Less Stress
More Peace of Mind

Agilent InfinityLab Stay Safe caps and accessories

Agilent

Trusted Answers

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

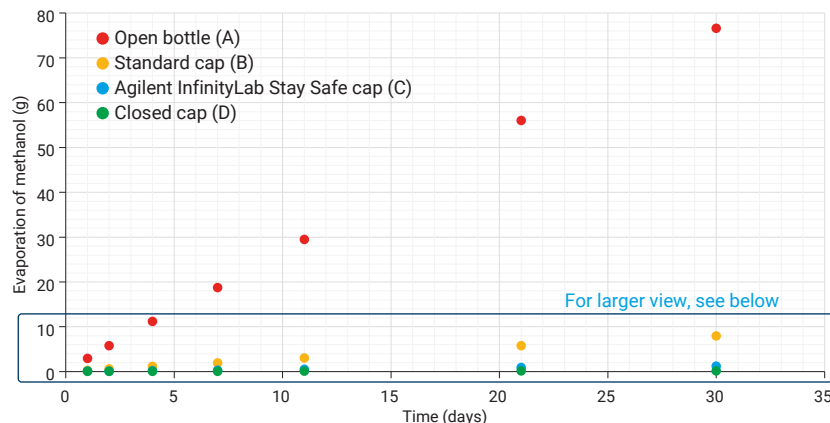## The small parts of your LC workflow make a big difference

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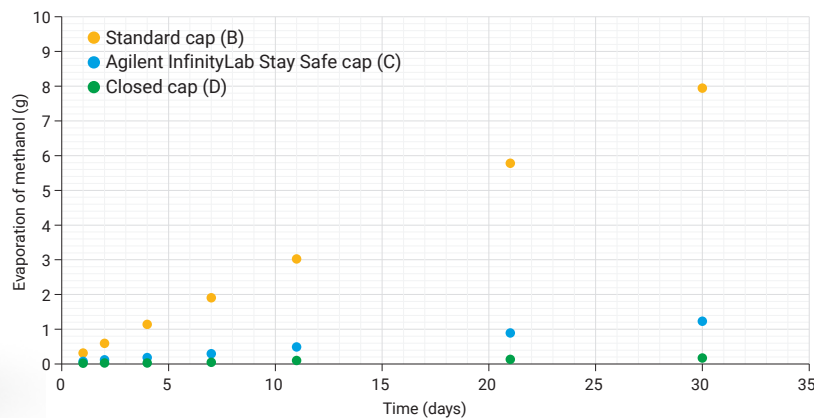
Average (n = 6) methanol evaporation over time resulting from using the different cap types

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%

−85%

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 Stay Safe cap

InfinityLab fittings

Vapor-free tubing connection.

InfinityLab solvent bottle

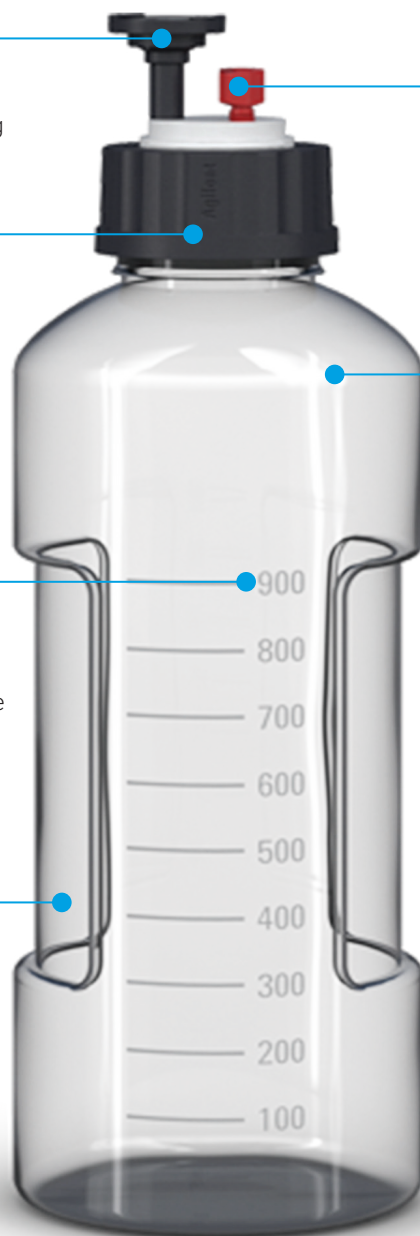### Easy-to-read white ceramic print

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.
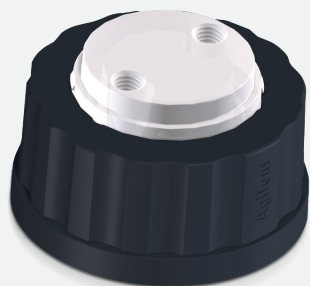
Many configurations are available to suit your needs

Time strip

Venting valve

Fittings for solvent tubing

Freely rotating body

Standard (GL45 or GL38) screw thread

Agilent

month   3   6

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
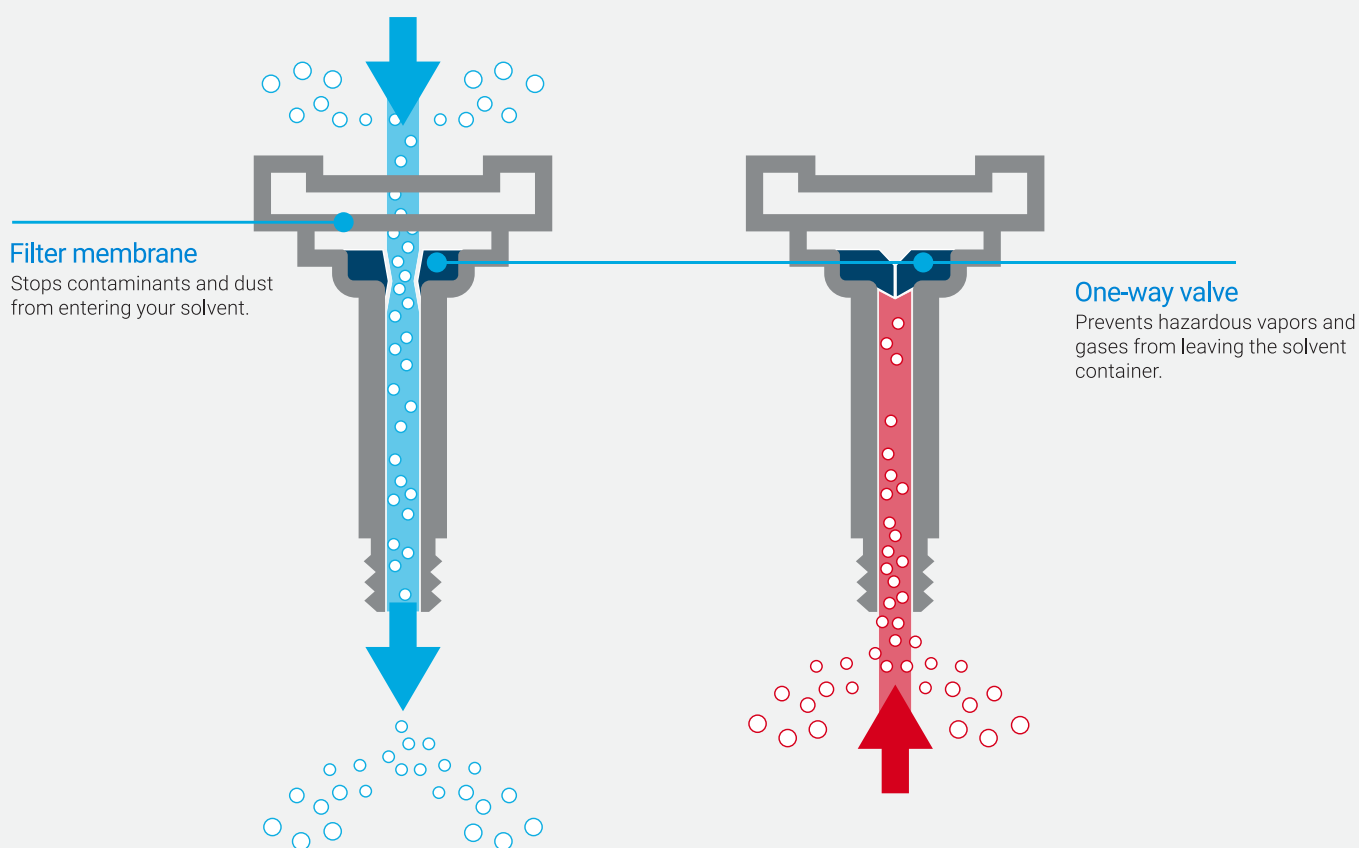
Stay Safe cap with two ports

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.

Filter membrane
Stops contaminants and dust from entering your solvent.

One-way valve
Prevents hazardous vapors and gases from leaving the solvent container.

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.
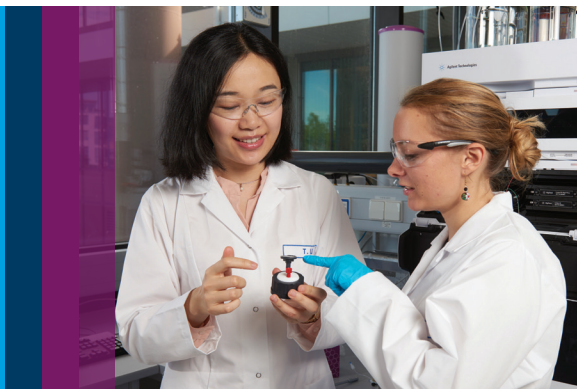

Installation

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
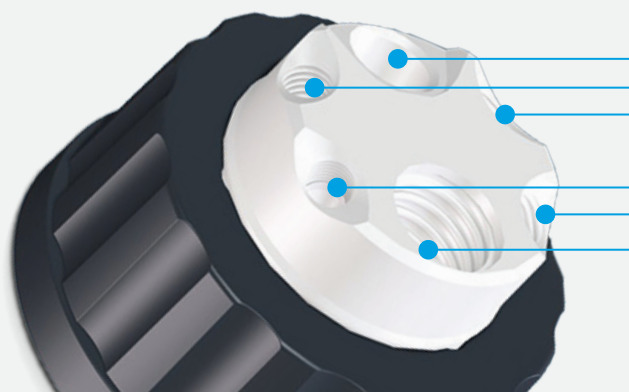
Stops solvents from leaching into the air.

InfinityLab fittings

Enable vapor-tight tubing connections.

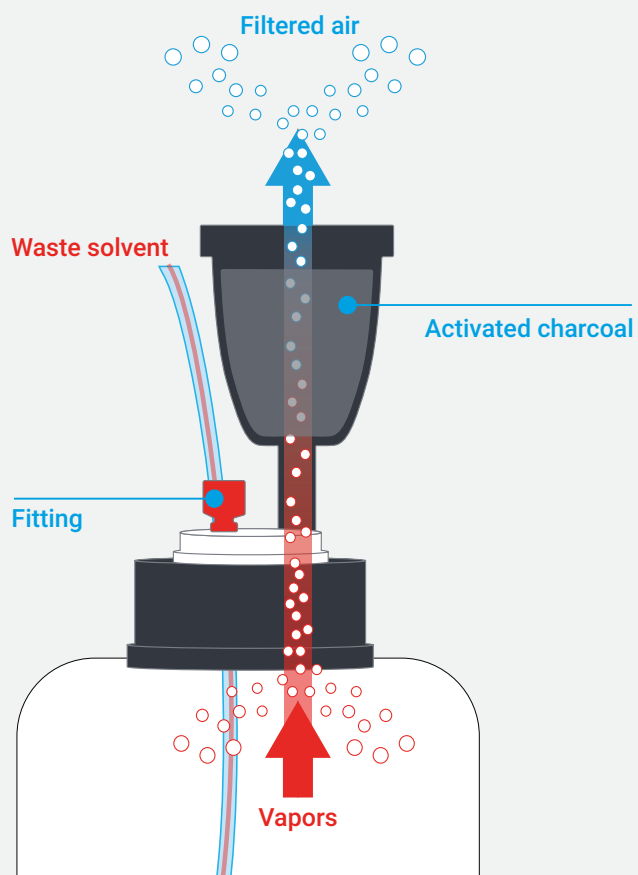## InfinityLab waste can

Ports for solvent waste containers

Leak hose port (1/8"-27 NPT thread)

Fitting ports (1/4"-28 UNF thread)

Charcoal filter port (GL14)

Filtered air

Waste solvent

Activated charcoal

Fitting

Vapors

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.

1

2

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	✖ Vapors leach into the air from open or improperly covered solvent bottles.	✔ No leaching of harmful solvent vapors. ✔ Caps seal off mobile phase bottles during purging.	
Ease-of-handling	✖ 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.	✔ Easily insert or remove solvent lines with no risk of losing solvent filters.	
Prevent air in LC line	✖ Solvent lines and bottle caps hang loosely. ✖ Solvent filters can slide out, suctioning air into the LC.	✔ 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 5 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), 2.5 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), 2.5 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 1/4"-28 UNF thread, PTFE, 2/pk	For plugging unused fitting ports
5043-1195	Screw plug 1/8"-27 NPT thread, 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 2.5 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, 1/8"-27 NPT thread, PTFE, 1/pk

5043-1198
Screw plug, 1/4"-28 UNF thread, 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**

Learn more:
www.agilent.com/chem/staysafecaps

Buy online:
www.agilent.com/chem/store

Get answers to your technical questions and access resources in the Agilent Community:
community.agilent.com

U.S. and Canada
1-800-227-9770
agilent_inquiries@agilent.com

Europe
info_agilent@agilent.com

Asia Pacific
inquiry_lsca@agilent.com

Agilent
Trusted Answers