

Less Stress More Peace of Mind

Agilent InfinityLab Stay Safe caps and accessories





Minimize Harmful Vapors and Maintain Solvent Consistency

Open- or partially-covered solvent bottles can lead to solvent evaporation and the escape of harmful vapors. Over time, these chemicals can have a negative impact on the health of your lab employees and visitors.

Agilent InfinityLab Stay Safe caps and accessories stop solvents from leaching into the air. With just a twist, these safety caps fit snugly onto your standard solvent bottles, keeping the air free from harmful vapors. They also help maintain solvent consistency for more reproducible results.

Decrease exposure to toxic chemicals

Acetonitrile and methanol are just two of the many compounds you may be exposed to every day. Stay Safe caps stop solvents from leaching into the air—protecting both you and your coworkers.

Ensure the reproducibility of your chromatographic analysis

Mobile phase changes due to evaporation can affect chromatographic performance. With Stay Safe caps, you can stop solvents from leaching into the air, maintaining mobile phase consistency over time.

Prevent waste and save on cost

Having to replace your mobile phase due to an evaporative change can drive up costs. Stay Safe caps stop solvents from leaching into the air, preventing waste.



Go from this...

- ✘ Evaporation of hazardous solvent vapors into your lab environment
- ✘ Airborne contaminants entering the solvent bottle, causing bacterial growth and ghost peaks



To this...

- ✔ A safer work environment: Solvents, vapors, and gases are restricted to their container
- ✔ More reliable HPLC/UHPLC: Stop dust and other air contaminants from affecting your results

InfinityLab Stay Safe Caps Prevent Solvent Evaporation



We compared the evaporation rate of methanol from identical solvent bottles, equipped with different caps.



Open bottle, no cap



Standard cap with
two open holes



Agilent InfinityLab
Stay Safe cap



Closed cap



The “small” parts of your LC workflow make a big difference

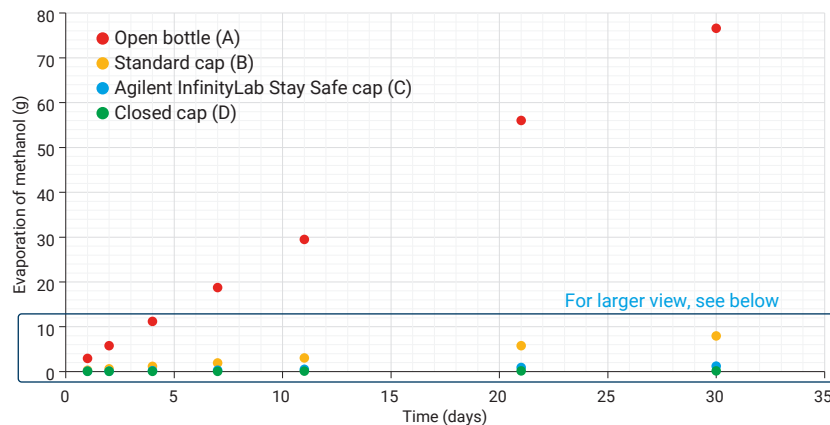
Agilent InfinityLab Stay Safe caps, solvent bottles, and waste cans are part of the Agilent InfinityLab portfolio.

From maintaining your LC system, to controlling harmful solvent fumes, innovative InfinityLab supplies are designed to solve everyday laboratory challenges. So you can work more efficiently, leaving you with more time and less frustration.

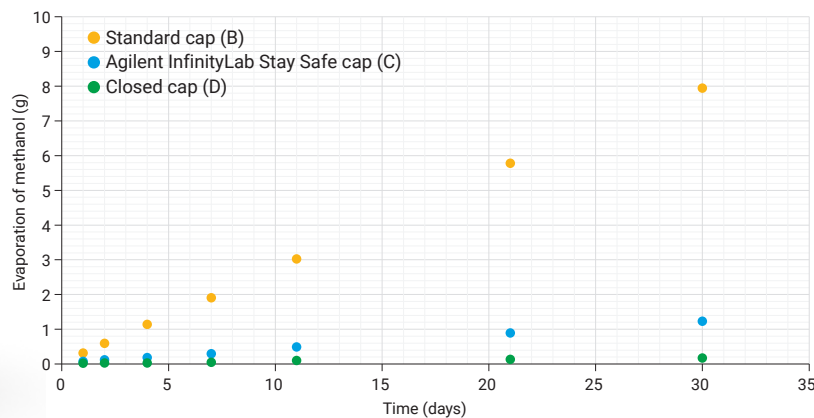
Average (n = 6) methanol evaporation over time resulting from using the different cap types

The bottles were stored in a solvent cabinet with ten-fold air exchange rate per hour. All the bottles were weighed at the beginning of the experiment, then several times over a period of 30 days. This measured the loss of methanol over time. Temperature was not controlled, but was recorded during the experiment, and it varied between 17 and 21 °C.

Methanol evaporation over time from solvent bottles equipped with different types of cap.



Methanol evaporation over time from solvent bottles equipped with specified caps.



Cap Type	Loss of Methanol	
	g	%
Open bottle	76.6	19.1
Standard cap	7.9	2.0
Agilent InfinityLab Stay Safe cap	1.2	0.3
Closed bottle	0.2	0.0

-98% (from Open bottle to Agilent InfinityLab Stay Safe cap)
-85% (from Standard cap to Agilent InfinityLab Stay Safe cap)

Loss of methanol after 30 days. With InfinityLab Stay Safe caps, the evaporation of methanol was reduced by 85% compared to a standard cap, and by 98% compared to an open bottle.

Solvent Bottles and Caps: Perfect Partners for a Safer Lab



Agilent solvent bottles are designed for easy use and safe handling, lowering the risk of accidents in the lab. They are compatible with your InfinityLab LC Series instruments, and can be incorporated seamlessly into your LC workflow.

InfinityLab venting valve

Includes six-month time strip indicating when the valve needs to be replaced.

InfinityLab fittings

Vapor-free tubing connection.

InfinityLab Stay Safe cap

InfinityLab solvent bottle

Easy-to-read white ceramic print

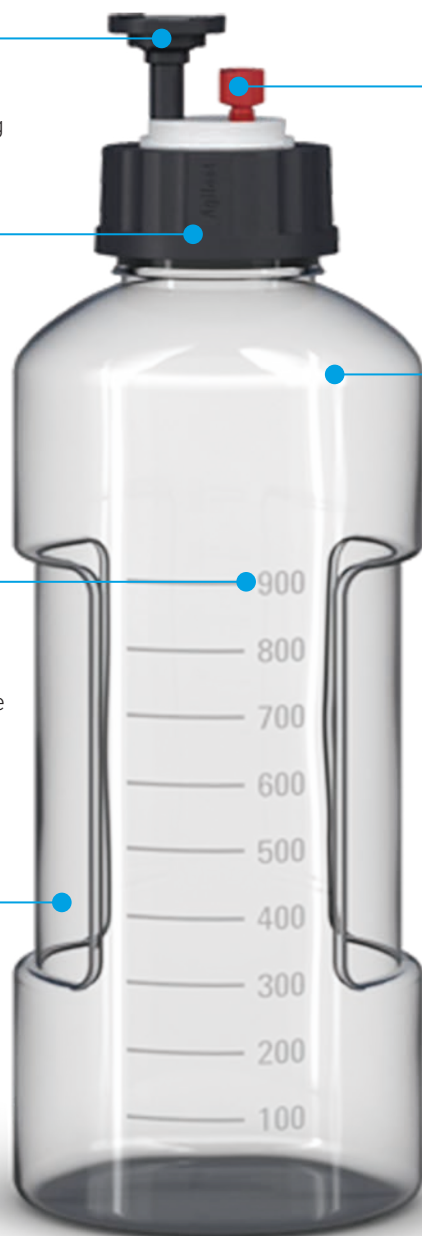
Layout indicates the nominal volume and allows you to quickly determine the rest contents of the bottle.

Ergonomic design

A slim profile and shaped gripping zones on both sides of the bottle promote safe, easy use.

Identification rings and labels

Colorful silicone rings and self-adhesive labels let you unambiguously identify solvent compositions.



Many configurations are available to suit your needs



Stay Safe cap port configuration

The InfinityLab Stay Safe caps are available in a variety of configurations for fitting ports. In each configuration there is one additional port for the venting valve.



Stay Safe cap with one port



Stay Safe cap with two ports



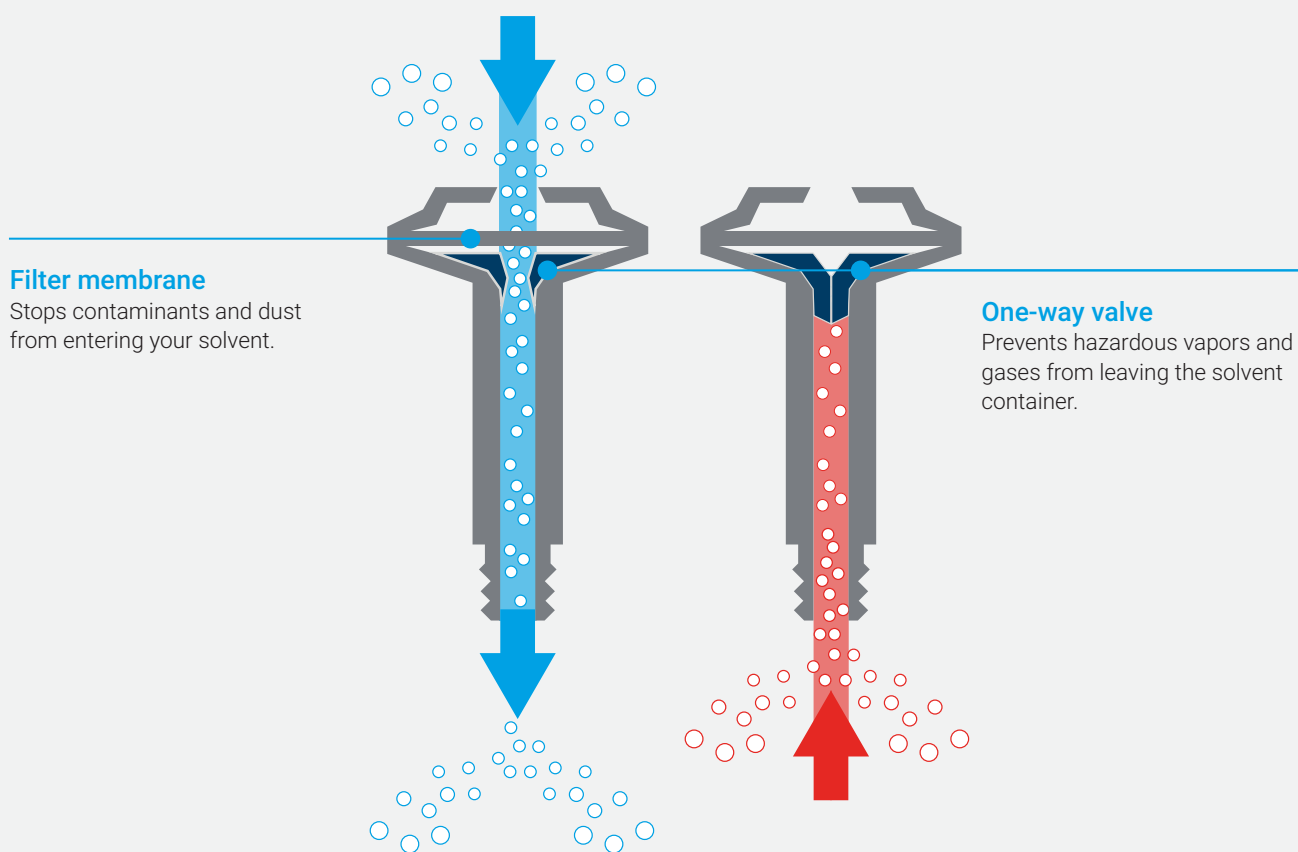
Stay Safe cap with three ports

Venting valves: an essential component for protecting air quality

The Agilent InfinityLab venting valve plays an important role in maintaining a clean, safe workspace. It prevents harmful vapors from escaping the solvent bottle, and ensures adequate ventilation while solvent is being pulled into the LC instrument. A time strip indicates the time of use, and reminds you to replace the valve.

How does it work?

The valve allows air to flow into the bottle to compensate for the pressure during solvent removal. A PTFE filter membrane installed at the top of the valve minimizes the risk of dust particles contaminating the solvent.



Time strip: easily replace parts when needed

InfinityLab venting valves include an easy-to-read strip that tells you when it's time for replacement. A simple press of your finger activates the strip and starts the clock. You will know when it's time to reorder a new valve when the red bar reaches the six-month mark.*

* Assumes typical lab conditions: 1 ml/min, 8 hours per day, 5 days per week, 20 °C.



Installation

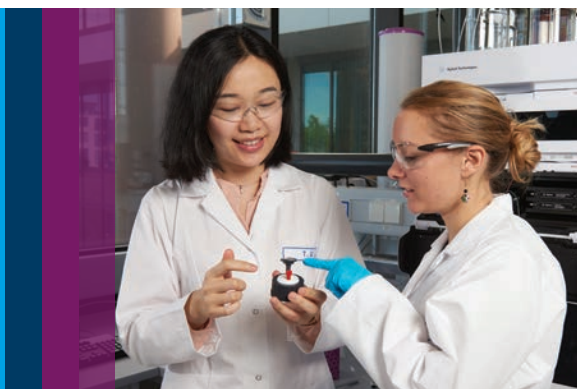
Here's how easy it is to install an InfinityLab Stay Safe cap with venting valve, solvent tube, and charcoal filter.

1. Install the venting valve into a free port on the Stay Safe cap and activate the time strip.*
2. Guide the solvent tube through the proper fitting on the Stay Safe cap. Push the open end through a free port on the cap.
3. Attach the solvent inlet filter onto the open end of the tubing.
4. Screw the Stay Safe cap onto the solvent bottle.
5. Adjust the height of the solvent inlet filter within the bottle.
6. Tighten the fitting by turning it clockwise.



* No venting valve on p/n 5043-1220.

Solvent Waste Containers: Safely Capture Hazardous Chemicals



InfinityLab solvent waste containers provide a convenient way for your LC solvent waste to be contained.

InfinityLab charcoal filter (58 g)

Six-month time strip tells you when the filter needs to be replaced.

Leak hose

Connects system leak tubing.

InfinityLab Stay Safe cap

Stops solvents from leaching into the air.

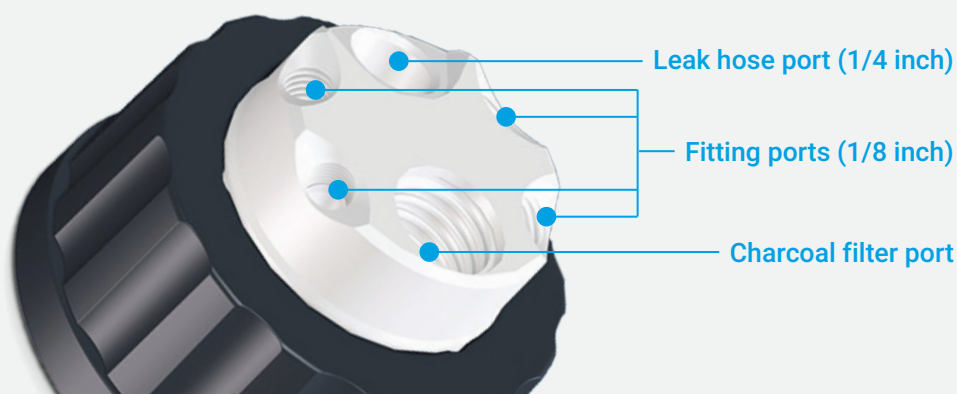
InfinityLab fittings

Enable vapor-tight tubing connections.

InfinityLab waste can

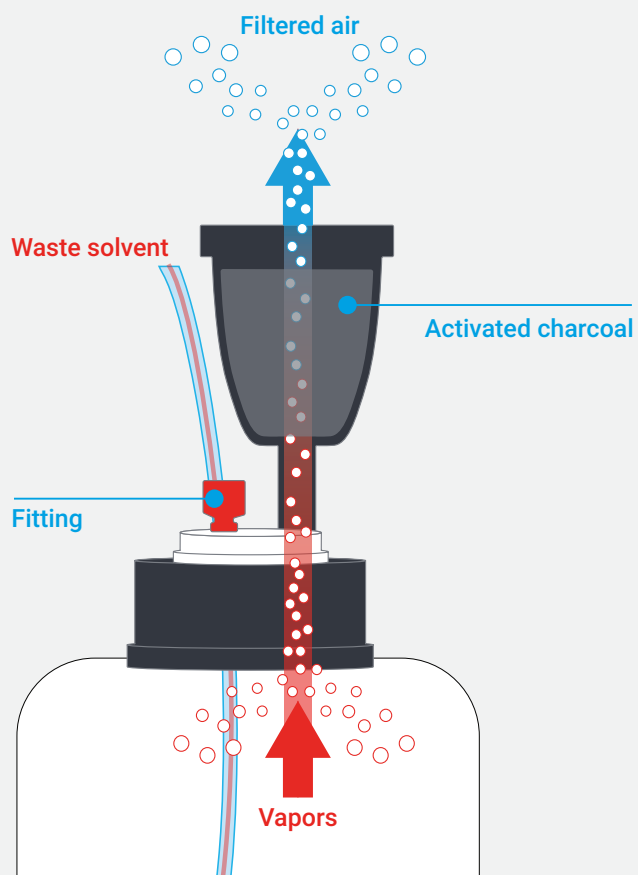


Ports for solvent waste containers



Charcoal filter: keep solvent vapors at bay

The Agilent InfinityLab charcoal filter absorbs the harmful solvent vapors coming from the waste container, ensuring clean air.



Installation

Installing an InfinityLab charcoal filter is fast and easy.




1. Identify the connecting port on the cap. Note: The charcoal filter can only be used on the Stay Safe cap GL45 with 4 ports (p/n 5043-1220).
2. Install the charcoal filter on the connecting port and turn clockwise until you feel a resistance.



InfinityLab Stay Safe Purging Bottles: Safe, Easy LC Purging



Need an easy way to reduce laboratory solvent vapors? InfinityLab Stay Safe purging bottles receive and secure up to four solvent lines, allowing you to purge multiple channels with the same solvent.

	Traditional purging process	→	Purging with InfinityLab Stay Safe purging bottle
 Avoid harmful solvent vapor	<ul style="list-style-type: none"> ✗ Vapors leach into the air from open or improperly covered solvent bottles. 		<ul style="list-style-type: none"> ✓ No leaching of harmful solvent vapors. ✓ Caps seal off mobile phase bottles during purging.
 Ease-of-handling	<ul style="list-style-type: none"> ✗ All solvent channels and filters run through a narrow bottle opening. ✗ Solvent filters can fall off when pulling the solvent tubing out of the bottle. 		<ul style="list-style-type: none"> ✓ Easily insert or remove solvent lines with no risk of losing solvent filters.
 Prevent air in LC line	<ul style="list-style-type: none"> ✗ Solvent lines and bottle caps hang loosely. ✗ Solvent filters can slide out, suctioning air into the LC. 		<ul style="list-style-type: none"> ✓ Solvent lines are securely attached, preventing suction of air into the LC.



For more information visit www.agilent.com/chem/infinitylab-purging-bottle

Ordering information

Part Number	Description	Notes
Stay Safe caps		
5043-1222	Stay Safe cap starter kit	4 caps (3x 5043-1217, 1x 5043-1218) 4 venting valves with time strip 4 fittings (3.2 mm)
5043-1217	GL45 cap with 1 port, 1 vent valve, 3.2 mm id fitting	1 venting valve port, 1 fitting port
5043-1218	GL45 cap with 2 ports, 1 vent valve, 3.2 mm id fittings (2)	1 venting valve port, 2 fitting ports
5043-1219	GL45 cap with 3 ports, 1 vent valve, 3.2 mm id fittings (3)	1 venting valve port, 3 fitting ports
5043-1698	GL38 cap with 1 port, 1 vent valve, 3.2 mm id fitting	1 venting valve port, 1 fitting port
5043-1333	GL45 cap with 1 port for prep LC, 1 vent valve, 4.7 mm id fitting	1 venting valve port, 1 fitting port
5043-1334	GL45 cap with 2 ports for prep LC, 1 vent valve, 4.7 mm id fitting (2)	1 venting valve port, 2 fitting ports
Stay Safe caps with charcoal filter ports		
5043-1220	GL45 cap with 4 ports, 1 leak hose, 4 fittings: 3.2 mm (2), 2.3 mm (1), 1.6 mm (1)	1 charcoal filter port, 1 leak hose port, 4 fitting ports Charcoal filter not included
5043-1695	GL38 cap with 4 ports, 1 leak hose, 4 fittings: 3.2 mm (2), 2.3 mm (1), 1.6 mm (1)	1 charcoal filter port, 1 leak hose port, 4 fitting ports Charcoal filter not included
Waste containers		
5043-1221	Kit, including 6-liter waste can and GL45 cap with 4 ports	Charcoal filter not included
5043-1196	6-liter waste can, GL45 thread	
5043-1338	Kit, including 10-liter waste can and S60 cap with 4 ports	Charcoal filter not included
5043-1337	10-liter waste can, S60 thread	
5043-1986	5-liter waste can, GL38 thread, narrow	23.5 × 6.4 × 37 cm
Accessories		
5043-1193	Charcoal filter (58 g) with time strip	Filter inserts into the GL14 port on InfinityLab Stay Safe caps for waste cans only
5043-1216	Fitting for 3.2 mm tubing, PFA, 2/pk	For solvent supply lines from bottle head assemblies
5043-1215	Fitting for 2.3 mm tubing, PFA, 2/pk	For seal wash silicone tubing
5043-1214	Fitting for 1.6 mm tubing, PFA, 2/pk	Use for 1.6 mm od tubing from seal wash supply line, detector, and automated purge valve outlet tubing
5043-1335	Fitting for 4.7 mm tubing, PFA, 2/pk	Use for 4.7 mm solvent supply lines used in prep LC
5043-1198	Screw plug 1/8 inch, PTFE, 2/pk	For plugging unused fitting ports
5043-1195	Screw plug 1/4 inch, PTFE, 1/pk	For plugging unused leak hose port
5005-2970	Screw plug 5/16 inch	For plugging unused fitting port on prep LC caps
5043-1207	2-port waste collector, PTFE	2 in 1 leak hose collector for connecting large-bore leak overflow tubes
5043-1190	Venting valve with 6-month time strip	
5043-1191	Thread adapter PTFE GL45(M) to GL40(F)	Extends GL40 bottle thread to GL45
5043-1192	Thread adapter PTFE GL45(M) to GPI38(F)	Extends GPI38-430(F) bottle thread to GL45
9301-6529	Identification silicone rings, 8/pk	4 colors
Purging bottles		
5043-1339	Stay Safe purging bottle	1-liter bottle with four GL45 openings
5043-1340	Kit, consisting of purging bottle and Stay Safe caps starter kit	Including 5043-1339 and 5043-1222
Solvent bottles		
9301-6523	GL45 clear thread, 500 mL, with cap	78 mm diameter, 195 mm height
9301-6524	GL45 clear thread, 1000 mL	93 mm diameter, 253 mm height
9301-6525	GL45 amber thread, 500 mL, with cap	78 mm diameter, 195 mm height
9301-6526	GL45 amber thread, 1000 mL	93 mm diameter, 253 mm height
9301-6528	GL45 clear thread, 1000 mL, with cap	93 mm diameter, 253 mm height
Bottle head assemblies		
G1311-60003	1000 mm length, 3.2 mm od	For 1100/1200/1260 Series LC systems, includes solvent inlet filter (glass)
G7120-60007	1730 mm length, 3.2 mm od	For 1260 Infinity II, 1290 Infinity/Infinity II Series LC systems, includes solvent inlet filter (glass)
G7122-60007	2280 mm length, 3.2 mm od	
G7120-60017	Ultraclean tubing quality, 1730 mm	Recommended for MS applications, 1290 Infinity/Infinity II LC

Part and Pictures



5043-1217
GL45 cap with one port,
one vent valve, one 3.2 mm id fitting



5043-1196
6-liter waste can GL45



5043-1218
GL45 cap with 2 ports,
1 vent valve, two 3.2 mm id fitting



5043-1214
Fittings 1.6 mm tubing
Color code: green



5043-1220
GL45 cap with four ports,
one leak hose, four fittings: 3.2 mm (2),
2.3 mm (1), 1.6 mm (1)



5043-1215
Fittings 2.3 mm
Color code: purple



5043-1190
Venting valve with
six-month time strip



5043-1216
Fittings 3.2 mm
Color code: red



5043-1193
Charcoal filter 58 g
with six-month time strip



5043-1195
Screw plug, 1/4 inch, PTFE, 1/pk

5043-1198
Screw plug, 1/8 inch, PTFE, 2/pk
(Shown in image)



5043-1191
Thread adapter PTFE
GL45(M) to GL40(F)

5043-1192
Thread adapter PTFE
GL45(M) to GPI38(F)
(Shown in image)



5043-1207
2-port waste collector



5043-1222
Stay Safe cap starter kit



5043-1339
Stay Safe purging bottle

Reliable, Efficient, Always Innovating for Your Best Result

Designed to work together, Agilent InfinityLab LC instruments, columns, and supplies are rugged and reliable, and improve your workflow efficiency. InfinityLab LC components help every scientist get the most from their LC and LC/MS application with innovations that improve uptime, minimize rework, and simplify operation.

Here are a few examples of InfinityLab innovation and the great results you'll get

Systems: Agilent InfinityLab LC Series instruments are modular, giving you flexibility to ensure the best configuration for your LC and LC/MS applications.

LC columns: The unique superficially porous particle technology of Agilent InfinityLab Poroshell 120 LC columns is robust and flexible. So you can reliably achieve the highest efficiency and resolution in your LC and LC/MS separations.

Supplies: The innovative design of InfinityLab supplies enable improved results for everyone in your lab. The InfinityLab Flex Bench gives you easy mobility to connect your LC to any MS in the lab quickly and conveniently. InfinityLab Quick Connect fittings create leak-free, high-pressure connections with the close of a lever. InfinityLab Quick Change inline filter helps maximize your column lifetime, so everyone gets great results.

Take a closer look at www.agilent.com/chem/infinitylab



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