





## **VICI AG INTERNATIONAL**

VICI Jour has been a part of VICI AG International in Switzerland since 2004. The complete Jour line of accessories and consumables for fluid transfer in GC and LC is available from VICI AG International, VICI Valco Canada, VICI Precision Sampling, and through our international distributor network.

VICI AG International, in Schenkon, Switzerland, is an independent site for the manufacturing of Valco and Cheminert valves and the handling of all VICI product lines in Europe, Africa, the Middle East, and the Far East.

VICI AG International has obtained the ISO certificate to the standard of 9001:2015, 14001:2015 and 45001:2018, and is the first ISOcertified manufacturer of high pressure and low pressure valves for scientific equipment.



## **VICI JOUR PRODUCT LINE**

Jour products include a complete line of tubing and capillaries in a wide variety of diameters and materials, high and low pressure fingertight fittings and connection accessories, column hardware, high and low pressure filters, cutters and other tools, backpressure regulators, and much more.

We offer accessories and consumables for fluid transfer in GC and LC, including:

- Fittings high pressure polymeric and stainless, Nanovolume® PEEK and stainless, and low pressure
- Tubing and sample loops
- Safety products and mobile phase handling systems
- Filters and frits
- PEEK columns and guard columns



# 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.

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# **SAFETY-COATED GLASS BOTTLES**

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

# **SPECIAL APPLICATION FILTERS**

Carbon dioxide filter	20
Humidity filter	20

SPECIFICATIONS		
CONNECTIONS		
Valve to cap	1/4-28	
Filter	Female Luer	
MATERIALS		
Housing	PP (Polypropylene)	
Filter	Cellulose	
O-ring	NBR (O-ring is not a wetted part)	



# 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

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.

Description		Product No.
With 4 mm filter		JR-S-20003
With 15 mm filter	(C)	JR-S-20009
Without filter	1	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



# TECH TIPS

- The air inlet valve is not suitable when helium sparging is used.
- Safety air inlet valves and safety air outlet valves should 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.

# SEE ALSO

Safety caps . . . . . . . . 5-6 VICI caps . . . . . . . . 7-10

# **SPECIFICATIONS**

CONNECTIONS Valve to 1/4-28 cap Female Luer Filter **MATERIALS** Housing (Polypropylene) Filter Cellulose O-ring (O-ring is not a wetted part)

# Safety air outlet valves

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

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

Description	Product No.
Safety air outlet filter	JR-S-20004



# SAFETY EXHAUST FILTERS

- 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.

With 65 g of absorbent, our filters have a larger capacity than competing brands. Typical lifetime is up to 10 months\* for methanol and 8 months\* for acetonitrile.

The optional **NEW** break-through TOV (total organic vapor) detector recognizes trace amounts of acetone, acetonitrile, aliphatic and aromatic hydrocarbons,

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 red. 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



**DETECTOR IS UNEXPOSED** (Color is orange/pink)



**DETECTOR IS EXPOSED** (Color is red)



WITHOUT DETECTOR



WITH NEW DETECTOR

We highly recommend using the exhaust filter with a breakthrough detector!

# Safety exhaust filters

caps and A.I.T. smart waste caps

SPECIFICATIONS 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 breakthrough detector	JR-S-20005
	Without detector	JR-S-20002
Adapter *		JR-S-40004
* Connects VICI safety exhaust filter to SCAT® waste		

**NEW Replacement exhaust filter kits** 

Includes three exhaust filters, three breakthrough detectors (if ordered), and a carrying case.

Description Product N		Product No.
Exhaust filter kit		JR-S-35
Kit includes:	Qty	Product No.
Exhaust filters with breakthrough detectors	3	JR-S-20005
Carrying case	1	JR-S-35L
Exhaust filter kit without detectors		JR-S-36
Exhaust filters without breakthrough detectors	3	JR-S-20002
Carrying case	1	JR-S-35L

### 1/4-28

1/4-28



# **NOTE**

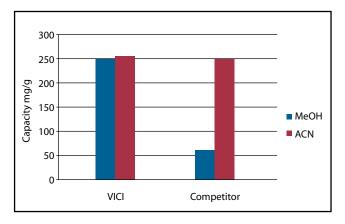
Disposal of the saturated filters must be done according to the local regulations for chemical waste.

# 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.

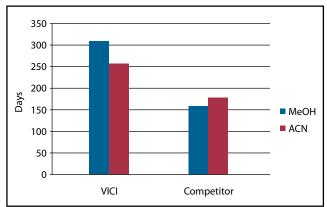
SEE ALSO
Carbon dioxide filter20
Humidity filter20

Safety caps . . . . . . . 5-6 VICI caps . . . . . . . . . . 7-10



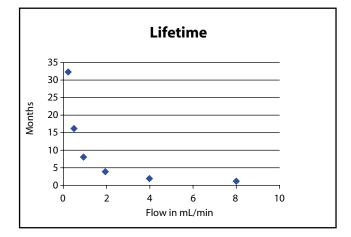
# **OPTIMIZED ADSORBENT OF SAFETY EXHAUST FILTERS**

In our continuous work to improve our products, VICI has optimized the adsorbent for increased capacity. Each detector contains 65 g of absorbent which guarantees a prolonged life time of the VICI exhaust filter.



The excellent capacity of our new adsorbent 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 in the chart at left.

# 🚺 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.

For more information, contact Tech Support support@vici.ch.

# **SAFETY CAPS**

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", page 71)



# Safety cap / bottle kit

### **INCLUDES**

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

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:		1 Liter	2 Liters
	No. of ports	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



		Troductivo.	
For improved chemical re	sistance, or	der:	]
O-ring, FEP-coated, GL45		JR-S-40008	]

# **GL45** THREADS

SPECIFICATIONS			
CONNECT	CONNECTIONS		
	1/4-28		
MATERIA	MATERIALS		
Closure	PP (Polypropylene)		
Insert	PTFE		
Stopcock	PCTFE		
O-ring	EPDM (optional FEP-coated)		
Nuts	PPS		
Ferrules	ETFE		
Sleeves	PP		
Bottle	Borosilicate 3.3, safety coated		
Filter	Polyethylene		

# **Spare parts**

# FOR SAFETY CAP/BOTTLE KITS

			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,		1	JR-32174	
economy slip-on connection, 5 µm pore				
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.



Safety-coated bottles (for additional sizes) . 19 Safety air inlet valves ... 2 Safety caps

### **SPECIFICATIONS** CONNECTIONS 1/4-28 MATERIALS Closure PP (Polypropylene) Insert PTFE **PCTFE** Stopcock O-ring **EPDM** (optional FEP-coated) Nuts **PPS** Ferrules ETFE Sleeves PP





- 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.

	No. of ports	Product No.
Safety cap, GL45	2	JR-S-11011
	3	JR-S-11012
	4	JR-S-11013

If improved chemical resistance is required (such as for halogenated hydrocarbons), we offer an FEP-coated O-ring. Order separately.

Product No.

For improved chemical resistance, order:		
O-ring, FEP-coated, GL45	JR-S-40008	

# **GL45** THREADS

- **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

# Safety caps

#### **SPECIFICATIONS** CONNECTIONS 1/4-28 MATERIALS Closure PP (Polypropylene) PTFF Insert PCTFE Stopcock EPDM/NBR O-ring PPS Nuts ETFE Ferrules PP Sleeves







- 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

- **INCLUDES** • 1 cap, DIN50 thread,
- 10-ring,
- 1 set: 1/16" nut/ ferrule/ color-sleeve adapter

with stopcocks

• 1, 2, or 3 sets: 1/8" nut/ferrule/ color-sleeve adapter

Additional nuts and ferrules for the bottom side connections



# Spare parts

### **FOR SAFETY CAPS**

			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
Barbed hose adapter for 1/8" ID tubing		1	JR-075013	
Color-Sleeve adapters, 12 colors (2 each)		24	JR-5508X-24	
PFA tubing, 1/8" x 1.59 mm x 3m		1	JR-T-4003-M3	

# **NOTE**

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



Exhaust filters ..... 3-4

# **VICI CAP KITS**

HPLC systems use up to 4 different mobile phases. We offer two safety cap kits for use with (up to quaternary) gradient HPLC systems.

**NEW VICI cap kit** 

## **GL45** THREADS

# **INCLUDES**

- 4 VICI caps, 3 ports, GL45 thread, with fittings
- 4 Air inlet valves with 4 mm filters
- 4 PP plugs
- Carrying case

Description		Product No.
VICI cap kit		JR-S-31
Kit includes:	Qty	Product No.
VICI caps, GL45, three ports	4	JR-S-11002
Air inlet valves with 4 mm filters	4	JR-S-20003
PP plugs	4	JR-201999
Carrying case	1	JR-S-31L



SPECIFICATIONS CONNECTIONS		
	1/4-28	
MATERIALS		
Closure	PP (Polypropylene)	
Insert	PTFE	
O-ring	EPDM	
Nuts	PPS	
Ferrules	ETFE	
Sleeves	PP	
Filter	Polyethylene	

# **NEW VICI cap kit**

## **INCLUDES**

- 3 VICI caps, 2 ports, GL45 thread, with fittings
- 1 VICI cap, 3 ports, GL45 thread, with fittings
- 4 Air inlet valves with 4 mm filters
- 1 PP plug
- Carrying case

Description		Product No.
VICI cap kit		JR-S-32
Kit includes:	Qty	Product No.
VICI caps, GL45, two ports	3	JR-S-11001
VICI cap, GL45, three ports	1	JR-S-11002
Air inlet valves with 4 mm filters	4	JR-S-20003
PP plug	1	JR-201999
Carrying case	1	JR-S-31L



#### **SPECIFICATIONS** CONNECTIONS 1/4-28 **MATERIALS** Closure PP (Polypropylene) PTFE Insert EPDM O-ring Nuts PPS ETFE Ferrules Sleeves PP Polyethylene Filter

**GL45** THREADS



For further information on efficiency of VICI Caps, refer to a study performed by an independent testing institute. The full study can be downloaded at https://www.vici-jour. com/safety/assets/Jour\_ Study\_Safety\_Caps.pdf

## **VICI CAPS**

VICI caps seal to the bottle with an O-ring which is resistant to commonly used HPLC solvents. Unused ports should be closed with plugs, available in PEEK or polypropylene.

Efficiency of VICI Caps was measured by an independent testing institute. Download the full study from https://www.vici-jour.com/safety/assets/Jour Study Safety Caps.pdf

- 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 (order from "Spare Parts", page 75).



**GL45** THREADS

# VICI cap / bottle kit

### **INCLUDES**

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

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:		1 Liter	2 Liters
	No. of ports	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



Product No.

For improved chemical resistance, order:		
O-ring, FEP-coated, GL45	JR-S-40008	

#### **SPECIFICATIONS** CONNECTIONS 1/4-28 **MATERIALS** Closure PP (Polypropylene) Insert PTFE O-ring EDDW (optional FEP-coated) Nuts PPS Ferrules **ETFE** Sleeves Rottle Borosilicate 3.3, safety coated Filter Polyethylene

**GL45** THREADS

PP (Polypropylene)

**SPECIFICATIONS** 

1/4-28

PTFE

EPDM

ETFE

(optional FEP-coated) PPS

CONNECTIONS

**MATERIALS** 

Closure

Insert

O-ring

Nuts

**Ferrules** 

## VICI caps

### **INCLUDES**

- 1 cap, GL45 thread
- 10-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



Spare parts for VICI caps and kits . . . . 10

For further information on efficiency of VICI Caps, the full study can be downloaded by scanning the QR code to the right ---

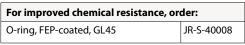


PFA tubing provides less re-gassing of the mobile phase.

- 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 the bottle with an O-ring behind a PTFE lip; therefore the O-ring is not a wetted part. If improved chemical resistance is required (e.g. for halogenated hydrocarbons), order an FEP-coated O-ring separately.

2	JR-S-11001
3	JR-S-11002
4	JR-S-11003
6	JR-S-11005
7	JR-S-11006
	2 3 4 6 7









**PTFE CAP INSERTS** 





PP Sleeves

VICI caps **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

SPECIFICATIONS	
CONNECTIONS	
1/4-28	
MATERIA	ILS
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
- 10-ring,
- 1 set: 1/16" nut/ ferrule/ color-sleeve adapter
- 1, 2, or 3 sets: 1/8" nut/ferrule/ colorsleeve 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 VICI caps seal to the bottle/canister with an O-ring behind a PTFE lip, so the O-ring is therefore not a wetted part.

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



CONNECTIONS		
1/4-28		
MATERIALS		
Closure	PP (Polypropylene)	
Insert	PTFE	
O-ring	EPDM/NBR	
Nuts	PPS	
Ferrules	ETFE	
Sleeves	PP	

# **VICI** caps

### **INCLUDES**

- 1 cap, GL37/430 thread
- 10-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

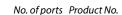


• Fit all bottles or canisters with GL38/430 thread (See NOTES, below left)

• 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. or ports	rroductivo.
VICI cap, GL38	2	JR-S-13001
	3	JR-S-13002
	4	JR-S-13003



Product No.

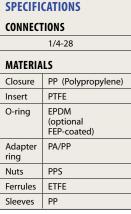
For improved chemical resistance, order:		
O-ring, FEP-coated, GL45	JR-S-40009	

GL38 THREADS		
SPECIFICATIONS		
CONNECTIONS		
1/4-28		
MATERIALS		
Closure	PP (Polypropylene)	
Insert	PTFE	
O-ring	EPDM (optional FEP-coated)	
Adapter ring	PA/PP	
Nuts	PPS	
Ferrules	ETFE	
Sleeves	PP	

# GL38 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.



# **Spare parts**

# FOR VICI CAP/BOTTLE KITS

		Qty/pkg	Product No.
Safety-coated bottle	1 Liter	1	JR-9000-0005
with solid cap	2 Liters	1	JR-9000-0010
No-Met biocompatible mobile phase filter,		1	JR-32174
economy slip-on connection, 5 µm pore			
PFA tubing, 1/8" x 1.59 mm x 3m		1	JR-T-4003-M3

# **Spare parts**

### **FOR VICI CAPS**

			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
Plug, 1/4-28	PEEK		1	JR-409
	Polypropylene		1	JR-201999
Barbed hose adapter for 1/8" ID tubing		1	JR-075013	
Color-Sleeve adapters, 12 colors (2 each)		24	JR-5508X-24	



# STUDY OF VICI CAPS

The efficiency of VICI Caps was measured by an independent testing institute. The results show that the use of VICI Caps

- Improved chromatographic results
- Prevents any contamination of the environment

The full study can be downloaded at

https://www.vici-jour.com/safety/assets/Jour\_Study\_Safety\_Caps.pdf or by scanning the QR code to the right ---->





# SEE ALSO

Safety-coated bottles (for additional sizes) . 19 Safety air inlet valves  $\dots 2$ 

### **WASTE CAPS**

Waste caps seal the bottle/canister with an O-ring behind a PTFE lip; therefore the O-ring is not a wetted part. Unused ports should be closed with plugs, available in PEEK or polypropylene.

Efficiency of VICI Caps was measured by an independent testing institute. Download the full study by scanning the QR code to the right ---->

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 from "Spare Parts" on page 14)



# NOTE

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



#### **GL45** THREADS Waste caps

### **INCLUDES**

- 1 cap
- 10-ring
- 1 set: 1/16" nut/ ferrule/ color-sleeve adapter
- 2 sets: 1/8" nut/ferrule/ color-sleeve adapter
- Fits all bottles or canisters with GL45 thread
- 4 ports 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.



Waste cap, G	L45	
Fourth port:	1/2-20 thread for 1/4" OD tubing, with 1/4" plug	JR-S-11003W
	M10 x 1 thread for barbed adapter	JR-S-11023





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

#### Waste caps **GLS80** THREADS

### **INCLUDES**

- 1 cap
- 10-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

- 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

Prod	uct	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

<sup>\*</sup> Order barbed adapter separately, bottom of page 14





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

MORE INFO
Spare parts for
waste caps14
SEE ALSO Waste caps B53 threads

Waste caps

### **SPECIFICATIONS** CONNECTIONS 1/4-28, 1/2-20 MATERIALS PE (Polyethylene) Closure PTFE Insert NBR O-ring Nuts PPS/POM ETFE/CTFE Ferrules PTFE Plug PA/PP Barbed adapter





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

Product No.

Waste cap, DIN60		
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

<sup>\*</sup> Order barbed adapter separately, bottom of page 14

# **INCLUDES**

**DIN60** THREADS

- 1 cap
- 10-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

### **SPECIFICATIONS** CONNECTIONS 1/4-28, 1/2-20 MATERIALS Closure PE (Polyethylene) PTFE Insert O-ring NBR PPS/POM Nuts ETFE/CTFE Ferrules PTFE Plug Barbed PA/PP adapter





- 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

Product No.

Waste cap, S51		
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

<sup>\*</sup> Order barbed adapter separately, bottom of page 14

# **S51** THREADS

### **INCLUDES**

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

Waste caps

#### **SPECIFICATIONS** CONNECTIONS 1/4-28, 1/2-20 MATERIALS Closure PE (Polyethylene) Insert PTFE O-ring NBR Nuts PPS/POM Ferrules ETFE/CTFE Plug PTFE Barbed PA/PP adapter







- 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

Product No.

Waste cap, S61		
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

<sup>\*</sup> Order barbed adapter separately, bottom of page 14

# **INCLUDES**

- 1 cap
- 10-ring
- 1 set: 1/16" nut/ ferrule/ color-sleeve adapter

**S61** THREADS

- 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 **B53** THREADS

### **INCLUDES**

- 1 cap
- 10-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 B53 thread
- 3 ports with 1/4-28 thread for 1/8" or 1/16" tubing
- Fourth port with choice of threads

Prod	uct	No.
------	-----	-----

Waste cap, B53		
Fourth port:	1/2-20 thread for 1/4" OD tubing, with 1/4" plug	JR-S-15303
	M10 x 1 thread for barbed adapter*	JR-S-15313

<sup>\*</sup> Order barbed adapter separately, on the next page



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

**B83** THREADS Waste caps

# **INCLUDES**

- 1 cap
- 10-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

- 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

Product No.

Waste cap, B83		
Fifth port:	1/2-20 thread for 1/4" OD tubing, with 1/4" plug	JR-S-18304
	M10 x 1 thread for barbed adapter*	JR-S-18314

<sup>\*</sup> Order barbed adapter separately, on the next page





SPECIFICATIONS			
CONNECT	TONS		
	1/4-28, 1/2-20		
MATERIA	LS		
Closure	PP (Polypropylene)		
Insert	PTFE		
O-ring	NBR		
Nuts	PPS/POM		
Ferrules	ETFE/CTFE		
Plug	PTFE		
Barbed adapter	PA/PP		



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



waste caps
DIN60 threads 12
GL45 threads 11
GLS80 threads 11
S51 threads12
S61 threads12
Exhaust filters 3-4
Air inlet valves2

# **Spare parts**

# FOR WASTE CAPS

			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
1/2-20 nut	POM	1/4" OD	1	JR-CFL-4D
Collapsible ferrule	CTFE	1/4" OD	1	JR-CFL-CB4KF-S
Plug, 1/4-28	PEEK Polypropylene		1	JR-409
			1	JR-201999
Plug, 1/2-20	PTFE		1	JR-S-40007
Plug, M10 x 1	PA		1	JR-073001
Barbed hose adapter for 1/8" ID tubing		1	JR-075013	
Color-Sleeve adapters, 12 colors (2 each)		24	JR-5508X-24	

Tubing size	Qty/pkg	Product No.
rubing size	Qty/phg	Troudct No.

Adapters				
1/2-20 to 1/4-28	POM		10	JR-S-40200
Barbed hose adapter	PA/PP	1/8" ID	1	JR-075013
Adapter for Exhaust filter in SCAT/AIT Caps	POM		1	JR-S-40004

Tubing size Qty/pkg Product No.

Barbed adapters, M10 x 1				
Angled	PA	4 mm ID	1	JR-S-40104
	PA	6 mm ID	1	JR-S-40106
	PA	8 mm ID	1	JR-S-40108
Straight	PA	4 mm ID	1	JR-S-40304
	PA	6 mm ID	1	JR-S-40306
	PA	8 mm ID	1	JR-S-40308
Т	PA	4 mm ID	1	JR-S-40404
	PA	6 mm ID	1	JR-S-40406









JR-S-40104



JR-S-40004

### **MULTI CAPS**

**NEW** VICI multi caps are available for bottles with GL38, GL45, DIN50, S51, B53, DIN60, S61, GLS80 and B83 threads. They can be used for mobile phase or waste bottles/canisters.

All multi caps come with three angled PA barbed adapters for connecting tubing with 4mm, 6mm and 8mm ID, a PA plug for the M10x1 bore, and PP plugs for the 1/4-28 bores.

Optionally, the caps can be equipped with PA straight and T-adapters for different ID tubing.

# NEW Multi caps

### **INCLUDES**

- 1 cap
- 1 O-ring
- 1 set: 1/8" nuts/ferrules/ colored sleeve adapters
- 1 set: angled barbed adapters for 4mm, 6mm and 8mm ID tubing
- 1 set: plugs (PA and PP)



- Fits all bottles or canisters with GL38 thread
- 1 port with 1/4-28 thread for 1/8" OD tubing
- Second port with M10x1 threads for barbed adapters

	Product No.
Multi cap, GL38	JR-S-13011

SPECIFICATIONS			
CONNECT	CONNECTIONS		
1/4-28, M10 x 1			
MATERIALS			
Closure PP/PE			
Insert PTFE			
O-ring	NBR		
Nuts	PPS/POM		
Ferrules ETFE			
Sleeves	PP (1/4-28) PA (M10x 1)		

**GL38** THREADS

# **NEW Multi caps**

## **INCLUDES**

- 1 cap
- 1 O-ring
- 2 sets: 1/8" nuts/ ferrules/colored sleeve adapters
- 1 set: angled barbed adapters for 4mm, 6mm and 8mm ID tubing
- 1 set: plugs (PA and PP)



- Fits all bottles or canisters with GL45 thread
- 2 ports with 1/4-28 thread for 1/8" OD tubing
- Third port with M10x1 threads for barbed adapters

	Product No.
Multi cap, GL45	JR-S-11052

GL45 THREADS		
SPECIFI	SPECIFICATIONS	
CONNECTIONS		
1/4-28, M10 x 1		
MATERIALS		
Closure	PP/PE	
Insert	PTFE	
O-ring	NBR	
Nuts	PPS/POM	
Ferrules	ETFE	
Sleeves	PP (1/4-28) PA (M10x 1)	

GI 15 TUDEADO

# **NEW Multi caps**

# **INCLUDES**

- 1 cap
- 1 O-ring
- 2 sets: 1/8" nuts/ ferrules/colored sleeve adapters
- 1 set: angled barbed adapters for 4mm, 6mm and 8mm ID tubing
- 1 set: plugs (PA and PP)



- Fits all bottles or canisters with DIN50 thread
- 2 ports with 1/4-28 thread for 1/8" OD tubing
- Third port with M10x1 threads for barbed adapters

Product No.

Multi cap, DIN50	JR-S-15052

# **DIN50** THREADS

SPECIFICATIONS CONNECTIONS			
	1/4-28, M10 x 1		
MATERIALS			
Closure	PP/PE		
Insert	PTFE		
O-ring	NBR		
Nuts	PPS/POM		
Ferrules	ETFE		
Barbed adapters	PA		
Plugs	PP (1/4"-28) PA (M10x1)		

# **NEW Multi caps**

### **SPECIFICATIONS** CONNECTIONS 1/4-28, M10 x 1 **MATERIALS** Closure PP/PE Insert PTFE NBR O-ring Nuts PPS/POM ETFE Ferrules Barbed adapters Plugs PP (1/4"-28) PA (M10x1)



• Fits all bottles or canisters with S51 thread

- 2 ports with 1/4-28 thread for 1/8" OD tubing
- Third port with M10x1 threads for barbed adapters

Product No.

ı	Multi cap, S51	JR-S-15152
	Multi Cap, 33 i	70-2-12122

# **S51** THREADS

- **INCLUDES** • 1 cap
- 1 O-ring
- 2 sets: 1/8" nuts/ ferrules/colored sleeve adapters
- 1 set: angled barbed adapters for 4mm, 6mm and 8mm ID tubing
- 1 set: plugs (PA and PP)

# **NEW Multi caps**

SPECIFICATIONS CONNECTIONS		
1/4-28, M10 x 1		
MATERIA	LS	
Closure	PP/PE	
Insert	PTFE	
O-ring	NBR	
Nuts	PPS/POM	
Ferrules	ETFE	
Barbed adapters	PA	
Plugs	PP (1/4"-28) PA (M10x1)	



• Fits all bottles or canisters with B53 thread

• 2 ports with 1/4-28 thread for 1/8" OD tubing

• Third port with M10x1 threads for barbed adapters

### Product No.

Multi cap, B53	JR-S-15352
----------------	------------

# **INCLUDES**

- 1 cap
- 1 O-ring
- 2 sets: 1/8" nuts/ ferrules/colored sleeve adapters

**B53** THREADS

- 1 set: angled barbed adapters for 4mm, 6mm and 8mm ID tubing
- 1 set: plugs (PA and PP)

# **NEW Multi caps**

#### **SPECIFICATIONS** CONNECTIONS 1/4-28, M10 x 1 **MATERIALS** Closure PP/PE PTFE Insert O-ring NBR PPS/POM Nuts Ferrules ETFE Barbed PA adapters Plugs PP (1/4"-28) PA (M10x1)



- Fits all bottles or canisters with DIN60 thread
- 2 ports with 1/4-28 thread for 1/8" OD tubing-
- Third port with M10x1 threads for barbed adapters

Product No.

Multi cap, DIN60 JR-S-16052

# **DIN60** THREADS

- 1 cap
- 1 O-ring

**INCLUDES** 

- 2 sets: 1/8" nuts/ ferrules/colored sleeve adapters
- 1 set: angled barbed adapters for 4mm, 6mm and 8mm ID tubing
- 1 set: plugs (PA and PP)

NEW Multi caps S61 THREADS

### **INCLUDES**

- 1 cap
- 1 O-ring
- 2 sets: 1/8" nuts/ ferrules/colored sleeve adapters
- 1 set: angled barbed adapters for 4mm, 6mm and 8mm ID tubing
- 1 set: plugs (PA and PP)



- Fits all bottles or canisters with S61 thread
- 1 port with 1/4-28 thread for 1/8"
- Second port with M10x1 threads for barbed adapters

	Product No.
Multi cap, S61	JR-S-16152

SPECIFICATIONS			
CONNECT	CONNECTIONS		
	1/4-28, M10 x 1		
MATERIALS			
Closure	PP/PE		
Insert	PTFE		
O-ring	NBR		
Nuts	PPS/POM		
Ferrules	ETFE		
Barbed adapters	PA		
Plugs	PP (1/4"-28) PA (M10x1)		

# **NEW** Multi caps

### **INCLUDES**

- 1 cap
- 1 O-ring
- 3 sets: 1/8" nuts/ ferrules/colored sleeve adapters
- 1 set: angled barbed adapters for 4mm, 6mm and 8mm ID tubing
- 1 set: plugs (PA and PP)



- Fits all bottles or canisters with GLS80 thread
- 2 ports with 1/4-28 thread for 1/8"
- Third port with M10x1 threads for barbed adapters

	Product No.
Multi cap, GLS80	JR-S-18053

# GLS80 THREADS

SPECIFICATIONS CONNECTIONS			
	1/4-28, M10 x 1		
MATERIALS			
Closure	PP/PE		
Insert	PTFE		
O-ring	NBR		
Nuts	PPS/POM		
Ferrules	ETFE		
Barbed adapters	PA		
Plugs	PP (1/4"-28) PA (M10x1)		

# **NEW** Multi caps

# **INCLUDES**

- 1 cap
- 1 O-ring
- 3 sets: 1/8" nuts/ ferrules/colored sleeve adapters
- 1 set: angled barbed adapters for 4mm, 6mm and 8mm ID tubing
- 1 set: plugs (PA and PP)



- Fits all bottles or canisters with B83 thread
- 2 ports with 1/4-28 thread for 1/8"
- Third port with M10x1 threads for barbed adapters

	Product No.
Multi cap, B83	JR-S-18353

# B83 THREADS

SPECIFICATIONS		
CONNECT	CONNECTIONS	
1/4-28, M10 x 1		
MATERIALS		
Closure	PP/PE	
Insert	PTFE	
O-ring	NBR	
Nuts	PPS/POM	
Ferrules	ETFE	
Barbed adapters	PA	
Plugs	PP (1/4"-28) PA (M10x1)	

# **ECO CAPS**

The Eco cap consists of a three-hole ETFE insert (two bores for 1/8" and one for 4 mm OD tubing) 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 simply inserted.

# Eco cap/ safety bottle kit

### **GL45** THREADS

**SPECIFICATIONS MATERIALS** Screw PP (Polypropylene) collar Pouring PP ring Insert ETFE O-ring **EPDM** PP plug



### **INCLUDES**

- 1 cap, GL45 thread, with three ports
- 1 safety-coated glass bottle (option: 1 L or
- 1 male Luer plug, polypropylene, for 4 mm bore
- 3 m PFA tubing
- 1 No-met filter, 20 µm

Fco can **GL45** THREADS

есо сар		
SPECIFICATIONS		
MATERIALS		
Screw collar	PP (Polypropylene)	
Pouring ring	PP	
Insert	ETFE	
O-ring	EPDM	
Luer plug	PP	



• Competitively priced alternative to sparge and deliver mobile phases

In addition to an Eco cap with polypropylene male Luer

• Also available as bottle kit

	Product No.
Eco cap	JR-9000-0007

### **INCLUDES**

- 1 cap, GL45 thread, with three ports
- 1 male Luer plug, polypropylene, for 4 mm bore
- 3 m PFA tubing
- 1 No-met filter, 20 µm

# **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.



## SEE ALSO

Waste caps . . . . . . . . 11-14

# **Spare parts**

**FOR ECO CAP** 

	Qty/pkg	Product No.
Male Luer plug, polypropylene	10	JR-070350-10

### **SolviFlex**

### **INCLUDES**

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

	Product No.	
SolviFlex assembly	JR-6120-50030	1 O Million
		/ / /
		O STATE OF THE PARTY OF THE PAR

### **SPECIFICATIONS TUBING SIZE** 1/8 OD **MATERIALS** Tubing PFA Nuts PPS ETFE Ferrules Filter PE



# Safety-coated glass bottles

- 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
	21	JR-9000-0010





# 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.

SEE ALSO
Cafaty cans

Safety caps 5-	6
Safety cap kit	5
Safety exhaust filter 3-	4
VICI caps 7-1	0
VICI cap kit	7



# **Carbon dioxide filter**

 $CO_2$ 

In ion chromatography, a basic solution is often used as mobile phase. Because of their low buffer capacity, the pH of these eluents can easily 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 and reproducibility of the analysis. In this application, the carbon dioxide filter also functions as an air inlet valve.

	Product No.
Carbon dioxide filter	JR-S-20100



# **Humidity filter**

H<sub>2</sub>0

In applications requiring a non-aquaeous organic solvent chiral separations, for example - traces of moisture in the ambient air can influence the results.

The use of a humidity filter in combination with a VICI cap solves this problem.

	Product No.
Humidity filter	JR-S-20200



- Capillaries
- Tubing
- Fittings
- Filters
- SAFETY-PRODUCTS
- TOOLS
- ACCESSORIES

More information On the WEB: https://www.vici-jour.com



www.vici-jour.com

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