit	22851
20mm Electronic Crimper (220 volt European battery charger)	kit	22851-EUR
20mm Electronic Crimper (220 volt UK battery charger)	kit	22851-UK
20mm Electronic Decapper (110 volt battery charger)	kit	22852
20mm Electronic Decapper (220 volt European battery charger)	kit	22852-EUR
20mm Electronic Decapper (220 volt UK battery charger)	kit	22852-UK

## Screw-Thread Step™ Vials, 4.0mL, WISP™ 48 Style, 13mm/425 Screw-Thread

## WISP™ 48 Screw-Thread Step™ Vials (15 x 45mm, 13/425 Screw-Thread)

Description	100-pk.	1000-pk.
4.0mL Clear Step™ Vial, White Grad. Marking Spot	24654	24655
4.0mL Amber Step™ Vial, White Grad. Marking Spot	24656	24657



4.0mL Clear Step™ Vial

## Caps and Septa

Description	100-pk.	1000-pk.
Top Hat™, PTFE/Silicone Septa	21745	21746
Pre-Assembled, Red PTFE/Silicone, 0.065"	21743	21744
Caps, Black, Polypropylene, Open-Hole	21741	21742
Septa, Red PTFE/Silicone, 0.040"	21751	21752
Septa, Red PTFE/Silicone, 0.060"	21749	21750

## Limited Volume Inserts

Description	100-pk.	1000-pk.
500µL, Glass, WISP™, Flat Bottom*	21787	21788

\*Also fit 4.0mL Snap Seal™ Vials (see our general catalog or website).

## Shell Vials, 1.0mL, WISP™ 96 Style, 8 x 40mm

## WISP™ 96 Style, 8 x 40mm Shell Vials

Description	200-pk.	1000-pk.
1.0mL Clear Vial	24662	24663
1.0mL Amber Vial	24664	24665
1.0mL Polypropylene Vial	24678	24679
700µL Limited Volume Polypropylene Vial	24680	24681



## 8mm Starburst Plugs

Description	200-pk.	1000-pk.
Snap Plug, Clear Polyethylene	21769	21770
Snap Plug, Conical, Clear Polyethylene	21771	21772
Snap Plug, Silicone Lined, Clear Polyethylene	21773	21774

## Limited Volume Inserts for Shell Vials

Description	100-pk.	1000-pk.
250µL Glass, Big Mouth Insert w/ Bottom Spring	21776	21777



# LC Autosampler Syringes

## Syringes for Agilent 1090 & 1100 LC Autosamplers



25µL, 1/4-32 UNEF Thread

### SGE Syringes

Volume	SGE		qty.	Restek
	Model	cat.#		cat.#
25µL	25D-HP1090-GT	003670	ea.	22290
250µL	250D-HP1090-GT	006670	ea.	22291

## Syringe for Hitachi LC Autosamplers



500µL, M10 X1 Thread

### SGE Syringe

Volume	SGE		qty.	Restek
	Model	cat.#		cat.#
500µL	500C-HITACHI	007660	ea.	22292

## Syringes for PerkinElmer LC Autosamplers



250µL, 1/4-28 UNF Thread

### SGE Syringes

Volume	SGE		qty.	Restek
	Model	cat.#		cat.#
50µL	50D-CX-GT	004995	ea.	22295
100µL	100D-CX-GT	005990	ea.	22296
250µL	250D-CX-GT	006995	ea.	22297
500µL	500D-CX-GT	007995	ea.	22298
1mL	1MD-C-GT	008185	ea.	22299

## Syringes for Waters WISP™ LC Autosamplers



250µL, 1/4-28 UNF Thread

### SGE Syringes

Volume	SGE		qty.	Restek
	Model	cat.#		cat.#
25µL	25D-WISP	003990	ea.	22293
250µL	250D-WISP	006690	ea.	22294

## Syringes for Waters WISP™ LC Autosamplers

Teflon® PTFE-tipped plungers



### Hamilton Syringes

Volume	Hamilton		qty.	Restek
	Model	cat.#		cat.#
25µL	1702	80020	ea.	24528
250µL	1725	80024	ea.	24529

## Syringes for CTC/LEAP LC Autosamplers


**new!**

### Hamilton Syringes

Hamilton 10µL LC Autosampler Syringe

Volume	Needle Term.	Needle Gauge	Needle Length	Point Style	Hamilton		Restek
					Model	cat. #	
10µL	N	22s	2"/51mm	3	701N	203073	ea. 22743
25µL	N	22s	2"/51mm	3	1702N	203075	ea. 22744
100µL	N	22s	2"/51mm	3	1710N Slim Line*	203077	ea. 22745
100µL	N	22	2"/51mm	3	1710N	203235	ea. 22746
250µL	N	22	2"/51mm	3	1725N	203079	ea. 22747
500µL	N	22	2"/51mm	3	1750N	203349	ea. 22748

\*Barrel O.D. = 6.7mm; all other 25µL and 100µL syringes have a 7.9mm barrel O.D.


**new!**

### SGE Syringes

SGE 10µL LC Autosampler Syringe

Volume	Needle Term.	Needle Gauge	Needle Length	Point Style	SGE		Restek
					Model	cat. #	
10µL	F	22s	2"/51mm	LC	10F-CTC-LC	002710	ea. 22737
25µL	F	22s	2"/51mm	LC	25F-C/FLC	003984	ea. 22738
25µL*	R	22s	2"/51mm	LC	25R-C/T-GT-LC	003985	ea. 22739
50µL*	F	22s	2"/51mm	LC	50F-C/T-GT-LC	004810	ea. 22740
100µL*	R	22s	2"/51mm	LC	100R-C/T-GT-LC	005330	ea. 22741
500µL*	F	22s	2"/51mm	LC	500F-CTC-GT-LC(0.41)	007720	ea. 22742

\*Gas-Tight syringe.

## Analytical Reference Materials

### HPLC Normal Phase Test Mix #1

Routine analysis using this mix can assist in determining the need to perform column and/or system maintenance.

benzene	1.00mg/mL	benzyl alcohol	3.00
benzaldehyde	0.04	4-methoxybenzyl alcohol	2.00
In hexane, 1mL/ampul			
cat. # 35004 (ea.)			

No data pack available.

### HPLC Reversed Phase Test Mix #1

Routine analysis using this mix can assist in determining the need to perform column and/or system maintenance.

benzene	3.00mg/mL	naphthalene	0.50
uracil	0.02	biphenyl	0.06
In methanol:water (75:25), 1mL/ampul			
cat. # 35005 (ea.)			

No data pack available.

### HPLC Performance Test Mix

The National Institute of Standards and Technology (NIST) formulated a mixture that is highly effective for characterizing HPLC columns for efficiency, void volume, methylene selectivity, retentiveness, and activity toward chelators and organic bases. Results can be used for column classification, column selection, monitoring column performance over time, or for quality control. We test our material against the NIST 870 standard.

amitriptyline hydrochloride	2800µg/mL	quinizarin	94
ethylbenzene	1700	toluene	1400
		uracil	28
In methanol, 1mL/ampul			
cat. # 31699 (ea.)			

### HPLC OQ Linearity Test Mix Kit

Linear detector responses to concentration variations are an important part of operation qualification (OQ) for HPLC instruments. Our kit of five aqueous solutions of caffeine can be used to generate simple plots of UV response versus concentration. Certificate of Analysis includes caffeine concentration, calculated variance in preparing each mixture, a linearity plot, and coefficient of determination ( $r^2$ ) for the linear plot.

Caffeine at 5.0, 25.0, 125.0, 250.0, 500.0 µg/mL in water in a five ampul kit.

1mL each of these mixtures.

cat. # 31805 (kit)

No data pack available.

### Carbohydrate HPLC Performance Check Mix

Performance qualification (PQ) determines the precision of the HPLC system. Our performance check mix for HPLC / RI consists of five simple sugars in varied concentrations. We prepare the reference material in water, lyophilize it, and pack it dry for enhanced stability.

glucose	2.0mg	maltose	4.5
fructose	2.1	sucrose	4.0
lactose	4.4		

Dry components in 4mL screw-cap vial.

Reconstitute in 1mL acetonitrile:water (75:25) to 2.0, 2.1, 4.4, 4.5, 4.0 mg/mL, respectively.

cat. # 31809 (ea.)

No data pack available.