

Safety products

AND MOBILE PHASE HANDLING SYSTEMS

- Save cost on solvents
- Avoid hazardous air in the laboratories
- Increase reproducibility of chromatographic analyses

VICI strives to provide customers with the best solutions for their problems, making the work better and/or easier with respect to environment and health.

Safety products index

VICI safety filters

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Safety-coated glass bottles

Solviflex tubing

Flexible coiled PFA tubing expands and contracts, giving flexibility to move mobile phase bottles on the bench.





Safety air inlet valves

- No evaporation of volatile compounds into lab air
- Better composition stability of the mobile phases
- Less shift of retention times
- No bacterial contamination
- Fit any VICI cap or VICI safety cap

The air inlet valve has a check valve which blocks vapors of the solution in a bottle, preventing the vapors from escaping into the lab. The mobile phase composition remains stable, resulting in constant retention times.

The check valve regulates the pressure when the negative pressure reaches 1.5 psi or 0.1 bar. This small negative pressure prevents evaporation of the liquid (lower vapor pressure) and still guarantees the stability of the flow rate. A negative pressure which is too high can influence the aspiration of a constant flow.

Several tests have indicated that the 0.2 µm cellulose filter will keep mobile phase liquid free of bacteria and dust particles over time. If you use a filter and still have bacteria growth in your liquid, it is likely due to the presence of bacteria in the deionized water used.

Air inlet valves fit on any VICI safety cap or VICI cap.

<i>Description</i>	<i>Product No.</i>
With 4 mm filter	JR-S-20003
With 15 mm filter	JR-S-20009
Without filter	JR-S-20006

Spare parts

Replacement cellulose filter	
0.2 µm x 4 mm	JR-S-20007
0.2 µm x 15 mm	JR-S-20008



SPECS

- Connections
Valve to cap:
1/4-28
Filter:
Female Luer
- Materials
Housing:
Polypropylene
Filter: Cellulose
O-ring: NBR
(O-ring is not a wetted part)

TECH TIPS

- The air inlet valve is not suitable when helium sparging is used.
- We recommend that safety air inlet valves and safety air outlet valves be replaced every 6-7 months to guarantee correct operation of the check valve. The lifetime of the check valve and the filter depend on the intensity of use and the quality of the ambient air.

RELATED PRODUCTS

Safety caps 62-63
VICI caps 64-65

Safety air outlet filters

The VICI safety air outlet filter regulates the pressure during helium sparging.

Air outlet filters fit on any VICI safety cap or VICI cap.

<i>Description</i>	<i>Product No.</i>
Safety air outlet filter	JR-S-20004



SPECS

- Connections
Valve to cap:
1/4-28
Filter:
Female Luer
- Materials
Housing:
Polypropylene
Filter: Cellulose
O-ring: NBR
(O-ring is not a wetted part)

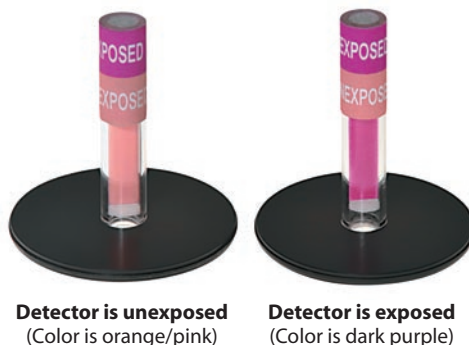
SAFETY PRODUCTS

- Prevents pollution of ambient air with volatile compounds
- Large capacity and long lifetime
- Break-through detector available, alerting users to saturation of the filter absorbent
- Universal 1/4-28 connection – fit all VICI safety caps and VICI caps
- Adapter to competitor products available

Our improved exhaust filter is the center of the VICI Jour safety program, ridding ambient air of solvent vapors which could adversely affect the health of lab workers. When placed on the waste bottle of an HPLC system, the specially-treated absorbent filters out nearly all organic solvent vapor evaporating out of the waste solution.

Our new absorbent as an increased capacity over our previous filter and definitely over a competing brand. Excellent capacity leads to longer lifetime of the exhaust filter: up to 10 months* for methanol, and up to 8 months* for acetonitrile. The new design also has improved stability at the connecting threads.

The optional break-through detector recognizes trace amounts of acetone, acetonitrile, ethanol, ethyl acetate, methanol, methylene chloride and THF. When the absorbent is saturated, break-through is indicated by a color change in the detector from orange/pink to dark purple. A small charcoal filter absorbs the vapors after they pass the detector.



*Based on results of our tests (water/organics = 50/50; flow rate 1.0 ml/min during the day, 0.5 ml/min overnight, 0.1 ml/min during weekends).

Safety exhaust filters

1/4-28

SPECS

- Connections: 1/4-28
- Materials: Filter housing: POM; Detector housing: PC; Frits: Polyethylene; O-ring: NBR (O-ring is not a wetted part)

Description	Product No.
Exhaust filter	
With detector	JR-S-20005
Without detector	JR-S-20002
Adapter	JR-S-40004
Connects VICI safety exhaust filter to SCAT® waste caps and A.I.T. smart waste caps	



NOTE

Disposal of the saturated filters must be done according to the local regulations for chemical waste.

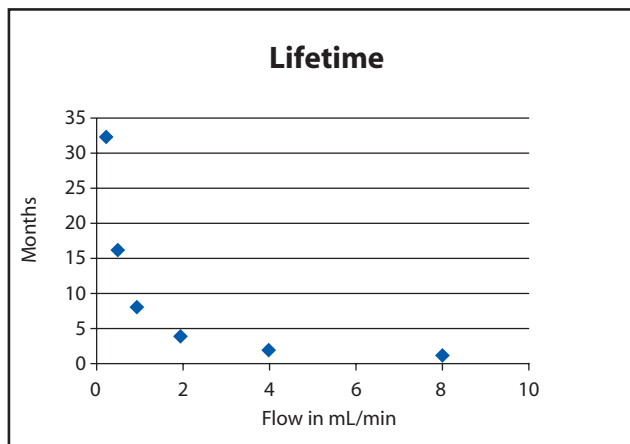
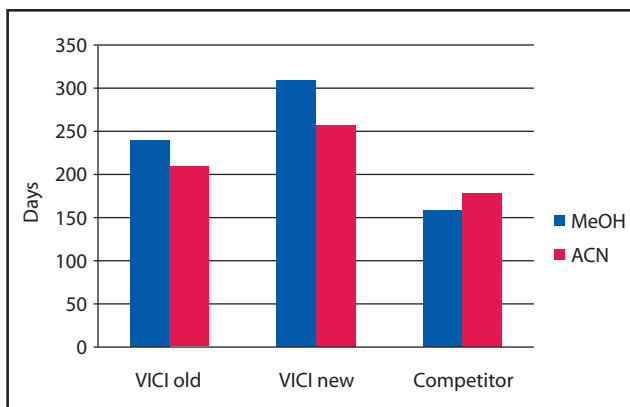
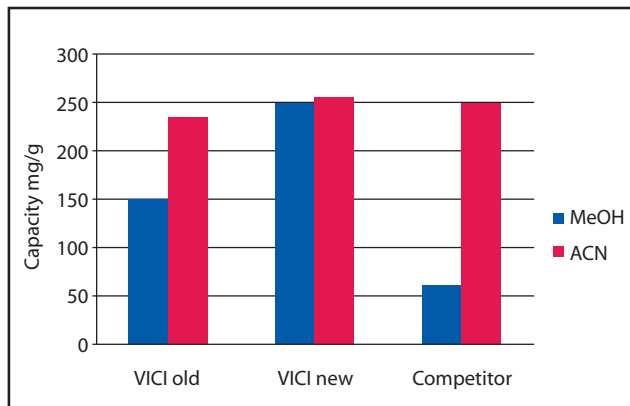
TECH TIPS

- Larger capacity = longer lifetime = lower costs
- As a general rule, halving the flow rate doubles the lifetime at constant composition and temperature. Doubling the flow rate halves it.

RELATED PRODUCTS

- Carbon dioxide filter... 71
- Humidity filter... 71
- Safety caps... 62-63
- VICI caps... 64-65

See additional information about VICI safety exhaust filters on the facing page.



Optimized absorbent of safety exhaust filters

In our continuous work to improve our products, VICI has optimized the absorbent for increased capacity.

The excellent capacity of our new absorbent leads to longer lifetimes – up to 10 months for methanol and 8 months for acetonitrile.*

*Based on results of our tests (water/organics = 50/50; flow rate 1.0 ml/min during the day, 0.5 ml/min overnight, 0.1 ml/min during weekends).

Safety exhaust filter lifetime

The lifetime of the filter depends on:

- Composition of the mobile phase
- Flow rate
- Ambient temperature: a higher temperature leads to an increased vapor pressure of the volatile compound

The theoretical lifetime of an exhaust filter, depending on the flow rate, is shown here.

TECH TIP

Acetonitrile and water form an "azeotropic" mixture at 85% acetonitrile. Due to this physical property, the vapor of an acetonitrile/water mixture always corresponds to the 85/15 mixture. This explains the non-linearity of the lifetime for acetonitrile compared to methanol.

ADDITIONAL APPLICATIONS

Other applications for safety filters are possible, e.g. an exhaust filter for the GC split vent.

Contact Tech Support for more information.

Safety caps have built-in stopcocks to close off unused ports or to provide a convenient cut off of the liquid stream when tubing is removed.

- Stopcocks rated up to 72 psi gas at 25°C
- Prevent evaporation of volatile compounds
- Ideal for delivery of mobile phase or collection of waste LC solutions
- 2, 3, or 4 ports with 1/4-28 threads for 1/8" or 1/16" tubing
- Optional bottom-sealing barbed adapter to connect 1/8" (3.2 mm) ID tubing (shown at right – order separately from "Spare Parts")



Safety cap kit

GL45 threads

SPECS

- Connections: 1/4-28
- Materials:
 - Closure: PP (polypropylene)
 - Insert: PTFE
 - Stopcock: CTFE
 - O-ring: EPDM (alternative: FEP-coated)
 - Nuts: PPS
 - Ferrules: ETFE
 - Sleeves: PP
- Bottle: Borosilicate 3.3, safety coated
- Filter: Polyethylene

In addition to a GL45 safety cap with color-coded fittings, this kit offers a safety bottle (1 or 2 liter), PFA tubing, and a mobile phase filter.

GL45 safety caps seal to the bottle with an O-ring* (EPDM) which is resistant to commonly used HPLC solvents. If improved chemical resistance is required (e.g. for halogenated hydrocarbons), order an FEP-coated O-ring separately.

Bottle size:	No. of ports	1 Liter		2 Liters	
		Product No.	Product No.	Product No.	Product No.
Safety cap kit, GL45	2	JR-S-11111	JR-S-11211		
	3	JR-S-11112	JR-S-11212		
	4	JR-S-11113	JR-S-11213		
		Qty/pkg		Product No.	
O-ring, FEP-coated, GL45	1			JR-S-40008	



INCLUDES

- 1 safety cap, GL45 thread, with fittings
- 1 safety-coated glass bottle (option: 1L or 2L)
- 3 m, PFA tubing
- 1 No-Met mobile phase filter, 5 µm
- Additional nuts and ferrules for the bottom side connections

* GL45 caps produced beginning in 2012 will seal with an O-ring behind a PTFE lip.

Spare parts for safety cap kit

	Tubing OD	Qty/pkg	Product No.
1/4-28 flangeless nuts, PPS	1/16" OD	10	JR-55070-10
	1/8" OD	10	JR-55071-10
Inverted ferrules, ETFE	1/16" OD	10	JR-041-10
	1/8" OD	10	JR-051-10
Safety-coated bottle with solid cap			
1 Liter		1	JR-9000-0005
2 Liters		1	JR-9000-0010
Plug, 1/4-28, PEEK		1	JR-409
Barbed hose adapter for 1/8" ID tubing		1	JR-075013
Color-Sleeve adapters, 12 colors (2 each)		24	JR-5508X-24
No-Met biocompatible mobile phase filter, economy slip-on connection, 5 µm pore		1	JR-32174
PFA tubing, 1/8" x 1.59 mm x 3m		1	JR-T-4003-M3

TECH TIP

PFA tubing provides less re-gassing of the mobile phase.

RELATED PRODUCTS

Color-Sleeve adapters 17



No-Met mobile phase filters 52
 PFA tubing 9
 Safety-coated bottles (for additional sizes) . 70
 Safety air inlet valves . . 59

Safety caps

INCLUDES

- 1 cap, GL45 thread, with stopcocks
- 1 O-ring, EPDM
- 1 set: 1/16" nut/ferrule/ color-sleeve adapter
- 1, 2, or 3 sets: 1/8" nut/ferrule/ color-sleeve adapter
- Additional nuts and ferrules for the bottom side connections



- Fit all bottles or canisters with GL45 thread
- Built-in stopcocks for easy interruption of solvent lines
- 2, 3, or 4 ports with 1/4-28 threads for 1/8" or 1/16" tubing

GL45 safety caps seal to the bottle with an O-ring* (EPDM) which is resistant to commonly used HPLC solvents. If improved chemical resistance is required (e.g. for halogenated hydrocarbons), order an FEP-coated O-ring separately.

	No. of ports	Product No.
Safety cap, GL45	2	JR-S-11011
	3	JR-S-11012
	4	JR-S-11013
O-ring, FEP-coated, GL45		JR-S-40008

GL45 threads

SPECS

- Connections: 1/4-28
- Materials: Closure: PP (Polypropylene)
Insert: PTFE
Stopcock: CTFE
O-ring: EPDM (alternative: FEP-coated)
Nuts: PPS
Ferrules: ETFE
Sleeves: PP

* GL45 caps produced beginning in 2012 will seal with an O-ring behind a PTFE lip.

Safety caps

INCLUDES

- 1 cap, DIN50 thread, with stopcocks
- 1 O-ring,
- 1 set: 1/16" nut/ ferrule/ color-sleeve adapter
- 1, 2, or 3 sets: 1/8" nut/ferrule/ color-sleeve adapter
- Additional nuts and ferrules for the bottom side connections



- Fit all bottles or canisters with DIN50 thread
- Built-in stopcocks for easy interruption of solvent lines
- 2, 3, or 4 ports with 1/4-28 threads for 1/8" or 1/16" tubing

DIN50 safety caps seal to the bottle/canister with an O-ring behind a PTFE lip, so the O-ring is therefore not a wetted part.

	No. of ports	Product No.
Safety cap, DIN50	2	JR-S-15011
	3	JR-S-15012
	4	JR-S-15013

DIN50 threads

SPECS

- Connections: 1/4-28
- Materials: Closure: PP (Polypropylene)
Insert: PTFE
Stopcock: CTFE
O-ring: EPDM/ NBR
Nuts: PPS
Ferrules: ETFE
Sleeves: PP

NOTE

One port must be reserved for the exhaust filter or the air inlet valve.

MORE INFORMATION

Chemical resistance 96-98

RELATED PRODUCTS

Air inlet valves 59
Exhaust filters 60-61

Spare parts

for safety caps

	Tubing OD	Qty/pkg	Product No.
1/4-28 flangeless nuts, PPS	1/16"	10	JR-55070-10
	1/8"	10	JR-55071-10
	1/16"	10	JR-041-10
Inverted ferrules, ETFE	1/16"	10	JR-051-10
	1/8"	10	JR-051-10
Barbed hose adapter for 1/8" ID tubing		1	JR-075013
Color-Sleeve adapters, 12 colors (2 each)		24	JR-5508X-24

VICI caps seal to the bottle with an O-ring (EPDM) which is resistant to commonly used HPLC solvents. If improved chemical resistance is required (e.g. for halogenated hydrocarbons), order an FEP-coated O-ring separately. Unused ports should be closed with plugs, available in PEEK or polypropylene. (See "Spare Parts," below)

- Prevent evaporation of volatile compounds
- 2, 3, or 4 ports with 1/4-28 threads for 1/8" or 1/16" tubing
- 6 or 7 ports available in some models
- Optional bottom-sealing barbed adapter to connect 1/8" (3.2 mm) ID tubing (shown at right – order separately from "Spare Parts")



VICI cap kit

GL45 threads

SPECS

- Connections: 1/4-28
- Materials
 - Closure: PP (polypropylene)
 - Insert: PTFE
 - O-ring: EPDM (alternative: FEP-coated)
 - Nuts: PPS
 - Ferrules: ETFE
 - Sleeves: PP
 - Bottle: Borosilicate 3.3, safety coated
 - Filter: Polyethylene

In addition to a GL45 VICI cap with fittings, this kit includes a safety bottle (1 or 2 liter), PFA tubing, and a mobile phase filter.

Bottle size:	No. of ports	1 Liter	2 Liters
		Product No.	Product No.
VICI cap kit, GL45	2	JR-S-11101	JR-S-11201
	3	JR-S-11102	JR-S-11202
	4	JR-S-11103	JR-S-11203
O-ring, FEP-coated, GL45		Qty/pkg	Product No.
		1	JR-S-40008



INCLUDES

- 1 VICI cap, GL45 thread, with fittings
- 1 safety-coated glass bottle (option: 1L or 2L)
- 3 m, PFA tubing
- 1 No-Met mobile phase filter, 5 µm

VICI caps

GL45 threads

SPECS

- Connections: 1/4-28
- Materials
 - Closure: PP (Polypropylene)
 - Insert: PTFE
 - Stopcock: CTFE
 - O-ring: EPDM (alternative: FEP-coated)
 - Nuts: PPS
 - Ferrules: ETFE
 - Sleeves: PP

- Fit all bottles or canisters with GL45 thread
 - 2, 3, 4, 6, and 7 ports with 1/4-28 threads for 1/8" or 1/16" tubing
- GL45 safety caps seal to the bottle with an O-ring* (EPDM) which is resistant to commonly used HPLC solvents. If improved chemical resistance is required (e.g. for halogenated hydrocarbons), order an FEP-coated O-ring separately.

	No. of ports	Product No.
VICI cap, GL45	2	JR-S-11001
	3	JR-S-11002
	4	JR-S-11003
	6	JR-S-11005
	7	JR-S-11006
O-ring, FEP-coated, GL45		JR-S-40008



INCLUDES

- 1 cap, GL45 thread
- 1 O-ring, EPDM
- 1 set: 1/16" nut/ferrule/ color-sleeve adapter
- 1, 2, 3, 5, or 6 sets: 1/8" nut/ferrule/ color-sleeve adapter



PTFE insert for 6 port cap



PTFE insert for 7 port cap

* GL45 caps produced beginning in 2012 will seal with an O-ring behind a PTFE lip.

Spare parts

for VICI caps

	Tubing OD	Qty/pkg	Product No.	Additional spare parts for VICI cap kits	Qty/pkg	Product No.
1/4-28 flangeless nuts, PPS	1/16"	10	JR-55070-10	Safety-coated bottle with solid cap	1	JR-9000-0005
	1/8"	10	JR-55071-10			
	Inverted ferrules, ETFE	1/16"	10	JR-041-10	2 Liters	1
1/8"		10	JR-051-10	No-Met biocompatible mobile phase filter, economy slip-on connection, 5 µm pore	1	JR-32174
		1	JR-409			
Plug, 1/4-28	PEEK	1	JR-201999	PFA tubing, 1/8" x 1.59 mm x 3m	1	JR-T-4003-M3
	Polypropylene	1	JR-075013			
Barbed hose adapter for 1/8" ID tubing		1	JR-075013			
Color-Sleeve adapters, 12 colors (2 each)		24	JR-5508X-24			

VICI caps

NEW

S40 threads

INCLUDES

1 cap, S40 thread
1 set: 1/16" nut/ ferrule/
color-sleeve adapter
2 sets:
1/8" nut/ferrule/
color-sleeve adapter



- Fit all bottles with S40 thread
- 3 ports with 1/4-28 threads for 1/8" or 1/16" tubing

The latest addition to the Jour Safety product line, the S40 VICI cap seals to the bottle with an O-ring (EPDM) which is resistant to commonly used HPLC solvents.

	No. of ports	Product No.
VICI cap, S40	3	JR-S-14002

SPECS

- Connections: 1/4-28
- Materials
Closure: PP* (Polypropylene)
Insert: PTFE
O-ring: EPDM
Nuts: PPS*
Ferrules: ETFE
Sleeves: PP*
*not a wetted part

VICI caps

DIN50 threads

INCLUDES

1 cap, DIN50 thread
1 O-ring,
1 set: 1/16" nut/ ferrule/
color-sleeve adapter
1, 2, or 3 sets:
1/8" nut/ferrule/ color-
sleeve adapter



- Fit all bottles or canisters with DIN50 thread
- 2, 3, or 4 ports with 1/4-28 threads for 1/8" or 1/16" tubing

DIN50 safety caps seal to the bottle/canister with an O-ring behind a PTFE lip, so the O-ring is therefore not a wetted part.

	No. of ports	Product No.
VICI cap, DIN50	2	JR-S-15001
	3	JR-S-15002
	4	JR-S-15003



SPECS

- Connections: 1/4-28
- Materials
Closure: PP (Polypropylene)
Insert: PTFE
Stopcock: CTFE
O-ring: EPDM/
NBR
Nuts: PPS
Ferrules: ETFE
Sleeves: PP

VICI caps

GL38 threads

INCLUDES

1 cap, GL37/430 thread
1 O-ring
1 set: 1/16" nut/ ferrule/
color-sleeve adapter
1, 2, or 3 sets:
1/8" nut/ferrule/
color-sleeve adapter
1 adapter ring



- Fit all bottles or canisters with GL38/430 thread (See NOTES, below)
- 2, 3, or 4 ports with 1/4-28 threads for 1/8" or 1/16" tubing

Color-coded PP sleeves fit on all ports on 2 and 3 port caps. With 4 port caps, the use of PP sleeves is limited to two sleeves per cap. (Four colors are included.)

	No. of ports	Product No.
VICI cap, GL38	2	JR-S-13001
	3	JR-S-13002
	4	JR-S-13003
O-ring, FEP-coated, GL38		JR-S-40009

SPECS

- Connections: 1/4-28
- Materials
Closure: PP (Polypropylene)
Insert: PTFE
O-ring: EPDM (alternative: FEP-coated)
Adapter ring: PA/PP
Nuts: PPS
Ferrules: ETFE
Sleeves: PP

TECH TIP

PFA tubing provides less re-gassing of the mobile phase.

MORE INFORMATION

Chemical resistance 96-98

RELATED PRODUCTS

Color-Sleeve adapters . 17
No-Met mobile phase filters 52
PFA tubing 9
Safety-coated bottles (for additional sizes) . 70
Safety air inlet valves . . 59

NOTES

GL38 thread is available in different variations. Please check the inside diameter of the neck:

- For 21-24 mm ID (e.g. Wheaton® bottles), use the GL38 cap as is, without an adapter.
- For 24-28 mm ID (e.g. Nalgene® bottles), use the adapter ring (JR-S-40006) which is included with this VICI cap.

SAFETY PRODUCTS

Waste caps seal the bottle/canister with an O-ring behind a PTFE lip, so the O-ring is therefore not a wetted part. Unused ports should be closed with plugs, available in PEEK or polypropylene. (See "Spare Parts" on page 66.)

- Prevent evaporation of volatile compounds
- 3 or 4 ports with 1/4-28 threads for 1/8" or 1/16" tubing
- Additional port with 1/2-20 thread for 1/4" OD tubing or M10 x 1 thread for a barbed adapter
- Thread-sealing barbed adapters available in three sizes, to connect 4 mm, 6 mm, or 8 mm ID tubing (shown at right – order separately)



Waste caps NEW

GL45 threads

SPECS

- Connections: 1/4-28, 1/2-20
- Materials
 - Closure: PP (Polypropylene)
 - Insert: PTFE
 - O-ring: NBR
 - Nuts: PPS/POM
 - Ferrules: ETFE/CTFE
 - Plug: PTFE
 - Barbed adapter: PA/PP

- Fits all bottles or canisters with GL45 thread
- 4 ports with with one M10 x 1 port for barbed/angled adapters

This waste cap seals the bottle/cannester with an O-ring behind a PTFE lip, so the O-ring is therefore not a wetted part.



INCLUDES

- 1 cap
- 1 O-ring
- 1 set: 1/16" nut/ ferrule/ color-sleeve adapter
- 2 sets: 1/8" nut/ferrule/ color-sleeve adapter

	No. of ports	Product No.
Waste cap, GL45	4	JR-S-11023

Waste caps

GLS80 threads

SPECS

- Connections: 1/4-28, 1/2-20
- Materials
 - Closure: PP (Polypropylene)
 - Insert: PTFE
 - O-ring: NBR
 - Nuts: PPS/POM
 - Ferrules: ETFE/CTFE
 - Plug: PTFE
 - Barbed adapter: PA/PP

- Fits all bottles or canisters with GLS80 thread
- 4 ports with 1/4-28 thread for 1/8" or 1/16" tubing
- Fifth port with choice of threads

	Product No.
Waste cap, GLS80	
Fifth port:	
1/2-20 thread for 1/4" OD tubing, with 1/4" plug	JR-S-18004
M10 x 1 thread for barbed adapter	JR-S-18014
(Order barbed adapter from "Spare Parts" on page 66)	



INCLUDES

- 1 cap
- 1 O-ring
- 1 set: 1/16" nut/ ferrule/ color-sleeve adapter
- 1 set: 1/4" nut/ferrule
- 3 sets: 1/8" nut/ferrule/ color-sleeve adapter
- 1 plug, 1/4" (1/2-20), where noted in product number chart

NOTES

One port must be reserved for the exhaust filter or the air inlet valve.

MORE INFORMATION

Spare parts for waste caps 68
Chemical resistance 96-98

RELATED PRODUCTS

Waste caps
B53 threads 68
B83 threads 68

Waste caps

DIN60 threads

INCLUDES

- 1 cap
- 1 O-ring
- 1 set: 1/16" nut/ ferrule/ color-sleeve adapter
- 1 set: 1/4" nut/ferrule
- 2 sets:
 - 1/8" nut/ferrule/ color-sleeve adapter
- 1 plug, 1/4" (1/2-20), where noted in product number chart



- Fits all bottles or canisters with DIN60 thread
- 3 ports with 1/4-28 thread for 1/8" or 1/16" tubing
- Fourth port with choice of threads

Waste cap, DIN60

Product No.

Fourth port:

1/2-20 thread for 1/4" OD tubing, with 1/4" plug JR-S-16003

M10 x 1 thread for barbed adapter JR-S-16013

(Order barbed adapter from "Spare Parts" on page 64)

SPECS

- Connections: 1/4-28, 1/2-20
- Materials
 - Closure: PP (Polypropylene)
 - Insert: PTFE
 - O-ring: NBR
 - Nuts: PPS/POM
 - Ferrules: ETFE/CTFE
 - Plug: PTFE
 - Barbed adapter: PA/PP

Waste caps

S51 threads

INCLUDES

- 1 cap
- 1 O-ring
- 1 set: 1/16" nut/ ferrule/ color-sleeve adapter
- 1 set: 1/4" nut/ferrule
- 2 sets:
 - 1/8" nut/ferrule/ color-sleeve adapter
- 1 plug, 1/4" (1/2-20), where noted in product number chart



- Fits all bottles or canisters with S51 thread
- 3 ports with 1/4-28 thread for 1/8" or 1/16" tubing
- Fourth port with choice of threads

Waste cap, S51

Product No.

Fourth port:

1/2-20 thread for 1/4" OD tubing, with 1/4" plug JR-S-15103

M10 x 1 thread for barbed adapter JR-S-15113

(Order barbed adapter from "Spare Parts" on page 66)

SPECS

- Connections: 1/4-28, 1/2-20
- Materials
 - Closure: PP (Polypropylene)
 - Insert: PTFE
 - O-ring: NBR
 - Nuts: PPS/POM
 - Ferrules: ETFE/CTFE
 - Plug: PTFE
 - Barbed adapter: PA/PP

Waste caps

S61 threads

INCLUDES

- 1 cap
- 1 O-ring
- 1 set: 1/16" nut/ ferrule/ color-sleeve adapter
- 1 set: 1/4" nut/ferrule
- 2 sets:
 - 1/8" nut/ferrule/ color-sleeve adapter
- 1 plug, 1/4" (1/2-20), where noted in product number chart



- Fits all bottles or canisters with S61 thread
- 3 ports with 1/4-28 thread for 1/8" or 1/16" tubing
- Fourth port with choice of threads

Waste cap, S61

Product No.

Fourth port:

1/2-20 thread for 1/4" OD tubing, with 1/4" plug JR-S-16103

M10 x 1 thread for barbed adapter JR-S-16113

(Order barbed adapter from "Spare Parts" on page 66)

SPECS

- Connections: 1/4-28, 1/2-20
- Materials
 - Closure: PP (Polypropylene)
 - Insert: PTFE
 - O-ring: NBR
 - Nuts: PPS/POM
 - Ferrules: ETFE/CTFE
 - Plug: PTFE
 - Barbed adapter: PA/PP

RELATED PRODUCTS

- Color-Sleeve adapters..... 17
- Exhaust filters 60-61
- Air inlet valves..... 59

Waste caps

B53 threads

SPECS

- Connections: 1/4-28, 1/2-20
- Materials
- Closure: PP (Polypropylene)
- Insert: PTFE
- O-ring: NBR
- Nuts: PPS/POM
- Ferrules: ETFE/CTFE
- Plug: PTFE
- Barbed adapter: PA/PP

- Fits all bottles or canisters with B53 thread
- 3 ports with 1/4-28 thread for 1/8" or 1/16" tubing
- Fourth port with choice of threads

Waste cap, B53
Fourth port:

- 1/2-20 thread for 1/4" OD tubing, with 1/4" plug
- M10 x 1 thread for barbed adapter
- (Order barbed adapter from "Spare Parts" below)

Product No.

- JR-S-15303
- JR-S-15313



INCLUDES

- 1 cap
- 1 O-ring
- 1 set: 1/16" nut/ ferrule/ color-sleeve adapter
- 1 set: 1/4" nut/ferrule
- 2 sets: 1/8" nut/ferrule/ color-sleeve adapter
- 1 plug, 1/4" (1/2-20), where noted in product number chart

Waste caps

B83 threads

SPECS

- Connections: 1/4-28, 1/2-20
- Materials
- Closure: PP (Polypropylene)
- Insert: PTFE
- O-ring: NBR
- Nuts: PPS/POM
- Ferrules: ETFE/CTFE
- Plug: PTFE
- Barbed adapter: PA/PP

- Fits all bottles or canisters with B83 thread
- 4 ports with 1/4-28 thread for 1/8" or 1/16" tubing
- Fifth port with choice of threads

Waste cap, B83
Fifth port:

- 1/2-20 thread for 1/4" OD tubing, with 1/4" plug
- M10 x 1 thread for barbed adapter
- (Order barbed adapter from "Spare Parts" below)

Product No.

- JR-S-18304
- JR-S-18314



INCLUDES

- 1 cap
- 1 O-ring
- 1 set: 1/16" nut/ ferrule/ color-sleeve adapter
- 1 set: 1/4" nut/ferrule
- 3 sets: 1/8" nut/ferrule/ color-sleeve adapter
- 1 plug, 1/4" (1/2-20), where noted in product number chart

Spare parts

for waste caps

	Material	Tubing OD	Qty/pkg	Product No.
1/4-28 flangeless nuts	PPS	1/16"	10	JR-55070-10
		1/8"	10	JR-55071-10
Inverted ferrules	ETFE	1/16"	10	JR-041-10
		1/8"	10	JR-051-10
1/2-20 nut	POM	1/4"	1	JR-CFL-4D
Collapsible ferrule	CTFE	1/4"	1	JR-CFL-CB4KF-S
Adapter				
1/2-20 to 1/4-28	POM	NEW	1	JR-S-40200
Barbed adapter, M10 x 1				
For 4 mm ID tubing	PA		1	JR-S-40104
For 6 mm ID tubing	PA		1	JR-S-40106
For 8 mm ID tubing	PA		1	JR-S-40108
Barbed hose adapter				
For 1/8" ID tubing	PA/PP		1	JR-075013
Plug, 1/4-28	PEEK		1	JR-409
	Polypropylene		1	JR-201999
Plug, 1/2-20	PTFE		1	JR-S-40007
Color-Sleeve adapters, 12 colors (2 each)			24	JR-5508X-24

NOTES

One port must be reserved for the exhaust filter or the air inlet valve.

MORE INFORMATION

Chemical resistance 96-98

RELATED PRODUCTS

- Waste caps
- DIN60 threads 67
- GL45 threads 66
- GLS80 threads 66
- S51 threads 67
- S61 threads 67
- Color-Sleeve adapters 17
- Exhaust filters 60-61
- Air inlet valves 59

Eco cap kit**INCLUDES**

- 1 cap, GL45 thread, with three ports
- 1 safety-coated glass bottle (option: 1 L or 2 L)
- 1 male Luer plug, polypropylene

In addition to an Eco cap with polypropylene male Luer plug, this kit offers a safety bottle (1 or 2L).

The Eco cap consists of a three-hole ETFE insert with a polyethylene collar, compatible with all standard GL45 thread bottles. The Eco cap has no threading for fittings on the inside of the tubing ports – the tubing is just inserted.

Product No.

Eco cap kit	
1 Liter bottle	JR-9000-0013
2 Liter bottle	JR-9000-0014

*GL45 threads***SPECS**

- Materials
- Screw collar: PP (polypropylene)
- Pouring ring: PP
- Insert: ETFE
- O-rings: EPDM
- Luer plug: PP

Eco cap**INCLUDES**

- 1 cap, GL45 thread, with three ports
- 1 male Luer plug, polypropylene

- Competitively priced alternative to sparge and deliver mobile phases
- Also available as bottle kit

The Eco cap consists of a three-hole ETFE insert with a polyethylene collar, compatible with all standard GL45 thread bottles. The Eco cap has no threading for fittings on the inside of the tubing ports – the tubing is just inserted.

Product No.

Eco cap	JR-9000-0007
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*GL45 threads***SPECS**

- Materials
- Screw collar: PP (polypropylene)
- Pouring ring: PP
- Insert: ETFE
- O-rings: EPDM
- Luer plug: PP

Spare parts*for Eco cap**Product No.*

Male Luer plug, polypropylene	JR-070350-10
10/pkg	

NOTE

These caps are not usable for building up a helium atmosphere within in the solvent bottle, but only for continuous helium sparging.

TECH TIP

Once the mobile phase is degassed, we recommend our impermeable tubing between bottle cap and pump to prevent regassing of helium degassed solvents.

RELATED PRODUCTS

Impermeable tubing . . . 13
Polymeric tubing . . . 9-13
Waste caps 66-68

SAFETY PRODUCTS

Safety-coated glass bottles

SPECS

- Pressure rating
0.8 bar (11.6 psi)
- Materials
Bottle:
Borosilicate
3.3 glass
Cap: PP
(Polypropylene)
Pouring ring: PP

- Special design for helium sparging of LC mobile phases
- Safety coating to minimize risk of injury
- Available in 0.25, 0.5, 1 and 2 Liter sizes

These glass bottles with GL45 screw threading are made of chemical resistant Borosilicate 3.3 and are coated on the outside with a layer of sturdy polymer, decreasing the chances of breakage if the bottle is dropped. Even if the bottle breaks, glass fragments will be kept within the polymer coating. Solvents will be kept within the coating for a short while. The coating also protects solvents against UV light up to 385 nm.

These safety-coated glass bottles cannot be autoclaved.

Bottles include a solid cap.



	Bottle size	Product No.
Safety-coated bottle	0.25 L	JR-9000-0011
	0.5 L	JR-9000-0012
	1 L	JR-9000-0005
	2 L	JR-9000-0010

SolviFlex

SPECS

- 1/18" OD tubing
- Materials
Tubing: PFA
Nuts: PPS
Ferrules: ETFE
Filter: PE
(Polyethylene)

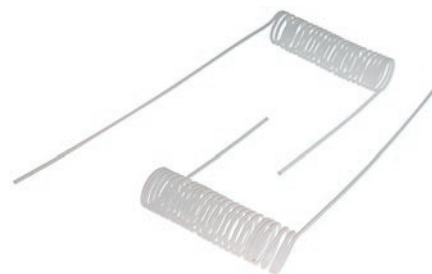
- Be "mobile" with mobile phase bottles
- Ideal for with VICI safety caps or VICI caps
- Customized version on request

The SolviFlex is made of flexible telephone cable-like PFA tubing which expands and contracts, providing flexibility to move mobile phase bottles up to 1.5 m radius on the bench. Approximately 3 m of tubing is coiled with straight stretches of tubing at each end.

Includes:

- ~3 m coiled 1/8" PFA tubing
- 2 sets: 1/4-28 nut/ferrules for 1/8" OD tubing
- 1 No-Met mobile phase filter with economy slip-on connection (JR-32174)

	Product No.
SolviFlex assembly	JR-6120-50030



A typical use of SolviFlex
Shown installed on a VICI cap and bottle, along with an exhaust filter

NOTES

- The bottles are not suitable to be stressed with pressures above 0.8 bar (11.6 psi), but only for continuous helium sparging.
- The safety coating on a bottle is not intended to replace safe working conditions and precautions in laboratories.

RELATED PRODUCTS

No-Met biocompatible mobile phase filter . . .	52
Safety caps	63
Safety cap kit	62
Safety exhaust filter . . .	60-61
VICI caps	64-65
VICI cap kit	64

**Carbon dioxide filter****NEW****CO₂**

In ion chromatography, a basic solution is often used as mobile phase. The buffer capacity of such solutions is small, so the pH of the solution can be affected by the carbon dioxide in the air.

Using a bottle in combination with a VICI cap and a carbon dioxide filter prevents any change in the pH of the mobile phase, thus increasing the stability of the analysis. In this application, the carbon dioxide filter also functions as an air inlet valve.

<i>Description</i>	<i>Product No.</i>
Carbon dioxide filter	JR-S-20100

**Humidity filter****NEW****H₂O**

In applications requiring a non-aqueous organic solvent, the moisture in the ambient air can influence the results. The use of a humidity filter in combination with a VICI cap solves this problem.

<i>Description</i>	<i>Product No.</i>
Humidity filter	JR-S-20200

RELATED PRODUCTS

Safety exhaust filters... 60