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Cole-Parmer®

# VapLock® Closed Systems

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solutions for fluid  
delivery and solvent  
waste



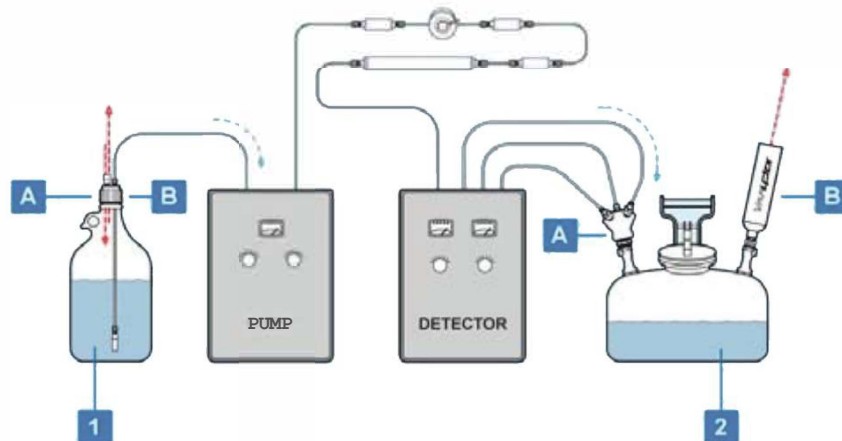
Cole-Parmer Vaplock products are a safety solution for scientists, chemical hygienists, and researchers worldwide, designed to ensure proper delivery and waste containment of industrial chemicals and solvents. A versatile product solution, Vaplock conforms to a broad spectrum of laboratory and industrial applications, useful wherever safety protocol for chemical handling is required or preferred, and through closed-system technology reduces harmful emissions which are potentially hazardous to employees and the environment. Our mission is to create a safer, healthier and cleaner workplace by providing unique, effective and price sensitive solutions to fluid handling problems in the laboratory.

### Closed Systems Introduction

Through leaks, spills, and ventilation, an "open" solvent system will release chemical exhaust directly into the laboratory environment. This introduction may be reduced by adding several key components to the typical instrument. These items are:

- 1A - a properly sealed solvent reservoir with secure fluid connections
- 1B - a ventilation control valve at the solvent reservoir to displace vacuum while minimizing evaporation
- 2A - a properly sealed solvent waste container with secure fluid connections
- 2B** - an exhaust filter at the waste container to capture escaping fumes

## Example of a Closed System HPLC



## 1A - Solvent Reservoir Fluid Connections

For a closed-system solvent reservoir, the container first requires a bottle cap with ports to fit the specific tubing sizes removing solvent from the bottle. Vaplock solvent caps provide versatile, leak-resistant connections where mobile phase tubing may be attached securely.

### 1B - Solvent Reservoir Ventilation Control

In reservoirs where fluid is actively removed and no new solvent or gas pressure is simultaneously added, to complete the closed system the container requires a device to control solvent evaporation. With use of an automatic control valve, air may still enter the bottle as a pump moves the liquid phase out to the instrument. Vaplock solutions for closed-system solvent delivery includes both standalone vent control valves and built-in valved cap options.

## 2A - Waste Container Fluid Connections

Containers to collect solvent waste vary in size and in the specific means required to convert them to a closed system. By selecting an appropriate container, waste may be sealed effectively, allowing effluent tubing to drain into the container without leaks or venting, forcing exhaust fumes through a single aperture where solvent vapors may be captured before entering the laboratory. Vaplock waste collection manifolds and kits are designed to conform to a wide range of common laboratory and industrial containers, with versatile connection types and a uniquely modular system allowing reconfiguration and addition of new manifold components as required.

## 2B - Waste Container Ventilation Control

As solvents draining to waste may volatilize rapidly, the waste container can be the most significant generator of hazardous chemical vapor in an HPLC system. Available in several cartridge formats, Vaplock exhaust filters mitigate health hazards and reduce harmful chemical emissions and odors from laboratory waste containers. Developed and tested specifically for HPLC organic solvents, they may be used in conjunction with Vaplock breakthrough color indicators to determine longevity and establish a replacement schedule.



## GL45 Solvent Bottle Caps with Stainless Steel Thread Inserts



12018-00



12018-01



12018-02

### Closed System Design

Reduce chemical evaporation and exposure to hazardous vapors with Vaplock solvent reservoir caps. Combine with secure fluid connections and Vaplock air inlet or relief valves to maintain pressure equilibrium within the bottle.

### Durable Port Threads

Designed to accept industry-standard 1/4-28 threaded fittings, these caps include robust stainless steel (SS) thread inserts to minimize cross-threading and damage to soft PTFE ports. For use with semi-rigid tubing equal to or less than 1/8" (3.2 mm) outside diameter.

### Anti-Twist Design

To prevent twisting of tubing when the cap is removed or attached, the inner body rotates independently of the outer collar.

### Chemically Compatible

Constructed of inert PTFE, the body of the cap provides ideal chemical compatibility with laboratory solvents. Under normal use, the outer polypropylene (PP) collar is non-wetted. Caps may be autoclaved to 140 °C. Please inquire for other material options and custom designs.

Description	# of Ports	Materials	Item#
Bottle cap, GL45, (2) 1/4-28 ports with SS thread inserts, PTFE with PP collar	(2) 1/4-28	PTFE, PP, SS	12018-00
Bottle cap, GL45, (3) 1/4-28 ports with SS thread inserts, PTFE with PP collar	(3) 1/4-28	PTFE, PP, SS	12018-01
Bottle cap, GL45, (4) 1/4-28 ports with SS thread inserts, PTFE with PP collar	(4) 1/4-28	PTFE, PP, SS	12018-02

## GL45 Solvent Bottle Caps with Threaded Ports



12018-03



12018-04



12018-05

### Closed System Design

Reduce chemical evaporation and exposure to hazardous vapors with Vaplock solvent reservoir caps. Combine with secure fluid connections and Vaplock air inlet or relief valves to maintain pressure equilibrium within the bottle.

### ¼-28 Port Threads

Designed to accept industry-standard ¼-28 threaded fittings. For use with semi-rigid tubing equal to or less than 1/8" (3.2 mm) outside diameter. Ports are angled 10° for more accessible tubing connections.

### Anti-Twist Design

To prevent twisting of tubing when the cap is removed or attached, the inner body rotates independently of the outer collar.

### Chemically Compatible

Constructed of inert PTFE, the body of the cap provides ideal chemical compatibility with laboratory solvents. Under normal use, the outer polypropylene (PP) collar is non-wetted. Caps may be autoclaved to 140 °C. Please inquire for other material options and custom designs.

Description	# of Ports	Materials	Item#
Bottle cap, GL45, (2) ¼-28 ports, PTFE with PP collar	(2) ¼-28	PTFE,PP	12018-03
Bottle cap, GL45, (3) ¼-28 ports, PTFE with PP collar	(3) ¼-28	PTFE,PP	12018-04
Bottle cap, GL45, (4) ¼-28 ports, PTFE with PP collar	(4) ¼-28	PTFE,PP	12018-05

## GL45 Solvent Bottle Caps with Integrated Air Inlet Valve



12018-08



12018-06



12018-10



12018-09



12018-07



12018-11

### Closed System Design

Reduce exposure to hazardous chemical vapors with Vaplock solvent reservoir caps. Minimizing evaporation, an integrated check valve permits air to enter the bottle for vacuum displacement while solvent is pumped to the instrument. A 50  $\mu\text{m}$  PTFE filter covers the valve assembly to reduce particulates.

### ¼-28 Port Threads

Designed to accept industry-standard ¼-28 threaded fittings. For use with semi-rigid tubing equal to or less than 1/8" (3.2 mm) outside diameter.

### Anti-Twist Design

To prevent twisting of tubing when the cap is removed or attached, the inner body rotates independently of the outer collar.

### Chemically Compatible

Constructed of inert PTFE, the body of the cap provides ideal chemical compatibility with laboratory solvents. The air inlet valve is assembled with PTFE and 300-series stainless steel components, with inert FFKM, white USP Class VI EPDM, or Viton® seal options. Under normal use, the outer Polypropylene collar is non-wetted. Caps may be autoclaved to 140 °C. Please inquire for other material options and custom designs.

Description	# of Ports	Valve seal material	Item#
Bottle cap, GL45, (2) ¼-28 ports, PTFE with yellow PP collar, FFKM air inlet valve	(2) ¼-28	FFKM	12018-08
Bottle cap, GL45, (2) ¼-28 ports, PTFE with green PP collar, EPDM air inlet valve	(2) ¼-28	EPDM	12018-06
Bottle cap, GL45, (2) ¼-28 ports, PTFE with blue PP collar, Viton air inlet valve	(2) ¼-28	Viton	12018-10
Bottle cap, GL45, (4) ¼-28 ports, PTFE with yellow PP collar, FFKM air inlet valve	(4) ¼-28	FFKM	12018-09
Bottle cap, GL45, (4) ¼-28 ports, PTFE with green PP collar, EPDM air inlet valve	(4) ¼-28	EPDM	12018-07
Bottle cap, GL45, (4) ¼-28 ports, PTFE with blue PP collar, Viton air inlet valve	(4) ¼-28	Viton	12018-11

### GL38 Solvent Bottle Caps with Stainless Steel Thread Inserts



12018-12



12018-13



12018-14

#### Closed System Design

Reduce chemical evaporation and exposure to hazardous vapors with Vaplock solvent reservoir caps. Combine with secure fluid connections and Vaplock air inlet or relief valves to maintain pressure equilibrium within the bottle.

#### Durable Port Threads

Designed to accept industry-standard 1/4-28 threaded fittings, these caps include robust stainless steel (SS) thread inserts to minimize cross-threading and damage to soft PTFE ports. For use with semi-rigid tubing equal to or less than 1/8" (3.2 mm) outside diameter.

#### Anti-Twist Design

To prevent twisting of tubing when the cap is removed or attached, the inner body rotates independently of the outer collar.

#### Chemically Compatible

Constructed of inert PTFE, the body of the cap provides ideal chemical compatibility with laboratory solvents. Under normal use, the outer polypropylene (PP) collar is non-wetted. Caps may be autoclaved to 140 °C. Please inquire for other material options and custom designs.

Description	# of Ports	Materials	Item#
Bottle cap, GL38, (2) 1/4-28 ports with SS thread inserts, PTFE with PP collar	(2) 1/4-28	PTFE, PP, SS	12018-12
Bottle cap, GL38, (3) 1/4-28 ports with SS thread inserts, PTFE with PP collar	(3) 1/4-28	PTFE, PP, SS	12018-13
Bottle cap, GL38, (4) 1/4-28 ports with SS thread inserts, PTFE with PP collar	(4) 1/4-28	PTFE, PP, SS	12018-14



## GL38 Solvent Bottle Caps with Threaded Ports



12018-15



12018-16



12018-17

### Closed System Design

Reduce chemical evaporation and exposure to hazardous vapors with Vaplock solvent reservoir caps. Combine with secure fluid connections and Vaplock air inlet or relief valves to maintain pressure equilibrium within the bottle.

### ¼-28 Port Threads

Designed to accept industry-standard ¼-28 threaded fittings. For use with semi-rigid tubing equal to or less than 1/8" (3.2 mm) outside diameter. Ports are angled 10° for more accessible tubing connections.

### Anti-Twist Design

To prevent twisting of tubing when the cap is removed or attached, the inner body rotates independently of the outer collar.

### Chemically Compatible

Constructed of inert PTFE, the body of the cap provides ideal chemical compatibility with laboratory solvents. Under normal use, the outer polypropylene (PP) collar is non-wetted. Caps may be autoclaved to 140 °C. Please inquire for other material options and custom designs.

Description	# of Ports	Materials	Item#
Bottle cap, GL38, (2) ¼-28 ports, PTFE with PP collar	(2) ¼-28	PTFE,PP	12018-15
Bottle cap, GL38, (3) ¼-28 ports, PTFE with PP collar	(3) ¼-28	PTFE,PP	12018-16
Bottle cap, GL38, (4) ¼-28 ports, PTFE with PP collar	(4) ¼-28	PTFE,PP	12018-17

## GL38 Solvent Bottle Caps with Integrated Air Inlet Valve



12018-18



12018-19



12018-20



12018-21



12018-22



12018-23

### Closed System Design

Reduce exposure to hazardous chemical vapors with Vaplock solvent reservoir caps. Minimizing evaporation, an integrated check valve permits air to enter the bottle for vacuum displacement while solvent is pumped to the instrument. A 50  $\mu$ m PTFE filter covers the valve assembly to reduce particulates.

### ¼-28 Port Threads

Designed to accept industry-standard ¼-28 threaded fittings. For use with semi-rigid tubing equal to or less than 1/8" (3.2 mm) outside diameter.

### Anti-Twist Design

To prevent twisting of tubing when the cap is removed or attached, the inner body rotates independently of the outer collar.

### Chemically Compatible

Constructed of inert PTFE, the body of the cap provides ideal chemical compatibility with laboratory solvents. The air inlet valve is assembled with PTFE and 300-series stainless steel components, with inert FFKM, white USP Class VI EPDM, or Viton seal options. Under normal use, the outer polypropylene (PP) collar is non-wetted. Caps may be autoclaved to 140 °C. Please inquire for other material options and custom designs.

Description	# of Ports	Valve seal material	Item#
Bottle cap, GL38, (2) ¼-28 ports, PTFE with PP collar, FFKM air inlet valve	(2) ¼-28	FFKM	12018-18
Bottle cap, GL38, (2) ¼-28 ports, PTFE with PP collar, EPDM air inlet valve	(2) ¼-28	EPDM	12018-19
Bottle cap, GL38, (2) ¼-28 ports, PTFE with PP collar, Viton air inlet valve	(2) ¼-28	Viton	12018-20
Bottle cap, GL38, (4) ¼-28 ports, PTFE with PP collar, FFKM air inlet valve	(4) ¼-28	FFKM	12018-21
Bottle cap, GL38, (4) ¼-28 ports, PTFE with PP collar, EPDM air inlet valve	(4) ¼-28	EPDM	12018-22
Bottle cap, GL38, (4) ¼-28 ports, PTFE with PP collar, Viton air inlet valve	(4) ¼-28	Viton	12018-23

## Thermo Scientific™ Nalgene™ 38-430 Solvent Bottle Caps with Stainless Steel Thread Inserts



12018-24



12018-25



12018-26

### Closed System Design

Reduce chemical evaporation and exposure to hazardous vapors with Vaplock solvent reservoir caps. Combine with secure fluid connections and Vaplock air inlet or relief valves to maintain pressure equilibrium within the bottle.

### Durable Port Threads

Designed to accept industry-standard 1/4-28 threaded fittings, these caps include robust stainless steel (SS) thread inserts to minimize cross-threading and damage to soft PTFE ports. For use with semi-rigid tubing equal to or less than 1/8" (3.2 mm) outside diameter.

### Anti-Twist Design

To prevent twisting of tubing when the cap is removed or attached, the inner body rotates independently of the outer collar.

### Chemically Compatible

Constructed of inert PTFE, the body of the cap provides ideal chemical compatibility with laboratory solvents. Under normal use, the outer polypropylene (PP) collar is non-wetted. Caps may be autoclaved to 140 °C. Please inquire for other material options and custom designs.

Description	# of Ports	Materials	Item#
Bottle cap for Nalgene 38-430, (2) 1/4-28 ports with SS thread inserts, PTFE with PP collar	(2) 1/4-28	PTFE, PP, SS	12018-24
Bottle cap for Nalgene 38-430, (3) 1/4-28 ports with SS thread inserts, PTFE with PP collar	(3) 1/4-28	PTFE, PP, SS	12018-25
Bottle cap for Nalgene 38-430, (4) 1/4-28 ports with SS thread inserts, PTFE with PP collar	(4) 1/4-28	PTFE, PP, SS	12018-26

## Thermo Scientific Nalgene 38-430 Solvent Bottle Caps with Threaded Ports



12018-27



12018-28



12018-29

### Closed System Design

Reduce chemical evaporation and exposure to hazardous vapors with Vaplock solvent reservoir caps. Combine with secure fluid connections and Vaplock air inlet or relief valves to maintain pressure equilibrium within the bottle.

### ¼-28 Port Threads

Designed to accept industry-standard ¼-28 threaded fittings. For use with semi-rigid tubing equal to or less than 1/8" (3.2 mm) outside diameter. Ports are angled 10° for more accessible tubing connections.

### Anti-Twist Design

To prevent twisting of tubing when the cap is removed or attached, the inner body rotates independently of the outer collar.

### Chemically Compatible

Constructed of inert PTFE, the body of the cap provides ideal chemical compatibility with laboratory solvents. Under normal use, the outer polypropylene (PP) collar is non-wetted. Caps may be autoclaved to 140 °C. Please inquire for other material options and custom designs.

Description	# of Ports	Materials	Item#
Bottle cap for Nalgene 38-430, (2) ¼-28 ports, PTFE with PP collar	(2) ¼-28	PTFE,PP	12018-27
Bottle cap for Nalgene 38-430, (3) ¼-28 ports, PTFE with PP collar	(3) ¼-28	PTFE,PP	12018-28
Bottle cap for Nalgene 38-430, (4) ¼-28 ports, PTFE with PP collar	(4) ¼-28	PTFE,PP	12018-29



## Thermo Scientific Nalgene 38-430 Solvent Bottle Caps with Integrated Air Inlet Valve



12018-32



12018-30



12018-34



12018-33



12018-31



12018-35

### Closed System Design

Reduce exposure to hazardous chemical vapors with Vaplock solvent reservoir caps. Minimizing evaporation, an integrated check valve permits air to enter the bottle for vacuum displacement while solvent is pumped to the instrument. A 50  $\mu$ m PTFE filter covers the valve assembly to reduce particulates.

### ¼-28 Port Threads

Designed to accept industry-standard ¼-28 threaded fittings. For use with semi-rigid tubing equal to or less than 1/8" (3.2 mm) outside diameter.

### Anti-Twist Design

To prevent twisting of tubing when the cap is removed or attached, the inner body rotates independently of the outer collar.

### Chemically Compatible

Constructed of inert PTFE, the body of the cap provides ideal chemical compatibility with laboratory solvents. The air inlet valve is assembled with PTFE and 300-series stainless steel components, with inert FFKM, white USP Class VI EPDM, or Viton seal options. Under normal use, the outer polypropylene (PP) collar is non-wetted. Caps may be autoclaved to 140 °C. Please inquire for other material options and custom designs.

Description	# of Ports	Valve seal material	Item#
Bottle cap for Nalgene 38-430, (2) ¼-28 ports, PTFE with PP collar, FFKM air inlet valve	(2) ¼-28	FFKM	12018-08
Bottle cap for Nalgene 38-430, (2) ¼-28 ports, PTFE with PP collar, EPDM air inlet valve	(2) ¼-28	EPDM	12018-06
Bottle cap for Nalgene 38-430, (2) ¼-28 ports, PTFE with PP collar, Viton air inlet valve	(2) ¼-28	Viton	12018-10
Bottle cap for Nalgene 38-430, (4) ¼-28 ports, PTFE with PP collar, FFKM air inlet valve	(4) ¼-28	FFKM	12018-09
Bottle cap for Nalgene 38-430, (4) ¼-28 ports, PTFE with PP collar, EPDM air inlet valve	(4) ¼-28	EPDM	12018-07
Bottle cap for Nalgene 38-430, (4) ¼-28 ports, PTFE with PP collar, Viton air inlet valve	(4) ¼-28	Viton	12018-11

## 38 mm Wako Solvent Bottle Caps with Stainless Steel Thread Inserts



12018-36



12018-37



12018-38

### Closed System Design

Reduce chemical evaporation and exposure to hazardous vapors with Vaplock solvent reservoir caps. Combine with secure fluid connections and Vaplock air inlet or relief valves to maintain pressure equilibrium within the bottle.

### Durable Port Threads

Designed to accept industry-standard 1/4-28 threaded fittings, these caps include robust stainless steel (SS) thread inserts to minimize cross-threading and damage to soft PTFE ports. For use with semi-rigid tubing equal to or less than 1/8" (3.2 mm) outside diameter.

### Anti-Twist Design

To prevent twisting of tubing when the cap is removed or attached, the inner body rotates independently of the outer collar.

### Chemically Compatible

Constructed of inert PTFE, the body of the cap provides ideal chemical compatibility with laboratory solvents. Under normal use, the outer polypropylene (PP) collar is non-wetted. Caps may be autoclaved to 140 °C. Please inquire for other material options and custom designs.

Description	# of Ports	Materials	Item#
Bottle cap for Wako 38 mm, (2) 1/4-28 ports with SS thread inserts, PTFE with PP collar	(2) 1/4-28	PTFE, PP, SS	12018-36
Bottle cap for Wako 38 mm, (3) 1/4-28 ports with SS thread inserts, PTFE with PP collar	(3) 1/4-28	PTFE, PP, SS	12018-37
Bottle cap for Wako 38 mm, (4) 1/4-28 ports with SS thread inserts, PTFE with PP collar	(4) 1/4-28	PTFE, PP, SS	12018-38

## 38 mm Wako Solvent Bottle Caps with Threaded Ports



12018-39



12018-40



12018-41

### Closed System Design

Reduce chemical evaporation and exposure to hazardous vapors with Vaplock solvent reservoir caps. Combine with secure fluid connections and Vaplock air inlet or relief valves to maintain pressure equilibrium within the bottle.

### ¼-28 Port Threads

Designed to accept industry-standard ¼-28 threaded fittings. For use with semi-rigid tubing equal to or less than 1/8" (3.2 mm) outside diameter. Ports are angled 10° for more accessible tubing connections.

### Anti-Twist Design

To prevent twisting of tubing when the cap is removed or attached, the inner body rotates independently of the outer collar.

### Chemically Compatible

Constructed of inert PTFE, the body of the cap provides ideal chemical compatibility with laboratory solvents. Under normal use, the outer polypropylene (PP) collar is non-wetted. Caps may be autoclaved to 140 °C. Please inquire for other material options and custom designs.

Description	# of Ports	Materials	Item#
Bottle cap for Wako 38 mm, (2) ¼-28 ports, PTFE with PP collar	(2) ¼-28	PTFE,PP	12018-39
Bottle cap for Wako 38 mm, (3) ¼-28 ports, PTFE with PP collar	(3) ¼-28	PTFE,PP	12018-40
Bottle cap for Wako 38 mm, (4) ¼-28 ports, PTFE with PP collar	(4) ¼-28	PTFE,PP	12018-41

## 38 mm Wako Solvent Bottle Caps with Integrated Air Inlet Valve



12018-44



12018-42



12018-46



12018-45



12018-43



12018-47

### Closed System Design

Reduce exposure to hazardous chemical vapors with Vaplock solvent reservoir caps. Minimizing evaporation, an integrated check valve permits air to enter the bottle for vacuum displacement while solvent is pumped to the instrument. A 50  $\mu$ m PTFE filter covers the valve assembly to reduce particulates.

### ¼-28 Port Threads

Designed to accept industry-standard ¼-28 threaded fittings. For use with semi-rigid tubing equal to or less than 1/8" (3.2 mm) outside diameter.

### Anti-Twist Design

To prevent twisting of tubing when the cap is removed or attached, the inner body rotates independently of the outer collar.

### Chemically Compatible

Constructed of inert PTFE, the body of the cap provides ideal chemical compatibility with laboratory solvents. The air inlet valve is assembled with PTFE and 300-series stainless steel components, with inert FFKM, white USP Class VI EPDM, or Viton seal options. Under normal use, the outer polypropylene (PP) collar is non-wetted. Caps may be autoclaved to 140 °C. Please inquire for other material options and custom designs.

Description	# of Ports	Valve seal material	Item#
Bottle cap for 38 mm Wako, (2) ¼-28 ports, PTFE with PP collar, FFKM air inlet valve	(2) ¼-28	FFKM	12018-08
Bottle cap for 38 mm Wako, (2) ¼-28 ports, PTFE with PP collar, EPDM air inlet valve	(2) ¼-28	EPDM	12018-06
Bottle cap for 38 mm Wako, (2) ¼-28 ports, PTFE with PP collar, Viton air inlet valve	(2) ¼-28	Viton	12018-10
Bottle cap for 38 mm Wako, (4) ¼-28 ports, PTFE with PP collar, FFKM air inlet valve	(4) ¼-28	FFKM	12018-09
Bottle cap for 38 mm Wako, (4) ¼-28 ports, PTFE with PP collar, EPDM air inlet valve	(4) ¼-28	EPDM	12018-07
Bottle cap for 38 mm Wako, (4) ¼-28 ports, PTFE with PP collar, Viton air inlet valve	(4) ¼-28	Viton	12018-11



## GL32 Solvent Bottle Caps with Stainless Steel Thread Inserts



12018-48



12018-49



12018-50

### Closed System Design

Reduce chemical evaporation and exposure to hazardous vapors with Vaplock solvent reservoir caps. Combine with secure fluid connections and Vaplock air inlet or relief valves to maintain pressure equilibrium within the bottle.

### Durable Port Threads

Designed to accept industry-standard 1/4-28 threaded fittings, these caps include robust stainless steel (SS) thread inserts to minimize cross-threading and damage to soft PTFE ports. For use with semi-rigid tubing equal to or less than 1/8" (3.2 mm) outside diameter.

### Anti-Twist Design

To prevent twisting of tubing when the cap is removed or attached, the inner body rotates independently of the outer collar.

### Chemically Compatible

Constructed of inert PTFE, the body of the cap provides ideal chemical compatibility with laboratory solvents. Under normal use, the outer polypropylene (PP) collar is non-wetted. Caps may be autoclaved to 140 °C. Please inquire for other material options and custom designs.

Description	# of Ports	Materials	Item#
Bottle cap, GL32, (2) 1/4-28 ports with SS thread inserts, PTFE with PP collar	(2) 1/4-28	PTFE, PP, SS	12018-48
Bottle cap, GL38, (3) 1/4-28 ports with SS thread inserts, PTFE with PP collar	(3) 1/4-28	PTFE, PP, SS	12018-49
Bottle cap, GL38, (4) 1/4-28 ports with SS thread inserts, PTFE with PP collar	(4) 1/4-28	PTFE, PP, SS	12018-50

## GL32 Solvent Bottle Caps with Threaded Ports



12018-51



12018-52



12018-53

### Closed System Design

Reduce chemical evaporation and exposure to hazardous vapors with Vaplock solvent reservoir caps. Combine with secure fluid connections and Vaplock air inlet or relief valves to maintain pressure equilibrium within the bottle.

### ¼-28 Port Threads

Designed to accept industry-standard ¼-28 threaded fittings. For use with semi-rigid tubing equal to or less than 1/8" (3.2 mm) outside diameter. Ports are angled 10° for more accessible tubing connections.

### Anti-Twist Design

To prevent twisting of tubing when the cap is removed or attached, the inner body rotates independently of the outer collar.

### Chemically Compatible

Constructed of inert PTFE, the body of the cap provides ideal chemical compatibility with laboratory solvents. Under normal use, the outer polypropylene (PP) collar is non-wetted. Caps may be autoclaved to 140 °C. Please inquire for other material options and custom designs.

Description	# of Ports	Materials	Item#
Bottle cap, GL32, (2) ¼-28 ports, PTFE with PP collar	(2) ¼-28	PTFE,PP	12018-51
Bottle cap, GL32, (3) ¼-28 ports, PTFE with PP collar	(3) ¼-28	PTFE,PP	12018-52
Bottle cap, GL32, (4) ¼-28 ports, PTFE with PP collar	(4) ¼-28	PTFE,PP	12018-53

## GL25 Solvent Bottle Caps with Threaded Ports



12018-54



12018-55

### Closed System Design

Reduce chemical evaporation and exposure to hazardous vapors with Vaplock solvent reservoir caps. Combine with secure fluid connections and Vaplock air inlet or relief valves to maintain pressure equilibrium within the bottle.

### ¼-28 Port Threads

Designed to accept industry-standard ¼-28 threaded fittings. For use with semi-rigid tubing equal to or less than 1/8" (3.2 mm) outside diameter. Ports are angled 10° for more accessible tubing connections.

### Anti-Twist Design

To prevent twisting of tubing when the cap is removed or attached, the inner body rotates independently of the outer collar.

### Chemically Compatible

Constructed of inert PTFE, the body of the cap provides ideal chemical compatibility with laboratory solvents. Under normal use, the outer polypropylene (PP) collar is non-wetted. Caps may be autoclaved to 140 °C. Please inquire for other material options and custom designs.

Description	# of Ports	Materials	Item#
Bottle cap, GL25, (2) ¼-28 ports, PTFE with PP collar	(2) ¼-28	PTFE,PP	12018-54
Bottle cap, GL25, (3) ¼-28 ports, PTFE with PP collar	(3) ¼-28	PTFE,PP	12018-55

# WASTE MANIFOLD CAPS AND KITS

## GL38 Waste Manifold Caps



12018-59



12018-61



12018-58



12018-60

### Vapor-Tight Connection

Waste manifolds are designed to fit standard GL38 threaded lab bottles.

### Chemical Resistance

Materials of construction include your choice of PP or PTFE manifold and insert with PP spin collar.

### Versatile Configuration

Manifolds can be configured for barbed connections, compression fittings, 1/4-28 fitting and ferrule sets. All manifolds are designed to accommodate our 12019-79 filter and indicator\*.

\*See the emissions and filter section on pages 59-62.

Description	# of Ports	Manifold material	Item#
Waste manifold for GL38 threaded container, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, PP	(3) 1/4 NPT (1) 1/2 NPT	pp	12018-59
Waste manifold for GL38 threaded container, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, PTFE	(3) 1/4 NPT (1) 1/2 NPT	PTFE	12018-61
Waste manifold for GL38 threaded container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28, PP	(1) 1/2 NPT (3) 1/4 NPT (6) 1/4-28	pp	12018-58
Waste manifold for GL38 threaded container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28, PTFE	(1) 1/2 NPT (3) 1/4 NPT (6) 1/4-28	PTFE	12018-60



# WASTE MANIFOLD CAPS AND KITS

## GL38 Waste Kits

- Minimize exposure to harmful chemical vapors
- Collect solvent waste from multiple effluent streams
- Highly adaptable and conforms to a broad range of containment types

Cole-Parmer Vaplock closed systems for solvent containment minimize leaks, spills, and vapor escape from solvent waste and supply containers. Use Vaplock kits to provide an effective means of sealed solvent delivery, and select from waste containment kits to collect effluents while minimizing harmful solvent exhaust. All Vaplock products are designed for ease of use and adaptability, and will conform to a broad range of standard laboratory solvent containers. Waste accessory kits include a solvent collection manifold, an organic solvent exhaust filter with breakthrough indicator, and adapters, plugs, and tubing connections required for installation on typical HPLC instruments.

### Kit contents

- 10-port waste manifold
- (3) ¼" NPT PP plugs
- (6) ¼-28 PTFE plugs
- (1) ½" NPT PP plug
- (1) Organic vapor filter
- (2) 2.2 mm OD hard-wall tubing connections
- (1) 2.5 mm OD hard-wall tubing connection
- (3) 1/8" OD hard-wall tubing connections
- (2) 1/5" OD hard-wall tubing connections
- (3) Barbed tubing connections, ¼" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, 1/8" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, 3/5" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, 3/8" ID tubing x ¼" NPT, PP
- (1) Barb to barb Y connector with ¼" (6.25 mm) barbs, PP
- (1) Hard-wall tube extension, includes union connections and 5-foot, 1/8" OD PTFE tubing
- (1) Filter adapter, ¼" NPT x 1/2" NPT, PP
- (1) Breakthrough color indicator for Vaplock organic vapor filter



12018-56

**Note:** Container is not included.

Description	# of Ports	Manifold material	Item#
HPLC waste accessory kit for GL38 threaded container - 10 port with (1) ½" NPT, (3) ¼" NPT, (6) ¼-28; includes PP manifold, fittings kit, exhaust filter with adapter and color indicator	(1) ½ NPT (3) ¼ NPT (6) ¼-28	pp	12018-56
HPLC waste accessory kit for GL38 threaded container - 10 port with (1) ½" NPT, (3) ¼" NPT, (6) ¼-28; includes PTFE manifold, fittings kit, exhaust filter with adapter and color indicator	(1) ½ NPT (3) ¼ NPT (6) ¼-28	PTFE	12018-57

# WASTE MANIFOLD CAPS AND KITS

## Thermo Scientific Nalgene 38-430 Waste Manifold Caps



12018-65



12018-67



12018-64



12018-66

### Vapor-Tight Connection

Waste manifolds are designed to fit standard plastic 38-430 threaded lab bottles.

### Chemical Resistance

Materials of construction include your choice of PP or PTFE manifold and insert with PP spin collar.

### Versatile Configuration

Manifolds can be configured for barbed connections, compression fittings, 1/4-28 fitting and ferrule sets. All manifolds are designed to accommodate our 12019-79 filter and indicator\*.

\*See the emissions and filter section on pages 59-62.

Description	# of Ports	Manifold material	Item#
Waste manifold for Nalgene 38-430 threaded container, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, PP	(3) 1/4" NPT (1) 1/2" NPT	pp	12018-65
Waste manifold for Nalgene 38-430 threaded container, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, PTFE	(3) 1/4" NPT (1) 1/2" NPT	PTFE	12018-67
Waste manifold for Nalgene 38-430 threaded container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28, PP	(1) 1/2" NPT (3) 1/4" NPT (6) 1/4-28	pp	12018-64
Waste manifold for Nalgene 38-430 threaded container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28, PTFE	(1) 1/2" NPT (3) 1/4" NPT (6) 1/4-28	PTFE	12018-66

# WASTE MANIFOLD CAPS AND KITS

## Thermo Scientific Nalgene 38-430 Waste Kits

- Minimize exposure to harmful chemical vapors
- Collect solvent waste from multiple effluent streams
- Highly adaptable and conforms to a broad range of containment types

Cole-Parmer Vaplock closed systems for solvent containment minimize leaks, spills, and vapor escape from solvent waste and supply containers. Use Vaplock kits to provide an effective means of sealed solvent delivery, and select from waste containment kits to collect effluents while minimizing harmful solvent exhaust. All Vaplock products are designed for ease of use and adaptability, and will conform to a broad range of standard laboratory solvent containers. Waste accessory kits include a solvent collection manifold, an organic solvent exhaust filter with breakthrough indicator, and adapters, plugs, and tubing connections required for installation on typical HPLC instruments.

### Kit contents

- 10-port waste manifold
- (3) ¼" NPT PP plugs
- (6) ¼-28 PTFE plugs
- (1) ½" NPT PP plug
- (1) Organic vapor filter
- (2) 2.2 mm OD hard-wall tubing connections
- (1) 2.5 mm OD hard-wall tubing connection
- (3) 1/8" OD hard-wall tubing connections
- (2) 1/5" OD hard-wall tubing connections
- (3) Barbed tubing connections, ¼" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, 1/8" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, 3/5" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, 3/8" ID tubing x ¼" NPT, PP
- (1) Barb to barb Y connector with ¼" (6.25 mm) barbs, PP
- (1) Hard-wall tube extension, includes union connections and 5-foot, 1/8" OD PTFE tubing
- (1) Filter adapter, ¼" NPT x 1/2" NPT, PP
- (1) Breakthrough color indicator for Vaplock organic vapor filter



12018-62

Note: Container is not included.

Description	# of Ports	Manifold material	Item#
HPLC waste accessory kit for Nalgene 38-430 threaded container - 10 port with (1) ½" NPT, (3) ¼" NPT, (6) ¼-28; includes PP manifold, fittings kit, exhaust filter with adapter and color indicator	(1) ½ NPT (3) ¼ NPT (6) ¼-28	pp	12018-62
HPLC waste accessory kit for Nalgene 38-430 threaded container - 10 port with (1) ½" NPT, (3) ¼" NPT, (6) ¼-28; includes PTFE manifold, fittings kit, exhaust filter with adapter and color indicator	(1) ½ NPT (3) ¼ NPT (6) ¼-28	PTFE	12018-63

# WASTE MANIFOLD CAPS AND KITS

## Wako 38 mm Waste Manifold Caps



12018-71



12018-73



12018-70



12018-72

### Vapor-Tight Connection

Waste manifolds are designed to fit Waka 38 mm threaded lab bottles.

### Chemical Resistance

Materials of construction include your choice of PP or PTFE manifold and insert with PP spin collar.

### Versatile Configuration

Manifolds can be configured for barbed connections, compression fittings, 1/4-28 fitting and ferrule sets. All manifolds are designed to accommodate our 12019-79 filter and indicator\*.

\*See the emissions and filter section on pages 59-62.

Description	# of Ports	Manifold material	Item#
Waste manifold for Waka 38 mm threaded container, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, PP	(3) 1/4 NPT (1) 1/2 NPT	pp	12018-71
Waste manifold for Waka 38 mm threaded container, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, PTFE	(3) 1/4 NPT (1) 1/2 NPT	PTFE	12018-73
Waste manifold for Waka 38 mm threaded container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28, PP	(1) 1/2 NPT (3) 1/4 NPT (6) 1/4-28	pp	12018-70
Waste manifold for Waka 38 mm threaded container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28, PTFE	(1) 1/2 NPT (3) 1/4 NPT (6) 1/4-28	PTFE	12018-72

# WASTE MANIFOLD CAPS AND KITS

## Wako 38 mm Waste Kits

- Minimize exposure to harmful chemical vapors
- Collect solvent waste from multiple effluent streams
- Highly adaptable and conforms to a broad range of containment types

Cole-Parmer Vaplock closed systems for solvent containment minimize leaks, spills, and vapor escape from solvent waste and supply containers. Use Vaplock kits to provide an effective means of sealed solvent delivery, and select from waste containment kits to collect effluents while minimizing harmful solvent exhaust. All Vaplock products are designed for ease of use and adaptability, and will conform to a broad range of standard laboratory solvent containers. Waste accessory kits include a solvent collection manifold, an organic solvent exhaust filter with breakthrough indicator, and adapters, plugs, and tubing connections required for installation on typical HPLC instruments.

### Kit contents

- 10-port waste manifold
- (3) ¼" NPT PP plugs
- (6) ¼-28 PTFE plugs
- (1) ½" NPT PP plug
- (1) Organic vapor filter
- (2) 2.2 mm OD hard-wall tubing connections
- (1) 2.5 mm OD hard-wall tubing connection
- (3) 1/8" OD hard-wall tubing connections
- (2) 1/5" OD hard-wall tubing connections
- (3) Barbed tubing connections, ¼" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, 1/8" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, 3/5" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, 3/8" ID tubing x ¼" NPT, PP
- (1) Barb to barb Y connector with ¼" (6.25 mm) barbs, PP
- (1) Hard-wall tube extension, includes union connections and 5-foot, 1/8" OD PTFE tubing
- (1) Filter adapter, ¼" NPT x 1/2" NPT, PP
- (1) Breakthrough color indicator for Vaplock organic vapor filter



12018-68

Note: Container is not included.

Description	# of Ports	Manifold material	Item#
HPLC waste accessory kit for Wako 38 mm threaded container - 10 port with (1) ½" NPT, (3) ¼" NPT, (6) ¼-28; includes PP manifold, fittings kit, exhaust filter with adapter and color indicator	(1) ½ NPT (3) ¼ NPT (6) ¼-28	pp	12018-68
HPLC waste accessory kit for Wako 38 mm threaded container - 10 port with (1) ½" NPT, (3) ¼" NPT, (6) ¼-28; includes PTFE manifold, fittings kit, exhaust filter with adapter and color indicator	(1) ½ NPT (3) ¼ NPT (6) ¼-28	PTFE	12018-69

# WASTE MANIFOLD CAPS AND KITS

## GL45 Waste Manifold Caps



12018-77



12018-79



12018-76



12018-78

### Vapor-Tight Connection

Waste manifolds are designed to fit standard GL45 threaded lab bottles.

### Chemical Resistance

Materials of construction include your choice of PP or PTFE manifold and insert with PP spin collar.

### Versatile Configuration

Manifolds can be configured for barbed connections, compression fittings, 1/4-28 fitting and ferrule sets. All manifolds are designed to accommodate our 12019-79 filter and indicator\*.

\*See the emissions and filter section on pages 59-62.

Description	# of Ports	Manifold material	Item#
Waste manifold for GL45 threaded container, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, PP	(3) 1/4" NPT (1) 1/2" NPT	pp	12018-77
Waste manifold for GL45 threaded container, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, PTFE	(3) 1/4" NPT (1) 1/2" NPT	PTFE	12018-79
Waste manifold for GL45 threaded container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28, PP	(1) 1/2" NPT (3) 1/4" NPT (6) 1/4-28	pp	12018-76
Waste manifold for GL45 threaded container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28, PTFE	(1) 1/2" NPT (3) 1/4" NPT (6) 1/4-28	PTFE	12018-78



# WASTE MANIFOLD CAPS AND KITS

## GL45 Waste Kits

- Minimize exposure to harmful chemical vapors
- Collect solvent waste from multiple effluent streams
- Highly adaptable and conforms to a broad range of containment types

Cole-Parmer Vaplock closed systems for solvent containment minimize leaks, spills, and vapor escape from solvent waste and supply containers. Use Vaplock kits to provide an effective means of sealed solvent delivery, and select from waste containment kits to collect effluents while minimizing harmful solvent exhaust. All Vaplock products are designed for ease of use and adaptability, and will conform to a broad range of standard laboratory solvent containers. Waste accessory kits include a solvent collection manifold, an organic solvent exhaust filter with breakthrough indicator, and adapters, plugs, and tubing connections required for installation on typical HPLC instruments.

### Kit contents

- 10-port waste manifold
- (3) ¼" NPT PP plugs
- (6) ¼-28 PTFE plugs
- (1) ½" NPT PP plug
- (1) Organic vapor filter
- (2) 2.2 mm OD hard-wall tubing connections
- (1) 2.5 mm OD hard-wall tubing connection
- (3) 1/8" OD hard-wall tubing connections
- (2) 1/5" OD hard-wall tubing connections
- (3) Barbed tubing connections, ¼" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, 1/8" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, 3/5" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, 3/8" ID tubing x ¼" NPT, PP
- (1) Barb to barb Y connector with ¼" (6.25 mm) barbs, PP
- (1) Hard-wall tube extension, includes union connections and 5-foot, 1/8" OD PTFE tubing
- (1) Filter adapter, ¼" NPT x ½" NPT, PP
- (1) Breakthrough color indicator for Vaplock organic vapor filter



12018-74

Note: Container is not included.

Description	# of Ports	Manifold material	Item#
HPLC waste accessory kit for GL45 threaded container - 10 port with (1) ½" NPT, (3) ¼" NPT, (6) ¼-28; includes PP manifold, fittings kit, exhaust filter with adapter and color indicator	(1) ½ NPT (3) ¼ NPT (6) ¼-28	pp	12018-74
HPLC waste accessory kit for GL45 threaded container - 10 port with (1) ½" NPT, (3) ¼" NPT, (6) ¼-28; includes PTFE manifold, fittings kit, exhaust filter with adapter and color indicator	(1) ½ NPT (3) ¼ NPT (6) ¼-28	PTFE	12018-75

# WASTE MANIFOLD CAPS AND KITS

## DIN 45 Waste Manifold Caps



12018-83



12018-85



12018-82



12018-84

### Vapor-Tight Connection

Waste manifolds are designed to fit standard DIN 45 threaded lab bottles.

### Chemical Resistance

Materials of construction include your choice of PP or PTFE manifold and insert with HDPE spin collar.

### Versatile Configuration

Manifolds can be configured for barbed connections, compression fittings, 1/4-28 fitting and ferrule sets. All manifolds are designed to accommodate our 12019-79 filter and indicator\*.

\*See the emissions and filter section on pages 59-62.

Description	# of Ports	Manifold material	Item#
Waste manifold for DIN 45 threaded container, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, PP	(3) 1/4 NPT (1) 1/2 NPT	pp	12018-83
Waste manifold for DIN 45 threaded container, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, PTFE	(3) 1/4 NPT (1) 1/2 NPT	PTFE	12018-85
Waste manifold for DIN 45 threaded container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28, PP	(1) 1/2 NPT (3) 1/4 NPT (6) 1/4-28	pp	12018-82
Waste manifold for DIN 45 threaded container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28, PTFE	(1) 1/2 NPT (3) 1/4 NPT (6) 1/4-28	PTFE	12018-84

# WASTE MANIFOLD CAPS AND KITS

## DIN 45 Waste Kits

- Minimize exposure to harmful chemical vapors
- Collect solvent waste from multiple effluent streams
- Highly adaptable and conforms to a broad range of containment types

Cole-Parmer Vaplock closed systems for solvent containment minimize leaks, spills, and vapor escape from solvent waste and supply containers. Use Vaplock kits to provide an effective means of sealed solvent delivery, and select from waste containment kits to collect effluents while minimizing harmful solvent exhaust. All Vaplock products are designed for ease of use and adaptability, and will conform to a broad range of standard laboratory solvent containers. Waste accessory kits include a solvent collection manifold, an organic solvent exhaust filter with breakthrough indicator, and adapters, plugs, and tubing connections required for installation on typical HPLC instruments.

### Kit contents

- 10-port waste manifold
- (3) ¼" NPT PP plugs
- (6) ¼-28 PTFE plugs
- (1) ½" NPT PP plug
- (1) Organic vapor filter
- (2) 2.2 mm OD hard-wall tubing connections
- (1) 2.5 mm OD hard-wall tubing connection
- (3) 1/8" OD hard-wall tubing connections
- (2) 1/5" OD hard-wall tubing connections
- (3) Barbed tubing connections, ¼" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, 1/8" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, 3/5" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, 3/8" ID tubing x ¼" NPT, PP
- (1) Barb to barb Y connector with ¼" (6.25 mm) barbs, PP
- (1) Hard-wall tube extension, includes union connections and 5-foot, 1/8" OD PTFE tubing
- (1) Filter adapter, ¼" NPT x ½" NPT, PP
- (1) Breakthrough color indicator for Vaplock organic vapor filter



12018-80

Note: Container is not included.

Description	# of Ports	Manifold material	Item#
HPLC waste accessory kit for DIN 45 threaded container - 10 port with (1) ½" NPT, (3) ¼" NPT, (6) ¼-28; includes PP manifold, fittings kit, exhaust filter with adapter and color indicator	(1) ½ NPT (3) ¼ NPT (6) ¼-28	pp	12018-80
HPLC waste accessory kit for DIN 45 threaded container - 10 port with (1) ½" NPT, (3) ¼" NPT, (6) ¼-28; includes PTFE manifold, fittings kit, exhaust filter with adapter and color indicator	(1) ½ NPT (3) ¼ NPT (6) ¼-28	PTFE	12018-81

# WASTE MANIFOLD CAPS AND KITS

## DIN 50 Waste Manifold Caps



12018-89



12018-91



12018-88



12018-90

### Vapor-Tight Connection

Waste manifolds are designed to fit standard DIN 50 threaded lab bottles.

### Chemical Resistance

Materials of construction include your choice of PP or PTFE manifold and insert with HDPE spin collar.

### Versatile Configuration

Manifolds can be configured for barbed connections, compression fittings, 1/4-28 fitting and ferrule sets. All manifolds are designed to accommodate our 12019-79 filter and indicator\*.

\*See the emissions and filter section on pages 59-62.

Description	# of Ports	Manifold material	Item#
Waste manifold for DIN 50 threaded container, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, PP	(3) 1/4" NPT (1) 1/2" NPT	pp	12018-89
Waste manifold for DIN 50 threaded container, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, PTFE	(3) 1/4" NPT (1) 1/2" NPT	PTFE	12018-91
Waste manifold for DIN 50 threaded container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28, PP	(1) 1/2" NPT (3) 1/4" NPT (6) 1/4-28	pp	12018-88
Waste manifold for DIN 50 threaded container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28, PTFE	(1) 1/2" NPT (3) 1/4" NPT (6) 1/4-28	PTFE	12018-90

# WASTE MANIFOLD CAPS AND KITS

## DIN 50 Waste Kits

- Minimize exposure to harmful chemical vapors
- Collect solvent waste from multiple effluent streams
- Highly adaptable and conforms to a broad range of containment types

Cole-Parmer Vaplock closed systems for solvent containment minimize leaks, spills, and vapor escape from solvent waste and supply containers. Use Vaplock kits to provide an effective means of sealed solvent delivery, and select from waste containment kits to collect effluents while minimizing harmful solvent exhaust. All Vaplock products are designed for ease of use and adaptability, and will conform to a broad range of standard laboratory solvent containers. Waste accessory kits include a solvent collection manifold, an organic solvent exhaust filter with breakthrough indicator, and adapters, plugs, and tubing connections required for installation on typical HPLC instruments.

### Kit contents

- 10-port waste manifold
- (3) ¼" NPT PP plugs
- (6) ¼-28 PTFE plugs
- (1) ½" NPT PP plugs
- (1) Organic vapor filter
- (2) 2.2 mm OD hard-wall tubing connections
- (1) 2.5 mm OD hard-wall tubing connection
- (3) 1/8" OD hard-wall tubing connections
- (2) 1/5" OD hard-wall tubing connections
- (3) Barbed tubing connections, ¼" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, 1/8" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, 3/5" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, 3/8" ID tubing x ¼" NPT, PP
- (1) Barb to barb Y connector with ¼" (6.25 mm) barbs, PP
- (1) Hard-wall tube extension, includes union connections and 5-foot, 1/8" OD PTFE tubing
- (1) Filter adapter, ¼" NPT x ½" NPT, PP
- (1) Breakthrough color indicator for Vaplock organic vapor filter



12018-86

Note: Container is not included.

Description	# of Ports	Manifold material	Item#
HPLC waste accessory kit for DIN 50 threaded container - 10 port with (1) ½" NPT, (3) ¼" NPT, (6) ¼-28; includes PP manifold, fittings kit, exhaust filter with adapter and color indicator	(1) ½ NPT (3) ¼ NPT (6) ¼-28	pp	12018-86
HPLC waste accessory kit for DIN 50 threaded container - 10 port with (1) ½" NPT, (3) ¼" NPT, (6) ¼-28; includes PTFE manifold, fittings kit, exhaust filter with adapter and color indicator	(1) ½ NPT (3) ¼ NPT (6) ¼-28	PTFE	12018-87

# WASTE MANIFOLD CAPS AND KITS

## 51 mm Waste Manifold Caps



12018-95



12018-97



12018-94



12018-96

### Vapor-Tight Connection

Waste manifolds are designed to fit standard 51 mm threaded lab bottles.

### Chemical Resistance

Materials of construction include your choice of PP or PTFE manifold and insert with HDPE spin collar.

### Versatile Configuration

Manifolds can be configured for barbed connections, compression fittings, 1/4-28 fitting and ferrule sets. All manifolds are designed to accommodate our 12019-79 filter and indicator\*.

\*See the emissions and filter section on pages 59-62.

Description	# of Ports	Manifold material	Item#
Waste manifold for 51 mm threaded container, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, PP	(3) 1/4" NPT (1) 1/2" NPT	pp	12018-95
Waste manifold for 51 mm threaded container, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, PTFE	(3) 1/4" NPT (1) 1/2" NPT	PTFE	12018-97
Waste manifold for 51 mm threaded container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28, PP	(1) 1/2" NPT (3) 1/4" NPT (6) 1/4-28	pp	12018-94
Waste manifold for 51 mm threaded container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28, PTFE	(1) 1/2" NPT (3) 1/4" NPT (6) 1/4-28	PTFE	12018-96

# WASTE MANIFOLD CAPS AND KITS

## 51 mm Waste Kits

- Minimize exposure to harmful chemical vapors
- Collect solvent waste from multiple effluent streams
- Highly adaptable and conforms to a broad range of containment types

Cole-Parmer Vaplock closed systems for solvent containment minimize leaks, spills, and vapor escape from solvent waste and supply containers. Use Vaplock kits to provide an effective means of sealed solvent delivery, and select from waste containment kits to collect effluents while minimizing harmful solvent exhaust. All Vaplock products are designed for ease of use and adaptability, and will conform to a broad range of standard laboratory solvent containers. Waste accessory kits include a solvent collection manifold, an organic solvent exhaust filter with breakthrough indicator, and adapters, plugs, and tubing connections required for installation on typical HPLC instruments.

### Kit contents

- 10-port waste manifold
- (3) ¼" NPT PP plugs
- (6) ¼-28 PTFE plugs
- (1) ½" NPT PP plug
- (1) Organic vapor filter
- (2) 2.2 mm OD hard-wall tubing connections
- (1) 2.5 mm OD hard-wall tubing connection
- (3) 1/8" OD hard-wall tubing connections
- (2) 1/5" OD hard-wall tubing connections
- (3) Barbed tubing connections, ¼" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, 1/8" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, 3/5" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, 3/8" ID tubing x ¼" NPT, PP
- (1) Barb to barb Y connector with ¼" (6.25 mm) barbs, PP
- (1) Hard-wall tube extension, includes union connections and 5-foot, 1/8" OD PTFE tubing
- (1) Filter adapter, ¼" NPT x ½" NPT, PP
- (1) Breakthrough color indicator for Vaplock organic vapor filter



12018-92

Note: Container is not included.

Description	# of Ports	Manifold material	Item#
HPLC waste accessory kit for 51 mm threaded container - 10 port with (1) ½" NPT, (3) ¼" NPT, (6) ¼-28; includes PP manifold, fittings kit, exhaust filter with adapter and color indicator	(1) ½ NPT (3) ¼ NPT (6) ¼-28	pp	12018-92
HPLC waste accessory kit for 51 mm threaded container - 10 port with (1) ½" NPT, (3) ¼" NPT, (6) ¼-28; includes PTFE manifold, fittings kit, exhaust filter with adapter and color indicator	(1) ½ NPT (3) ¼ NPT (6) ¼-28	PTFE	12018-93



# WASTE MANIFOLD CAPS AND KITS

## Thermo Scientific Nalgene 538 Waste Manifold Caps



12019-01



12019-03



12019-00



12019-02

### Vapor-Tight Connection

Waste manifolds are designed to fit standard 538 threaded lab bottles.

### Chemical Resistance

Materials of construction include your choice of PP or PTFE manifold and insert with PP spin collar.

### Versatile Configuration

Manifolds can be configured for barbed connections, compression fittings, 1/4-28 fitting and ferrule sets. All manifolds are designed to accommodate our 12019-79 filter and indicator\*.

\*See the emissions and filter section on pages 59-62.

Description	# of Ports	Manifold material	Item#
Waste manifold for 538 threaded container, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, PP	(3) 1/4 NPT (1) 1/2 NPT	pp	12019-01
Waste manifold for 538 threaded container, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, PTFE	(3) 1/4 NPT (1) 1/2 NPT	PTFE	12019-03
Waste manifold for 538 threaded container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28, PP	(1) 1/2 NPT (3) 1/4 NPT (6) 1/4-28	pp	12019-00
Waste manifold for 538 threaded container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28, PTFE	(1) 1/2 NPT (3) 1/4 NPT (6) 1/4-28	PTFE	12019-02



# WASTE MANIFOLD CAPS AND KITS

## Thermo Scientific Nalgene 538 Waste Kits

- Minimize exposure to harmful chemical vapors
- Collect solvent waste from multiple effluent streams
- Highly adaptable and conforms to a broad range of containment types

Cole-Parmer Vaplock closed systems for solvent containment minimize leaks, spills, and vapor escape from solvent waste and supply containers. Use Vaplock kits to provide an effective means of sealed solvent delivery, and select from waste containment kits to collect effluents while minimizing harmful solvent exhaust. All Vaplock products are designed for ease of use and adaptability, and will conform to a broad range of standard laboratory solvent containers. Waste accessory kits include a solvent collection manifold, an organic solvent exhaust filter with breakthrough indicator, and adapters, plugs, and tubing connections required for installation on typical HPLC instruments.

### Kit contents

- 10-port waste manifold
- (3) ¼" NPT PP plugs
- (6) ¼-28 PTFE plugs
- (1) ½" NPT PP plug
- (1) Organic vapor filter
- (2) 2.2 mm OD hard-wall tubing connections
- (1) 2.5 mm OD hard-wall tubing connection
- (3) 1/8" OD hard-wall tubing connections
- (2) 1/5" OD hard-wall tubing connections
- (3) Barbed tubing connections, ¼" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, 1/8" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, 3/5" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, 3/8" ID tubing x ¼" NPT, PP
- (1) Barb to barb Y connector with ¼" (6.25 mm) barbs, PP
- (1) Hard-wall tube extension, includes union connections and 5-foot, 1/8" OD PTFE tubing
- (1) Filter adapter, ¼" NPT x ½" NPT, PP
- (1) Breakthrough color indicator for Vaplock organic vapor filter



12018-98

Note: Container is not included.

Description	# of Ports	Manifold material	Item#
HPLC waste accessory kit for 53B threaded container - 10 port with (1) ½" NPT, (3) ¼" NPT, (6) ¼-28; includes PP manifold, fittings kit, exhaust filter with adapter and color indicator	(1) ½ NPT (3) ¼ NPT (6) ¼-28	pp	12018-98
HPLC waste accessory kit for 53B threaded container - 10 port with (1) ½" NPT, (3) ¼" NPT, (6) ¼-28; includes PTFE manifold, fittings kit, exhaust filter with adapter and color indicator	(1) ½ NPT (3) ¼ NPT (6) ¼-28	PTFE	12018-99

# WASTE MANIFOLD CAPS AND KITS

## DIN 60 Waste Manifold Caps



12019-07



12019-09



12019-06



12019-08

### Vapor-Tight Connection

Waste manifolds are designed to fit standard DIN 60 threaded lab bottles.

### Chemical Resistance

Materials of construction include your choice of PP or PTFE manifold and insert with HDPE spin collar.

### Versatile Configuration

Manifolds can be configured for barbed connections, compression fittings, 1/4-28 fitting and ferrule sets. All manifolds are designed to accommodate our 12019-79 filter and indicator\*.

\*See the emissions and filter section on pages 59-62.

Description	# of Ports	Manifold material	Item#
Waste manifold for DIN 60 threaded container, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, PP	(3) 1/4 NPT (1) 1/2 NPT	pp	12019-07
Waste manifold for DIN 60 threaded container, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, PTFE	(3) 1/4 NPT (1) 1/2 NPT	PTFE	12019-09
Waste manifold for DIN 60 threaded container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28, PP	(1) 1/2 NPT (3) 1/4 NPT (6) 1/4-28	pp	12019-06
Waste manifold for DIN 60 threaded container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28, PTFE	(1) 1/2 NPT (3) 1/4 NPT (6) 1/4-28	PTFE	12019-08

# WASTE MANIFOLD CAPS AND KITS

## DIN 60 Waste Kits

- Minimize exposure to harmful chemical vapors
- Collect solvent waste from multiple effluent streams
- Highly adaptable and conforms to a broad range of containment types

Cole-Parmer Vaplock closed systems for solvent containment minimize leaks, spills, and vapor escape from solvent waste and supply containers. Use Vaplock kits to provide an effective means of sealed solvent delivery, and select from waste containment kits to collect effluents while minimizing harmful solvent exhaust. All Vaplock products are designed for ease of use and adaptability, and will conform to a broad range of standard laboratory solvent containers. Waste accessory kits include a solvent collection manifold, an organic solvent exhaust filter with breakthrough indicator, and adapters, plugs, and tubing connections required for installation on typical HPLC instruments.

### Kit contents

- 10-port waste manifold
- (3) ¼" NPT PP plugs
- (6) ¼-28 PTFE plugs
- (1) ½" NPT PP plugs
- (1) Organic vapor filter
- (2) 2.2 mm OD hard-wall tubing connections
- (1) 2.5 mm OD hard-wall tubing connection
- (3) 1/8" OD hard-wall tubing connections
- (2) 1/5" OD hard-wall tubing connections
- (3) Barbed tubing connections, ¼" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, 1/8" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, 3/5" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, 3/8" ID tubing x ¼" NPT, PP
- (1) Barb to barb Y connector with ¼" (6.25 mm) barbs, PP
- (1) Hard-wall tube extension, includes union connections and 5-foot, 1/8" OD PTFE tubing
- (1) Filter adapter, ¼" NPT x ½" NPT, PP
- (1) Breakthrough color indicator for Vaplock organic vapor filter



12019-04

Note: Container is not included.

Description	# of Ports	Manifold material	Item#
HPLC waste accessory kit for DIN 60 threaded container - 10 port with (1) ½" NPT, (3) ¼" NPT, (6) ¼-28; includes PP manifold, fittings kit, exhaust filter with adapter and color indicator	(1) ½ NPT (3) ¼ NPT (6) ¼-28	pp	12019-04
HPLC waste accessory kit for DIN 60 threaded container - 10 port with (1) ½" NPT, (3) ¼" NPT, (6) ¼-28; includes PTFE manifold, fittings kit, exhaust filter with adapter and color indicator	(1) ½ NPT (3) ¼ NPT (6) ¼-28	PTFE	12019-05

# WASTE MANIFOLD CAPS AND KITS

## 61 mm Waste Manifold Caps



12019-13



12019-15



12019-12



12019-14

### Vapor-Tight Connection

Waste manifolds are designed to fit standard 61 mm threaded lab bottles.

### Chemical Resistance

Materials of construction include your choice of PP or PTFE manifold and insert with HDPE spin collar.

### Versatile Configuration

Manifolds can be configured for barbed connections, compression fittings, 1/4-28 fitting and ferrule sets. All manifolds are designed to accommodate our 12019-79 filter and indicator\*.

\*See the emissions and filter section on pages 59-62.

Description	# of Ports	Manifold material	Item#
Waste manifold for 61 mm threaded container, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, PP	(3) 1/4 NPT (1) 1/2 NPT	pp	12019-13
Waste manifold for 61 mm threaded container, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, PTFE	(3) 1/4 NPT (1) 1/2 NPT	PTFE	12019-15
Waste manifold for 61 mm threaded container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28, PP	(1) 1/2 NPT (3) 1/4 NPT (6) 1/4-28	pp	12019-12
Waste manifold for 61 mm threaded container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28, PTFE	(1) 1/2 NPT (3) 1/4 NPT (6) 1/4-28	PTFE	12019-14

# WASTE MANIFOLD CAPS AND KITS

## 61 mm Waste Kits

- Minimize exposure to harmful chemical vapors
- Collect solvent waste from multiple effluent streams
- Highly adaptable and conforms to a broad range of containment types

Cole-Parmer Vaplock closed systems for solvent containment minimize leaks, spills, and vapor escape from solvent waste and supply containers. Use Vaplock kits to provide an effective means of sealed solvent delivery, and select from waste containment kits to collect effluents while minimizing harmful solvent exhaust. All Vaplock products are designed for ease of use and adaptability, and will conform to a broad range of standard laboratory solvent containers. Waste accessory kits include a solvent collection manifold, an organic solvent exhaust filter with breakthrough indicator, and adapters, plugs, and tubing connections required for installation on typical HPLC instruments.

### Kit contents

- 10-port waste manifold
- (3) ¼" NPT PP plugs
- (6) ¼-28 PTFE plugs
- (1) ½" NPT PP plug
- (1) Organic vapor filter
- (2) 2.2 mm OD hard-wall tubing connections
- (1) 2.5 mm OD hard-wall tubing connection
- (3) 1/8" OD hard-wall tubing connections
- (2) 1/5" OD hard-wall tubing connections
- (3) Barbed tubing connections, ¼" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, 1/8" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, 3/5" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, 3/8" ID tubing x ¼" NPT, PP
- (1) Barb to barb Y connector with ¼" (6.25 mm) barbs, PP
- (1) Hard-wall tube extension, includes union connections and 5-foot, 1/8" OD PTFE tubing
- (1) Filter adapter, ¼" NPT x ½" NPT, PP
- (1) Breakthrough color indicator for Vaplock organic vapor filter



12019-10

Note: Container is not included.

Description	# of Ports	Manifold material	Item#
HPLC waste accessory kit for 61 mm threaded container - 10 port with (1) ½" NPT, (3) ¼" NPT, (6) ¼-28; includes PP manifold, fittings kit, exhaust filter with adapter and color indicator	(1) ½ NPT (3) ¼ NPT (6) ¼-28	pp	12019-10
HPLC waste accessory kit for 61 mm threaded container - 10 port with (1) ½" NPT, (3) ¼" NPT, (6) ¼-28; includes PTFE manifold, fittings kit, exhaust filter with adapter and color indicator	(1) ½ NPT (3) ¼ NPT (6) ¼-28	PTFE	12019-11

# WASTE MANIFOLD CAPS AND KITS

## 63 mm Waste Manifold Caps (Reike/Nowpak)



12019-19



12019-21



12019-18



12019-20

### Vapor-Tight Connection

Waste manifolds are designed to fit standard 63 mm threads, including Reike and Nowpak.

Note: Some 63 mm industrial threads differ. Please contact us regarding your particular container requirements.

### Chemical Resistance

Materials of construction include your choice of PP or PTFE manifold and insert with HDPE spin collar.

### Versatile Configuration

Manifolds can be configured for barbed connections, compression fittings, 1/4-28 fitting and ferrule sets. All manifolds are designed to accommodate our 12019-79 filter and indicator\*.

\*See the emissions and filter section on pages 59-62.

Description	# of Ports	Manifold material	Item#
Waste manifold for 63 mm threaded Reike/Nowpak container, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, PP	(3) 1/4 NPT (1) 1/2 NPT	pp	12019-19
Waste manifold for 63 mm threaded Reike/Nowpak container, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, PTFE	(3) 1/4 NPT (1) 1/2 NPT	PTFE	12019-21
Waste manifold for 63 mm threaded Reike/Nowpak container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28, PP	(1) 1/2 NPT (3) 1/4 NPT (6) 1/4-28	pp	12019-18
Waste manifold for 63 mm threaded Reike/Nowpak container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28, PTFE	(1) 1/2 NPT (3) 1/4 NPT (6) 1/4-28	PTFE	12019-20

# WASTE MANIFOLD CAPS AND KITS

## 63 mm Waste Kits (Reike/Nowpak)

- Minimize exposure to harmful chemical vapors
- Collect solvent waste from multiple effluent streams
- Highly adaptable and conforms to a broad range of containment types

Cole-Parmer Vaplock closed systems for solvent containment minimize leaks, spills, and vapor escape from solvent waste and supply containers. Use Vaplock kits to provide an effective means of sealed solvent delivery, and select from waste containment kits to collect effluents while minimizing harmful solvent exhaust. All Vaplock products are designed for ease of use and adaptability, and will conform to a broad range of standard laboratory solvent containers. Waste accessory kits include a solvent collection manifold, an organic solvent exhaust filter with breakthrough indicator, and adapters, plugs, and tubing connections required for installation on typical HPLC instruments.

### Kit contents

- 10-port waste manifold
- (3) ¼" NPT PP plugs
- (6) ¼-28 PTFE plugs
- (1) ½" NPT PP plug
- (1) Organic vapor filter
- (2) 2.2 mm OD hard-wall tubing connections
- (1) 2.5 mm OD hard-wall tubing connection
- (3) 1/8" OD hard-wall tubing connections
- (2) 1/5" OD hard-wall tubing connections
- (3) Barbed tubing connections, ¼" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, 1/8" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, 3/5" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, 3/8" ID tubing x ¼" NPT, PP
- (1) Barb to barb Y connector with ¼" (6.25 mm) barbs, PP
- (1) Hard-wall tube extension, includes union connections and 5-foot, 1/8" OD PTFE tubing
- (1) Filter adapter, ¼" NPT x ½" NPT, PP
- (1) Breakthrough color indicator for Vaplock organic vapor filter



12019-16

Note: Container is not included.

Description	# of Ports	Manifold material	Item#
HPLC waste accessory kit for 63 mm threaded container - 10 port with (1) ½" NPT, (3) ¼" NPT, (6) ¼-28; includes PP manifold, fittings kit, exhaust filter with adapter and color indicator	(1) ½ NPT (3) ¼ NPT (6) ¼-28	pp	12019-16
HPLC waste accessory kit for 63 mm threaded container - 10 port with (1) ½" NPT, (3) ¼" NPT, (6) ¼-28; includes PTFE manifold, fittings kit, exhaust filter with adapter and color indicator	(1) ½ NPT (3) ¼ NPT (6) ¼-28	PTFE	12019-17



# WASTE MANIFOLD CAPS AND KITS

## 70 mm Waste Manifold Caps (STPI Reike/Hedwin)



12019-25



12019-27



12019-24



12019-26

### Vapor-Tight Connection

Waste manifolds are designed to fit standard 70 mm 8TPI threaded containers.

Note: Please inquire for 70 mm 6TPI options.

### Chemical Resistance

Materials of construction include your choice of PP or PTFE manifold and insert with HDPE spin collar.

### Versatile Configuration

Manifolds can be configured for barbed connections, compression fittings, 1/4-28 fitting and ferrule sets. All manifolds are designed to accommodate our 12019-79 filter and indicator\*.

\*See the emissions and filter section on pages 59-62.

Description	# of Ports	Manifold material	Item#
Waste manifold for 70 mm threaded Reike/Hedwin container, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, PP	(3) 1/4 NPT (1) 1/2 NPT	pp	12019-25
Waste manifold for 70 mm threaded Reike/Hedwin container, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, PTFE	(3) 1/4 NPT (1) 1/2 NPT	PTFE	12019-27
Waste manifold for 70 mm threaded Reike/Hedwin container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28, PP	(1) 1/2 NPT (3) 1/4 NPT (6) 1/4-28	pp	12019-24
Waste manifold for 70 mm threaded Reike/Hedwin container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28, PTFE	(1) 1/2 NPT (3) 1/4 NPT (6) 1/4-28	PTFE	12019-26



# WASTE MANIFOLD CAPS AND KITS

## 70 mm Waste Kits (STPI Reike/Hedwin)

- Minimize exposure to harmful chemical vapors
- Collect solvent waste from multiple effluent streams
- Highly adaptable and conforms to a broad range of containment types

Cole-Parmer Vaplock closed systems for solvent containment minimize leaks, spills, and vapor escape from solvent waste and supply containers. Use Vaplock kits to provide an effective means of sealed solvent delivery, and select from waste containment kits to collect effluents while minimizing harmful solvent exhaust. All Vaplock products are designed for ease of use and adaptability, and will conform to a broad range of standard laboratory solvent containers. Waste accessory kits include a solvent collection manifold, an organic solvent exhaust filter with breakthrough indicator, and adapters, plugs, and tubing connections required for installation on typical HPLC instruments.

### Kit contents

- 10-port waste manifold
- (3) ¼" NPT PP plugs
- (6) ¼-28 PTFE plugs
- (1) ½" NPT PP plug
- (1) Organic vapor filter
- (2) 2.2 mm OD hard-wall tubing connections
- (1) 2.5 mm OD hard-wall tubing connection
- (3) 1/8" OD hard-wall tubing connections
- (2) 1/5" OD hard-wall tubing connections
- (3) Barbed tubing connections, ¼" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, 1/8" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, 3/5" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, 3/8" ID tubing x ¼" NPT, PP
- (1) Barb to barb Y connector with ¼" (6.25 mm) barbs, PP
- (1) Hard-wall tube extension, includes union connections and 5-foot, 1/8" OD PTFE tubing
- (1) Filter adapter, ¼" NPT x ½" NPT, PP
- (1) Breakthrough color indicator for Vaplock organic vapor filter



12019-22

Note: Container is not included.

Description	# of Ports	Manifold material	Item#
HPLC waste accessory kit for 70 mm threaded container - 10 port with (1) ½" NPT, (3) ¼" NPT, (6) ¼-28; includes PP manifold, fittings kit, exhaust filter with adapter and color indicator	(1) ½ NPT (3) ¼ NPT (6) ¼-28	pp	12019-22
HPLC waste accessory kit for 70 mm threaded container - 10 port with (1) ½" NPT, (3) ¼" NPT, (6) ¼-28; includes PTFE manifold, fittings kit, exhaust filter with adapter and color indicator	(1) ½ NPT (3) ¼ NPT (6) ¼-28	PTFE	12019-23

# WASTE MANIFOLD CAPS AND KITS

## 70 mm Waste Manifold Caps (Thermo Scientific Nalgene)



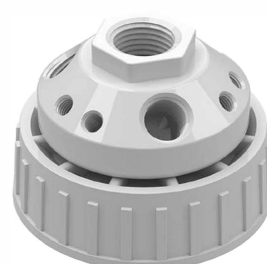
12019-31



12019-33



12019-30



12019-32

### Vapor-Tight Connection

Waste manifolds are designed to fit standard 70 mm Nalgene threaded containers.

### Chemical Resistance

Materials of construction include your choice of PP or PTFE manifold and insert with PP spin collar.

### Versatile Configuration

Manifolds can be configured for barbed connections, compression fittings, 1/4-28 fitting and ferrule sets. All manifolds are designed to accommodate our 12019-79 filter and indicator\*.

\*See the emissions and filter section on pages 59-62.

Description	# of Ports	Manifold material	Item#
Waste manifold for 70 mm threaded Nalgene container, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, PP	(3) 1/4 NPT (1) 1/2 NPT	pp	12019-31
Waste manifold for 70 mm threaded Nalgene container, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, PTFE	(3) 1/4 NPT (1) 1/2 NPT	PTFE	12019-33
Waste manifold for 70 mm threaded Nalgene container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28, PP	(1) 1/2 NPT (3) 1/4 NPT (6) 1/4-28	pp	12019-30
Waste manifold for 70 mm threaded Nalgene container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28, PTFE	(1) 1/2 NPT (3) 1/4 NPT (6) 1/4-28	PTFE	12019-32

# WASTE MANIFOLD CAPS AND KITS

## 70 mm Waste Kits (Thermo Scientific Nalgene)

- Minimize exposure to harmful chemical vapors
- Collect solvent waste from multiple effluent streams
- Highly adaptable and conforms to a broad range of containment types

Cole-Parmer Vaplock closed systems for solvent containment minimize leaks, spills, and vapor escape from solvent waste and supply containers. Use Vaplock kits to provide an effective means of sealed solvent delivery, and select from waste containment kits to collect effluents while minimizing harmful solvent exhaust. All Vaplock products are designed for ease of use and adaptability, and will conform to a broad range of standard laboratory solvent containers. Waste accessory kits include a solvent collection manifold, an organic solvent exhaust filter with breakthrough indicator, and adapters, plugs, and tubing connections required for installation on typical HPLC instruments.

### Kit contents

- 10-port waste manifold
- (3) ¼" NPT PP plugs
- (6) ¼-28 PTFE plugs
- (1) ½" NPT PP plug
- (1) Organic vapor filter
- (2) 2.2 mm OD hard-wall tubing connections
- (1) 2.5 mm OD hard-wall tubing connection
- (3) 1/8" OD hard-wall tubing connections
- (2) 1/5" OD hard-wall tubing connections
- (3) Barbed tubing connections, ¼" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, 1/8" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, 3/5" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, 3/8" ID tubing x ¼" NPT, PP
- (1) Barb to barb Y connector with ¼" (6.25 mm) barbs, PP
- (1) Hard-wall tube extension, includes union connections and 5-foot, 1/8" OD PTFE tubing
- (1) Filter adapter, ¼" NPT x ½" NPT, PP
- (1) Breakthrough color indicator for Vaplock organic vapor filter



12019-28

Note: Container is not included.

Description	# of Ports	Manifold material	Item#
HPLC waste accessory kit for 70 mm threaded container - 10 port with (1) ½" NPT, (3) ¼" NPT, (6) ¼-28; includes PP manifold, fittings kit, exhaust filter with adapter and color indicator	(1) ½ NPT (3) ¼ NPT (6) ¼-28	pp	12019-28
HPLC waste accessory kit for 70 mm threaded container - 10 port with (1) ½" NPT, (3) ¼" NPT, (6) ¼-28; includes PTFE manifold, fittings kit, exhaust filter with adapter and color indicator	(1) ½ NPT (3) ¼ NPT (6) ¼-28	PTFE	12019-29

# WASTE MANIFOLD CAPS AND KITS

## GLSO Waste Manifold Caps



12019-37



12019-39



12019-36



12019-38

### Vapor-Tight Connection

Waste manifolds are designed to fit standard GL80 threaded containers.

### Chemical Resistance

Materials of construction include your choice of PP or PTFE manifold and insert with PP spin collar.

### Versatile Configuration

Manifolds can be configured for barbed connections, compression fittings, 1/4-28 fitting and ferrule sets. All manifolds are designed to accommodate our 12019-79 filter and indicator\*.

\*See the emissions and filter section on pages 59-62.

Description	# of Ports	Manifold material	Item#
Waste manifold for GL80 threaded container, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, PP	(3) 1/4 NPT (1) 1/2 NPT	pp	12019-37
Waste manifold for GL80 threaded container, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, PTFE	(3) 1/4 NPT (1) 1/2 NPT	PTFE	12019-39
Waste manifold for GL80 threaded container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28, PP	(1) 1/2 NPT (3) 1/4 NPT (6) 1/4-28	pp	12019-36
Waste manifold for GL80 threaded container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28, PTFE	(1) 1/2 NPT (3) 1/4 NPT (6) 1/4-28	PTFE	12019-38

# WASTE MANIFOLD CAPS AND KITS

## GLSO Waste Kits

- Minimize exposure to harmful chemical vapors
- Collect solvent waste from multiple effluent streams
- Highly adaptable and conforms to a broad range of containment types

Cole-Parmer Vaplock closed systems for solvent containment minimize leaks, spills, and vapor escape from solvent waste and supply containers. Use Vaplock kits to provide an effective means of sealed solvent delivery, and select from waste containment kits to collect effluents while minimizing harmful solvent exhaust. All Vaplock products are designed for ease of use and adaptability, and will conform to a broad range of standard laboratory solvent containers. Waste accessory kits include a solvent collection manifold, an organic solvent exhaust filter with breakthrough indicator, and adapters, plugs, and tubing connections required for installation on typical HPLC instruments.

### Kit contents

- 10-port waste manifold
- (3) ¼" NPT PP plugs
- (6) ¼-28 PTFE plugs
- (1) ½" NPT PP plug
- (1) Organic vapor filter
- (2) 2.2 mm OD hard-wall tubing connections
- (1) 2.5 mm OD hard-wall tubing connection
- (3) 1/8" OD hard-wall tubing connections
- (2) 1/5" OD hard-wall tubing connections
- (3) Barbed tubing connections, ¼" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, 1/8" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, 3/5" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, 3/8" ID tubing x ¼" NPT, PP
- (1) Barb to barb Y connector with ¼" (6.25 mm) barbs, PP
- (1) Hard-wall tube extension, includes union connections and 5-foot, 1/8" OD PTFE tubing
- (1) Filter adapter, ¼" NPT x ½" NPT, PP
- (1) Breakthrough color indicator for Vaplock organic vapor filter



12019-34

Note: Container is not included.

Description	# of Ports	Manifold material	Item#
HPLC waste accessory kit for GL80 threaded container - 10 port with (1) ½" NPT, (3) ¼" NPT, (6) ¼-28; includes PP manifold, fittings kit, exhaust filter with adapter and color indicator	(1) ½ NPT (3) ¼ NPT (6) ¼-28	pp	12019-34
HPLC waste accessory kit for GL80 threaded container - 10 port with (1) ½" NPT, (3) ¼" NPT, (6) ¼-28; includes PTFE manifold, fittings kit, exhaust filter with adapter and color indicator	(1) ½ NPT (3) ¼ NPT (6) ¼-28	PTFE	12019-35

# WASTE MANIFOLD CAPS AND KITS

## Thermo Scientific Nalgene 838 Waste Manifold Caps



12019-43



12019-45



12019-42



12019-44

### Vapor-Tight Connection

Waste manifolds are designed to fit standard 83B threaded containers.

### Chemical Resistance

Materials of construction include your choice of PP or PTFE manifold and insert with PP spin collar.

### Versatile Configuration

Manifolds can be configured for barbed connections, compression fittings, 1/4-28 fitting and ferrule sets. All manifolds are designed to accommodate our 12019-79 filter and indicator\*.

\*See the emissions and filter section on pages 59-62.

Description	# of Ports	Manifold material	Item#
Waste manifold for 83B threaded container, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, PP	(3) 1/4 NPT (1) 1/2 NPT	pp	12019-43
Waste manifold for 83B threaded container, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, PTFE	(3) 1/4 NPT (1) 1/2 NPT	PTFE	12019-45
Waste manifold for 83B threaded container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28, PP	(1) 1/2 NPT (3) 1/4 NPT (6) 1/4-28	pp	12019-42
Waste manifold for 83B threaded container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28, PTFE	(1) 1/2 NPT (3) 1/4 NPT (6) 1/4-28	PTFE	12019-44

# WASTE MANIFOLD CAPS AND KITS

## Thermo Scientific Nalgene 838 Waste Kits

- Minimize exposure to harmful chemical vapors
- Collect solvent waste from multiple effluent streams
- Highly adaptable and conforms to a broad range of containment types

Cole-Parmer Vaplock closed systems for solvent containment minimize leaks, spills, and vapor escape from solvent waste and supply containers. Use Vaplock kits to provide an effective means of sealed solvent delivery, and select from waste containment kits to collect effluents while minimizing harmful solvent exhaust. All Vaplock products are designed for ease of use and adaptability, and will conform to a broad range of standard laboratory solvent containers. Waste accessory kits include a solvent collection manifold, an organic solvent exhaust filter with breakthrough indicator, and adapters, plugs, and tubing connections required for installation on typical HPLC instruments.

### Kit contents

- 10-port waste manifold
- (3) ¼" NPT PP plugs
- (6) ¼-28 PTFE plugs
- (1) ½" NPT PP plug
- (1) Organic vapor filter
- (2) 2.2 mm OD hard-wall tubing connections
- (1) 2.5 mm OD hard-wall tubing connection
- (3) 1/8" OD hard-wall tubing connections
- (2) 1/5" OD hard-wall tubing connections
- (3) Barbed tubing connections, ¼" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, 1/8" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, 3/5" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, 3/8" ID tubing x ¼" NPT, PP
- (1) Barb to barb Y connector with ¼" (6.25 mm) barbs, PP
- (1) Hard-wall tube extension, includes union connections and 5-foot, 1/8" OD PTFE tubing
- (1) Filter adapter, ¼" NPT x ½" NPT, PP
- (1) Breakthrough color indicator for Vaplock organic vapor filter



12019-40

Note: Container is not included.

Description	# of Ports	Manifold material	Item#
HPLC waste accessory kit for 83B threaded container - 10 port with (1) ½" NPT, (3) ¼" NPT, (6) ¼-28; includes PP manifold, fittings kit, exhaust filter with adapter and color indicator	(1) ½ NPT (3) ¼ NPT (6) ¼-28	pp	12019-40
HPLC waste accessory kit for 83B threaded container - 10 port with (1) ½" NPT, (3) ¼" NPT, (6) ¼-28; includes PTFE manifold, fittings kit, exhaust filter with adapter and color indicator	(1) ½ NPT (3) ¼ NPT (6) ¼-28	PTFE	12019-41



# WASTE MANIFOLD CAPS AND KITS

## Thermo Scientific Nalgene 100-415 Waste Manifold Caps



12019-49



12019-51



12019-48



12019-50

### Vapor-Tight Connection

Waste manifolds are designed to fit standard 100-415 threaded containers.

### Chemical Resistance

Materials of construction include your choice of PP or PTFE manifold and insert with PP spin collar.

### Versatile Configuration

Manifolds can be configured for barbed connections, compression fittings, 1/4-28 fitting and ferrule sets. All manifolds are designed to accommodate our 12019-79 filter and indicator\*.

\*See the emissions and filter section on pages 59-62.

Description	# of Ports	Manifold material	Item#
Waste manifold for 100-415 threaded container, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, PP	(3) 1/4 NPT (1) 1/2 NPT	pp	12019-49
Waste manifold for 100-415 threaded container, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, PTFE	(3) 1/4 NPT (1) 1/2 NPT	PTFE	12019-51
Waste manifold for 100-415 threaded container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28, PP	(1) 1/2 NPT (3) 1/4 NPT (6) 1/4-28	pp	12019-48
Waste manifold for 100-415 threaded container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28, PTFE	(1) 1/2 NPT (3) 1/4 NPT (6) 1/4-28	PTFE	12019-50



# WASTE MANIFOLD CAPS AND KITS

## Thermo Scientific Nalgene 100-415 Waste Kits

- Minimize exposure to harmful chemical vapors
- Collect solvent waste from multiple effluent streams
- Highly adaptable and conforms to a broad range of containment types

Cole-Parmer Vaplock closed systems for solvent containment minimize leaks, spills, and vapor escape from solvent waste and supply containers. Use Vaplock kits to provide an effective means of sealed solvent delivery, and select from waste containment kits to collect effluents while minimizing harmful solvent exhaust. All Vaplock products are designed for ease of use and adaptability, and will conform to a broad range of standard laboratory solvent containers. Waste accessory kits include a solvent collection manifold, an organic solvent exhaust filter with breakthrough indicator, and adapters, plugs, and tubing connections required for installation on typical HPLC instruments.

### Kit contents

- 10-port waste manifold
- (3) ¼" NPT PP plugs
- (6) ¼-28 PTFE plugs
- (1) ½" NPT PP plug
- (1) Organic vapor filter
- (2) 2.2 mm OD hard-wall tubing connections
- (1) 2.5 mm OD hard-wall tubing connection
- (3) 1/8" OD hard-wall tubing connections
- (2) 1/5" OD hard-wall tubing connections
- (3) Barbed tubing connections, ¼" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, 1/8" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, 3/5" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, 3/8" ID tubing x ¼" NPT, PP
- (1) Barb to barb Y connector with ¼" (6.25 mm) barbs, PP
- (1) Hard-wall tube extension, includes union connections and 5-foot, 1/8" OD PTFE tubing
- (1) Filter adapter, ¼" NPT x ½" NPT, PP
- (1) Breakthrough color indicator for Vaplock organic vapor filter



12019-46

Note: Container is not included.

Description	# of Ports	Manifold material	Item#
HPLC waste accessory kit for 100-415 threaded container - 10 port with (1) ½" NPT, (3) ¼" NPT, (6) ¼-28; includes PP manifold, fittings kit, exhaust filter with adapter and color indicator	(1) ½ NPT (3) ¼ NPT (6) ¼-28	pp	12019-46
HPLC waste accessory kit for 100-415 threaded container - 10 port with (1) ½" NPT, (3) ¼" NPT, (6) ¼-28; includes PTFE manifold, fittings kit, exhaust filter with adapter and color indicator	(1) ½ NPT (3) ¼ NPT (6) ¼-28	PTFE	12019-47

# WASTE MANIFOLD CAPS AND KITS

## Justrite® Container Quick-Disconnect Waste Manifold Caps



12019-56

12019-58

12019-60

12019-55

12019-57

12019-59

### Vapor-Tight Connection

Waste manifolds are designed to fit Justrite HPLC quick-disconnect safety containers.

### Chemical Resistance

Materials of construction include your choice of PP or PTFE manifold with PP or SS quick disconnect.

### Versatile Configuration

Manifolds can be configured for barbed connections, compression fittings, 1/4-28 fitting and ferrule sets. To complete the closed system, attach a Vaplock emissions filter\* to the separate exhaust port quick disconnect using the appropriate adapter.

\*See the emissions and filter section on pages 59-62.

Description	# of Ports	Manifold material	Item#
Waste manifold for Justrite container, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, PP manifold, PP disconnect	(3) 1/4 NPT (1) 1/2 NPT	pp	12019-56
Waste manifold for Justrite container, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, PP manifold, SS disconnect	(3) 1/4 NPT (1) 1/2 NPT	pp	12019-58
Waste manifold for Justrite container, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, PTFE manifold, PP disconnect	(3) 1/4 NPT (1) 1/2 NPT	PTFE	12019-60
Waste manifold for Justrite container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28, PP manifold, PP disconnect	(1) 1/2 NPT (3) 1/4 NPT (6) 1/4-28	pp	12019-55
Waste manifold for Justrite container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28, PP manifold, SS disconnect	(1) 1/2 NPT (3) 1/4 NPT (6) 1/4-28	pp	12019-57
Waste manifold for Justrite container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28, PTFE manifold, SS disconnect	(1) 1/2 NPT (3) 1/4 NPT (6) 1/4-28	PTFE	12019-59

# WASTE MANIFOLD CAPS AND KITS

## Justrite Container Quick-Disconnect Waste Kits

- Minimize exposure to harmful chemical vapors
- Collect solvent waste from multiple effluent streams
- Highly adaptable and conforms to a broad range of containment types

Cole-Parmer Vaplock closed systems for solvent containment minimize leaks, spills, and vapor escape from solvent waste and supply containers. Use Vaplock kits to provide an effective means of sealed solvent delivery, and select from waste containment kits to collect effluents while minimizing harmful solvent exhaust. All Vaplock products are designed for ease of use and adaptability, and will conform to a broad range of standard laboratory solvent containers. Waste accessory kits include a solvent collection manifold, an organic solvent exhaust filter with breakthrough indicator, and adapters, plugs, and tubing connections required for installation on typical HPLC instruments.

### Kit contents

- 10-port waste manifold
- (3) ¼" NPT PP plugs
- (6) ¼-28 PTFE plugs
- (1) ½" NPT PP plug
- (1) Organic vapor filter
- (2) 2.2 mm OD hard-wall tubing connections
- (1) 2.5 mm OD hard-wall tubing connection
- (3) 1/8" OD hard-wall tubing connections
- (2) 1/5" OD hard-wall tubing connections
- (3) Barbed tubing connections, ¼" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, 1/8" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, 3/5" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, 3/8" ID tubing x ¼" NPT, PP
- (1) Barb to barb Y connector with ¼" (6.25 mm) barbs, PP
- (1) Hard-wall tube extension, includes union connections and 5-foot, 1/8" OD PTFE tubing
- (1) Filter adapter, ¼" NPT x ½" NPT, PP
- (1) Breakthrough color indicator for Vaplock organic vapor filter



12019-53

Note: Container is not included.

Description	# of Ports	Manifold material	Item#
HPLC waste accessory kit for Justrite container - 10 port; includes PP manifold, PP disconnect, fittings kit, exhaust filter with adapter and color indicator	(1) ½ NPT (3) ¼ NPT (6) ¼-28	pp	12019-52
HPLC waste accessory kit for Justrite container - 10 port; includes PP manifold, SS disconnect, fittings kit, exhaust filter with adapter and color indicator	(1) ½ NPT (3) ¼ NPT (6) ¼-28	pp	12019-53
HPLC waste accessory kit for Justrite container - 10 port; includes PTFE manifold, SS disconnect, fittings kit, exhaust filter with adapter and color indicator	(1) ½ NPT (3) ¼ NPT (6) ¼-28	PTFE	12019-54

# WASTE MANIFOLD CAPS AND KITS

## Drum Waste Manifold Caps (2" Fine Thread)



12019-62



12019-64



12019-61



12019-63

### Vapor-Tight Connection

Waste manifolds are designed to fit US standard 2" drum bung with fine threads.

### Chemical Resistance

Materials of construction include your choice of PP or PTFE manifold with PP drum thread adapter.

### Versatile Configuration

Manifolds can be configured for barbed connections, compression fittings, 1/4-28 fitting and ferrule sets. All manifolds are designed to accommodate our 12019-79 filter and indicator\*.

\*See the emissions and filter section on pages 59-62.

Description	# of Ports	Manifold material	Item#
Waste manifold for drum 2" fine thread, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, PP	(3) 1/4" NPT (1) 1/2" NPT	pp	12019-62
Waste manifold for drum 2" fine thread, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, PTFE	(3) 1/4" NPT (1) 1/2" NPT	PTFE	12019-64
Waste manifold for drum 2" fine thread, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28, PP	(1) 1/2" NPT (3) 1/4" NPT (6) 1/4-28	pp	12019-61
Waste manifold for drum 2" fine thread, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28, PTFE	(1) 1/2" NPT (3) 1/4" NPT (6) 1/4-28	PTFE	12019-63

# WASTE MANIFOLD CAPS AND KITS

## Drum Waste Kits (2" Fine Thread)

- Minimize exposure to harmful chemical vapors
- Collect solvent waste from multiple effluent streams
- Highly adaptable and conforms to a broad range of containment types

Cole-Parmer Vaplock closed systems for solvent containment minimize leaks, spills, and vapor escape from solvent waste and supply containers. Use Vaplock kits to provide an effective means of sealed solvent delivery, and select from waste containment kits to collect effluents while minimizing harmful solvent exhaust. All Vaplock products are designed for ease of use and adaptability, and will conform to a broad range of standard laboratory solvent containers. Waste accessory kits include a solvent collection manifold, an organic solvent exhaust filter with breakthrough indicator, and adapters, plugs, and tubing connections required for installation on typical HPLC instruments.

### Kit contents

- 10-port waste manifold
- (3) ¼" NPT PP plugs
- (6) ¼-28 PTFE plugs
- (1) ½" NPT PP plug
- (1) Organic vapor filter
- (2) 2.2 mm OD hard-wall tubing connections
- (1) 2.5 mm OD hard-wall tubing connection
- (3) 1/8" OD hard-wall tubing connections
- (2) 1/5" OD hard-wall tubing connections
- (3) Barbed tubing connections, ¼" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, 1/8" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, 3/5" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, 3/8" ID tubing x ¼" NPT, PP
- (1) Barb to barb Y connector with ¼" (6.25 mm) barbs, PP
- (1) Hard-wall tube extension, includes union connections and 5-foot, 1/8" OD PTFE tubing
- (1) Filter adapter, ¼" NPT x ½" NPT, PP
- (1) Breakthrough color indicator for Vaplock organic vapor filter



12019-65

Note: Container is not included.

Description	# of Ports	Manifold material	Item#
HPLC waste accessory kit for drum 2" fine thread - 10 port with (1) ½" NPT, (3) ¼" NPT, (6) ¼-28; includes PP manifold, fittings kit, exhaust filter with adapter and color indicator	(1) ½ NPT (3) ¼ NPT (6) ¼-28	pp	12019-65
HPLC waste accessory kit for drum 2" fine thread - 10 port with (1) ½" NPT, (3) ¼" NPT, (6) ¼-28; includes PTFE manifold, fittings kit, exhaust filter with adapter and color indicator	(1) ½ NPT (3) ¼ NPT (6) ¼-28	PTFE	12019-66

# WASTE MANIFOLD CAPS AND KITS

## Drum Waste Manifold Caps (2" Coarse Thread)



12019-68



12019-70



12019-67



12019-69

### Vapor-Tight Connection

Waste manifolds are designed to fit US standard 2" drum bung with coarse threads.

### Chemical Resistance

Materials of construction include your choice of PP or PTFE manifold with PP drum thread adapter.

### Versatile Configuration

Manifolds can be configured for barbed connections, compression fittings, 1/4-28 fitting and ferrule sets. All manifolds are designed to accommodate our 12019-79 filter and indicator\*.

\*See the emissions and filter section on pages 59-62.

Description	# of Ports	Manifold material	Item#
Waste manifold for drum 2" coarse thread, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, PP	(3) 1/4" NPT (1) 1/2" NPT	pp	12019-68
Waste manifold for drum 2" coarse thread, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, PTFE	(3) 1/4" NPT (1) 1/2" NPT	PTFE	12019-70
Waste manifold for drum 2" coarse thread, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28, PP	(1) 1/2" NPT (3) 1/4" NPT (6) 1/4-28	pp	12019-67
Waste manifold for drum 2" coarse thread, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28, PTFE	(1) 1/2" NPT (3) 1/4" NPT (6) 1/4-28	PTFE	12019-69



# WASTE MANIFOLD CAPS AND KITS

## Drum Waste Kits (2" Coarse Thread)

- Minimize exposure to harmful chemical vapors
- Collect solvent waste from multiple effluent streams
- Highly adaptable and conforms to a broad range of containment types

Cole-Parmer Vaplock closed systems for solvent containment minimize leaks, spills, and vapor escape from solvent waste and supply containers. Use Vaplock kits to provide an effective means of sealed solvent delivery, and select from waste containment kits to collect effluents while minimizing harmful solvent exhaust. All Vaplock products are designed for ease of use and adaptability, and will conform to a broad range of standard laboratory solvent containers. Waste accessory kits include a solvent collection manifold, an organic solvent exhaust filter with breakthrough indicator, and adapters, plugs, and tubing connections required for installation on typical HPLC instruments.

### Kit contents

- 10-port waste manifold
- (3) ¼" NPT PP plugs
- (6) ¼-28 PTFE plugs
- (1) ½" NPT PP plug
- (1) Organic vapor filter
- (2) 2.2 mm OD hard-wall tubing connections
- (1) 2.5 mm OD hard-wall tubing connection
- (3) 1/8" OD hard-wall tubing connections
- (2) 1/5" OD hard-wall tubing connections
- (3) Barbed tubing connections, ¼" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, 1/8" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, 3/5" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, 3/8" ID tubing x ¼" NPT, PP
- (1) Barb to barb Y connector with ¼" (6.25 mm) barbs, PP
- (1) Hard-wall tube extension, includes union connections and 5-foot, 1/8" OD PTFE tubing
- (1) Filter adapter, ¼" NPT x ½" NPT, PP
- (1) Breakthrough color indicator for Vaplock organic vapor filter



12019-71

Note: Container is not included.

Description	# of Ports	Manifold material	Item#
HPLC waste accessory kit for drum 2" coarse thread - 10 port with (1) ½" NPT, (3) ¼" NPT, (6) ¼-28; includes PP manifold, fittings kit, exhaust filter with adapter and color indicator	(1) ½ NPT (3) ¼ NPT (6) ¼-28	pp	12019-71
HPLC waste accessory kit for drum 2" coarse thread - 10 port with (1) ½" NPT, (3) ¼" NPT, (6) ¼-28; includes PTFE manifold, fittings kit, exhaust filter with adapter and color indicator	(1) ½ NPT (3) ¼ NPT (6) ¼-28	PTFE	12019-72

# WASTE MANIFOLD CAPS AND KITS

## Panel-Mount Waste Manifold Caps



12019-74



12019-76



12019-73



12019-75

### Vapor-Tight Connection

Waste manifolds are configured to fit an aperture drilled to 1- $\frac{1}{4}$ " ID, with panel thickness of  $\frac{1}{5}$ " to  $\frac{1}{2}$ ". An area 1- $\frac{3}{4}$ " diameter free of obstruction around the aperture is required for use. Manifold drains to a  $\frac{1}{2}$ " NPT common port at the base.

*\*Inquire for cam lock and quick-disconnect options.*

### Chemical Resistance

Materials of construction include your choice of PP or PTFE manifold and lock nut.

### Versatile Configuration

Manifolds can be configured for barbed connections, compression fittings,  $\frac{1}{4}$ -28 fitting and ferrule sets. All manifolds are designed to accommodate our 12019-79 filter and indicator\*.

*\*See the emissions and filter section on pages 59-62.*

Description	# of Ports	Manifold material	Item#
Waste manifold, panel mount, 4-port with (3) $\frac{1}{4}$ " NPT, (1) $\frac{1}{2}$ " NPT, PP	(3) $\frac{1}{4}$ NPT (1) $\frac{1}{2}$ NPT	pp	12019-74
Waste manifold, panel mount, 4-port with (3) $\frac{1}{4}$ " NPT, (1) $\frac{1}{2}$ " NPT, PTFE	(3) $\frac{1}{4}$ NPT (1) $\frac{1}{2}$ NPT	PTFE	12019-76
Waste manifold, panel mount, 10-port with (1) $\frac{1}{2}$ " NPT, (3) $\frac{1}{4}$ " NPT, (6) $\frac{1}{4}$ -28, PP	(1) $\frac{1}{2}$ NPT (3) $\frac{1}{4}$ NPT (6) $\frac{1}{4}$ -28	pp	12019-73
Waste manifold, panel mount, 10-port with (1) $\frac{1}{2}$ " NPT, (3) $\frac{1}{4}$ " NPT, (6) $\frac{1}{4}$ -28, PTFE	(1) $\frac{1}{2}$ NPT (3) $\frac{1}{4}$ NPT (6) $\frac{1}{4}$ -28	PTFE	12019-75



# WASTE MANIFOLD CAPS AND KITS

## Drum Waste Kits (2" Coarse Thread)

- Minimize exposure to harmful chemical vapors
- Collect solvent waste from multiple effluent streams
- Highly adaptable and conforms to a broad range of containment types

Cole-Parmer Vaplock closed systems for solvent containment minimize leaks, spills, and vapor escape from solvent waste and supply containers. Use Vaplock kits to provide an effective means of sealed solvent delivery, and select from waste containment kits to collect effluents while minimizing harmful solvent exhaust. All Vaplock products are designed for ease of use and adaptability, and will conform to a broad range of standard laboratory solvent containers. Waste accessory kits include a solvent collection manifold, an organic solvent exhaust filter with breakthrough indicator, and adapters, plugs, and tubing connections required for installation on typical HPLC instruments.

### Kit contents

- 10-port waste manifold
- (3) ¼" NPT PP plugs
- (6) ¼-28 PTFE plugs
- (1) ½" NPT PP plug
- (1) Organic vapor filter
- (2) 2.2 mm OD hard-wall tubing connections
- (1) 2.5 mm OD hard-wall tubing connection
- (3) 1/8" OD hard-wall tubing connections
- (2) 1/5" OD hard-wall tubing connections
- (3) Barbed tubing connections, ¼" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, 1/5" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, 3/5" ID tubing x ¼" NPT, PP
- (1) Barbed tubing connection, 3/5" ID tubing x ¼" NPT, PP
- (1) Barb to barb Y connector with ¼" (6.25 mm) barbs, PP
- (1) Hard-wall tube extension, includes union connections and 5-foot, 1/5" OD PTFE tubing
- (1) Filter adapter, ¼" NPT x ½" NPT, PP
- (1) Breakthrough color indicator for Vaplock organic vapor filter



12019-77

Note: Container is not included.

Description	# of Ports	Manifold material	Item#
HPLC waste accessory kit for panel mount - 10 port with (1) ½" NPT, (3) ¼" NPT, (6) ¼-28; includes PP manifold, fittings kit, exhaust filter with adapter and color indicator	(1) ½ NPT (3) ¼ NPT (6) ¼-28	pp	12019-77
HPLC waste accessory kit for panel mount - 10 port with (1) ½" NPT, (3) ¼" NPT, (6) ¼-28; includes PTFE manifold, fittings kit, exhaust filter with adapter and color indicator	(1) ½ NPT (3) ¼ NPT (6) ¼-28	PTFE	12019-78

# EXHAUST FILTERS

## Chemical Exhaust Filters



12019-79 / 12019-81



12019-84

### Emission Reduction

Use Vaplock exhaust filters to mitigate health hazards and reduce harmful chemical emissions and odors from laboratory solvent containers. Developed and tested specifically for HPLC organic solvents, they may be used in conjunction with Vaplock breakthrough indicators to determine longevity and establish a replacement schedule.

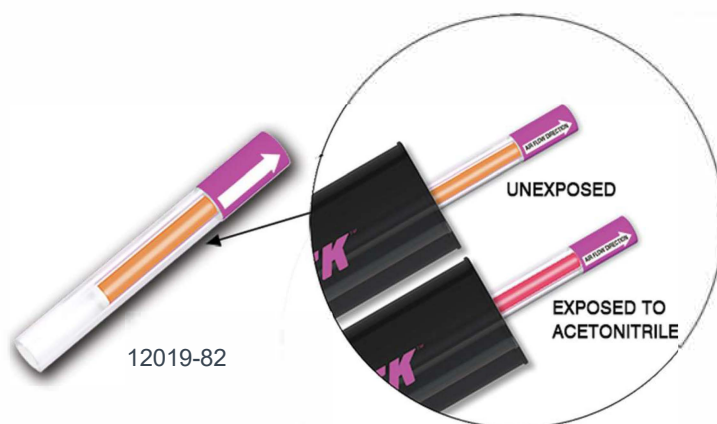
### Adaptable Design

Available in 76 g and 300 g cartridge sizes, Vaplock filters include activated media for organic solvents and are constructed of an HDPE housing with 1/4" NPT female receiving port. Attach to various point emission sources with Vaplock filter adapters. Please inquire for other sizes and formats.

Description	Indicator included	Item#
Vaplock exhaust filter, 75 g with 1/4" NPT female port	No	12019-79
Vaplock exhaust filter, 75 g with 1/4" NPT female port, 5 pack	No	12019-81
Vaplock exhaust filter kit with indicator, 75 g with 1/4" NPT female port	Yes	12019-80
Vaplock exhaust filter, 300 g with 1/4" NPT female port	No	12019-84

# BREAKTHROUGH INDICATORS

## Breakthrough Indicators



### Colorimetric Change

Designed to detect the end-of-service life for Vaplock exhaust filters, breakthrough indicators respond under exposure to organic solvent vapors. Final effects display within minutes or hours of exposure. Color saturation varies by solvent. Replace the exhaust filter when a variation occurs. Housing is acrylic with borosilicate glass option available.

### Multiple Solvent Detection

Breakthrough indicators may be used with the following chemicals. This list is not comprehensive. Please inquire for detection of other organic solvents: acetone, acetonitrile, acids (i.e. acetic acid, hydrochloric acid, trifluoroacetic acid, trichloroacetic acid), acrylonitrile, aliphatic hydrocarbons (i.e. hexane), aromatic hydrocarbons (i.e. benzene, toluene, and xylenes), chlorinated hydrocarbons (i.e. carbon tetrachloride, chloroform, and methylene chloride), ethanol, ethyl acetate, ethyl acrylate, ethyl ether, gasoline, HFIP (hexafluoroisopropanol), methanol, methyl acetate, naphtha, phenol, sulfolane, THF (tetrahydrofuran).

### Product Usage

Not for use in the presence of basic vapors in high concentrations (i.e. pyridine and aliphatic amines), which impair performance of the indicator. Does not respond to gaseous aliphatic hydrocarbons or aldehydes. Avoid exposure to heat or direct sunlight. Use only at room temperature. Shelf life is 12 months. For analytical research purposes only.

Description	Filter included	Item#
Breakthrough indicator for Vaplock exhaust filters	No	12019-82
Breakthrough indicator for Vaplock exhaust filters, 5 pack	No	12019-83
Vaplock exhaust filter kit with indicator, 75 g with 1/4" NPT female port	Yes	12019-80

## Filter Adapters



## Versatile Configurations

Vaplock exhaust filters (12019-79 and 12019-81) may be attached to various point-source emissions by use of the appropriate adapter. Each filter includes a ¼" female port. Select from the list below to adapt filters to a typical system, or inquire for assistance with special requirements. All adapters are reusable. Please note that options for Justrite safety containers are made to fit either polypropylene (PP) or stainless steel (SS) quick disconnects, but are not interchangeable.

## Carbon Filter Adapters

Description	Adapter type	Material	Item#
Filter adapter, luer lock x ¼" NPT, natural PP	Straight	pp	12019-85
Filter adapter, ¼" NPT x ¼" NPT, PP	Straight	pp	12019-86
Filter adapter, ¼" NPT x ½" NPT, PP	Straight	pp	12019-87
Filter adapter with PP and EPDM quick disconnect for Justrite Centura® containers	Straight	PP, EPDM	12019-88
Filter adapter, 90 degree elbow, ¼" NPT x ½" NPT, PP	90 degree elbow	pp	12019-89
Filter adapter with SS and PTFE quick disconnect for Justrite Centura containers	Straight	SS, PTFE	12019-90
Filter adapter, 90 degree elbow with PP and EPDM quick disconnect for Justrite Centura containers	90 degree elbow	PP, EPDM	12019-91
Filter adapter, 90 degree elbow with SS and PTFE quick disconnect for Justrite Centura containers	90 degree elbow	SS, PTFE	12019-92
Filter adapter, 45 degree elbow, ¼" MNPT x ¼" MNPT, nylon	45 degree elbow	Nylon	12019-93

# ADAPTERS

## Filter Adapters (continued)



12019-94



12019-95



12019-96



12019-97



12019-98



12019-99



12020-00

### Versatile Configurations

Vaplock exhaust filters (12019-79 and 12019-81) may be attached to various point-source emissions by use of the appropriate adapter. Each filter includes a 1/4" female port. Select from the list below to adapt filters to a typical system, or inquire for assistance with special requirements. All adapters are reusable. Please note that options for Justrite safety containers are made to fit either polypropylene (PP) or stainless steel (SS) quick disconnects, but are not interchangeable.

### Carbon Filter Adapters

Description	Adapter type	Material	Item#
Filter adapter, 90 degree elbow, 1/4" MNPT x 1/2" MNPT, PP	90 degree elbow	pp	<b>12019-94</b>
Filter adapter, 1/4" NPT male x 1/4-28 male, red PEEK™	Straight	Peek	<b>12019-95</b>
Adjustable filter adapter for 1/4" NPT female port, black acetal	Adjustable	Acetal	<b>12019-96</b>
Adjustable filter adapter for 1/2" NPT female port, black acetal	Adjustable	Acetal	12019-97
Adjustable filter adapter, with PP and EPDM quick disconnect for Justrite Centura containers, black acetal	Adjustable	PP, EPDM, acetal	<b>12019-98</b>
Adjustable filter adapter, with SS and PTFE quick disconnect for Justrite Centura containers, black acetal	Adjustable	SS, EPDM, acetal	<b>12019-99</b>
Filter adapter, 1/8" NPT x 1/4" NPT, PP	Straigh	pp	<b>12020-00</b>

# TUBING CONNECTIONS

## Tubing Connections



### For 1/4-28 and 5/16-24 UNF Ports

Compression fittings designed for liquid-tight connection of semi-rigid tubing to flat bottom 1/4-28 and 5/16-24 port threads, for tubing diameters 1/5" to 3/5" OD. Each connection is comprised of a two-piece nut and ferrule system, useful for pressurized applications under 500 psi. Make a selection based on your tubing outside diameter (OD); fittings are color-coded by tubing size for easy identification. These bottom-sealing UNF fittings do not require PTFE tape.

### Fittings for Semi-Rigid Tubing

Description	Color	Tubing OD	Item#
Tubing connection, 4 mm OD tubing x 5/16-24, brown PEEK nut, white PCTFE ferrule	Brown	4mm	12020-01
Tubing connection, 3/5" OD tubing x 5/16-24, white acetal nut, blue ETFE ferrule	White	3/5-inch	12020-02
Tubing connection, 1/5" OD tubing x 1/4-24, green PP nut, blue ETFE ferrule, 10 pack	Green	1/26-inch	12020-03
Tubing connection, 1.8-2.0 mm OD tubing x 1/4-28, red PP nut, green ETFE ferrule, 10 pack	Red	1.8-2.0 mm	12020-04
Tubing connection, 2.2 mm (0.085") OD tubing x 1/4-28, black PP nut, white PTFE ferrule, 10 pack	Black	2.2 mm	12020-05
Tubing connection, 2.5 mm OD tubing x 1/4-28, orange PP nut, white ETFE ferrule, 10 pack	Orange	2.5mm	12020-06
Tubing connection, 3 mm OD tubing x 1/4-28, yellow PP nut, orange ETFE ferrule, 10 pack	Yellow	3mm	12020-07
Tubing connection, 1/5" OD tubing x 1/4-28, blue PP nut, yellow ETFE ferrule, 10 pack	Blue	1/a-inch	12020-08

# TUBING CONNECTIONS

## Tubing Connection Adapters

*Representative images only*



12020-09



12020-10



12020-11



12020-12



12020-13



12020-14



12020-15



12020-16

### For 1/4" NPT Ports

Compression fittings designed for liquid-tight connection of semi-rigid tubing to 1/4" NPT ports, for tubing diameters 1/8" to 3/8" OD. Each connection is comprised of a two-piece nut and ferrule system with PP thread adapter. Useful for pressurized applications under 500 psi. Make a selection based on your tubing outside diameter (OD); fittings are color-coded by tubing size for easy identification. Wrap NPT threads 3 to 4 times with PTFE tape and wrench tighten for leak-resistant connections.

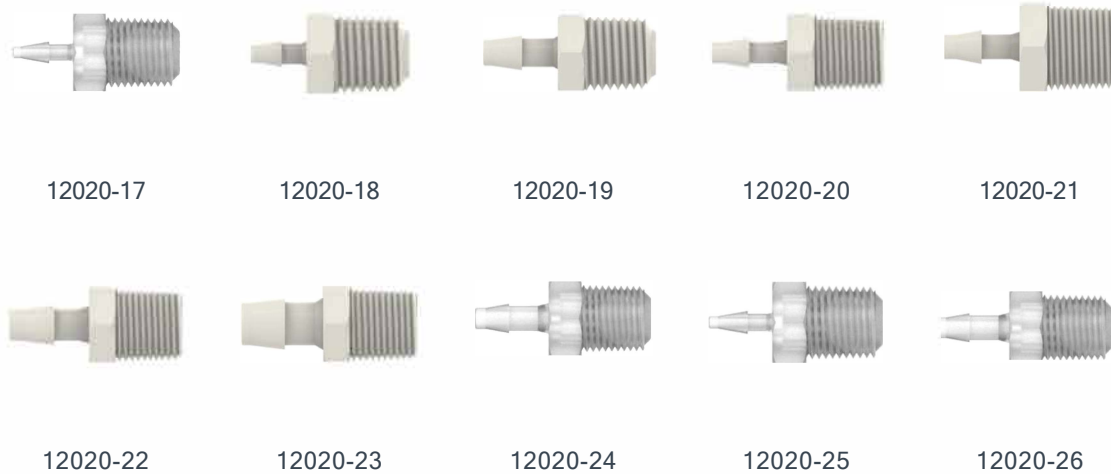
### Fittings for Semi-Rigid Tubing

Description	Color	OD	Thread	Material	Item#
Tubing connection, 4 mm OD tubing x 1/4" NPT, brown PEEK nut, white PCTFE ferrule, PP adapter	Brown	4mm	1/4" NPT	PEEK, PCTFE, PP	12020-09
Tubing connection, 3/16" OD tubing x 1/4" NPT, white acetal nut, blue ETFE ferrule, PP adapter	White	3/16-inch	1/4" NPT	Acetal, ETFE, PP	12020-10
Tubing connection, 1/8" OD tubing x 1/4" NPT, green PP nut, blue ETFE ferrule, PP adapter	Green	1/8-inch	1/4" NPT	PP, ETFE	12020-11
Tubing connection, 1.8-2.0 mm OD tubing x 1/4" NPT, red PP nut, green ETFE ferrule, PP adapter	Red	1.8-2.0 mm	1/4" NPT	PP, ETFE	12020-12
Tubing connection, 2.2 mm OD tubing x 1/4" NPT, black PP nut, natural ETFE ferrule, PP adapter	Black	2.2 mm	1/4" NPT	PP, ETFE	12020-13
Tubing connection, 2.5 mm OD tubing x 1/4" NPT, orange PP nut, natural ETFE ferrule, PP adapter	Orange	2.5mm	1/4" NPT	PP, ETFE	12020-14
Tubing connection, 3 mm OD tubing x 1/4" NPT, yellow PP nut, orange ETFE ferrule, PP adapter	Yellow	3mm	1/4" NPT	PP, ETFE	12020-15
Tubing connection, 1/8" OD tubing x 1/4" NPT, blue PP nut, yellow ETFE ferrule, PP adapter	Blue	1/8-inch	1/4" NPT	PP, ETFE	12020-16



# TUBING CONNECTIONS

## Barbed Tubing Connections



### For 1/5", 1/4" and 1/2" NPT Ports

A semi-permanent connection for soft-walled tubing only, barbed fittings are an economical means of connecting tubing to Vaplock manifold ports with NPT threads. For tubing diameters 1/5" to 1/2" ID. All fittings are polypropylene (PP). Make a selection based on your tubing inside diameter. Wrap NPT threads 3 to 4 times with PTFE tape and wrench tighten for leak-resistant connections.

### Fittings for Soft-Wall Tubing

Description	Tubing ID	Thread	Item#
Barbed tubing connection, 1/5" ID tubing x 1/4" NPT, PP, 10 pack	1/5-inch	1/4" NPT	12020-17
Barbed tubing connection, 1/8" ID tubing x 1/4" NPT, PP, 10 pack	1/8-inch	1/4" NPT	12020-18
Barbed tubing connection, 3/16" ID tubing x 1/4" NPT, PP, 10 pack	3/16-inch	1/4" NPT	12020-19
Barbed tubing connection, 1/4" ID tubing x 1/4" NPT, PP, 10 pack	1/4-inch	1/4" NPT	12020-20
Barbed tubing connection, 5/16" ID tubing x 1/4" NPT, PP, 10 pack	5/16-inch	1/4" NPT	12020-21
Barbed tubing connection, 3/8" ID tubing x 1/4" NPT, PP, 10 pack	3/8-inch	1/4" NPT	12020-22
Barbed tubing connection, 1/2" ID tubing x 1/4" NPT, PP, 10 pack	1/2-inch	1/4" NPT	12020-23
Barbed tubing connection, 5/8" ID tubing x 1/4" NPT, PP, 10 pack	5/8-inch	1/4" NPT	12020-24
Barbed tubing connection, 1/5" ID tubing x 1/8" NPT, PP, 10 pack	1/5-inch	1/8" NPT	12020-25
Barbed tubing connection, 1/8" ID tubing x 1/8" NPT, PP, 10 pack	1/8-inch	1/8" NPT	12020-26

# TUBING CONNECTIONS

## Barbed Tubing Connections



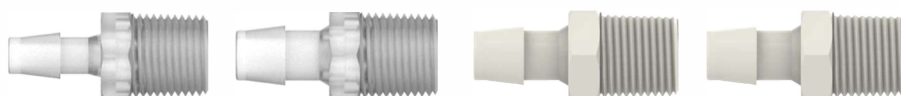
12020-27

12020-28

12020-29

12020-30

12020-31



12020-32

12020-33

12020-34

12020-35

### For 1/8", 1/4" and 1/2" NPT Ports (continued)

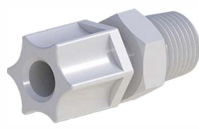
A semi-permanent connection for soft-walled tubing only, barbed fittings are an economical means of connecting tubing to Vaplock manifold ports with NPT threads. For tubing diameters 1/8" to 1/2" ID. All fittings are polypropylene (PP). Make a selection based on your tubing inside diameter. Wrap NPT threads 3 to 4 times with PTFE tape and wrench tighten for leak-resistant connections.

### Fittings for Soft-Wall Tubing

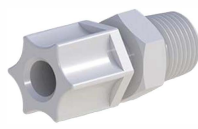
Description	Tubing ID	Thread	Item#
Barbed tubing connection, 3/8" ID tubing x 1/8" NPT, PP, 10 pack	3/8-inch	1/8" NPT	12020-27
Barbed tubing connection, 1/4" ID tubing x 1/8" NPT, PP, 10 pack	1/4-inch	1/8" NPT	12020-28
Barbed tubing connection, 5/8" ID tubing x 1/8" NPT, PP, 10 pack	5/8-inch	1/8" NPT	12020-29
Barbed tubing connection, 3/4" ID tubing x 1/8" NPT, PP, 10 pack	3/4-inch	1/8" NPT	12020-30
Barbed tubing connection, 1/4" ID tubing x 1/2" NPT, PP, 10 pack	1/4-inch	1/2" NPT	12020-31
Barbed tubing connection, 3/4" ID tubing x 1/2" NPT, PP, 10 pack	3/4-inch	1/2" NPT	12020-32
Barbed tubing connection, 1/2" ID tubing x 1/2" NPT, PP, 10 pack	1/2-inch	1/2" NPT	12020-33
Barbed tubing connection, 5/8" ID tubing x 1/2" NPT, PP, 10 pack	5/8-inch	1/2" NPT	12020-34
Barbed tubing connection, 3/4" ID tubing x 1/2" NPT, PP, 10 pack	3/4-inch	1/2" NPT	12020-35

# TUBING CONNECTIONS

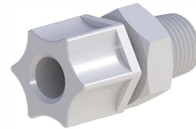
## Large-Bore Tubing Connections



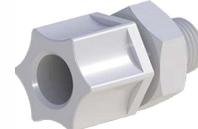
12020-36



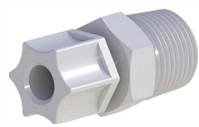
12020-37



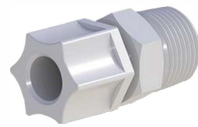
12020-38



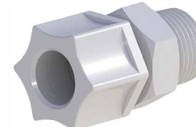
12020-39



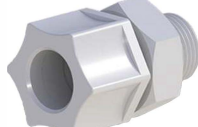
12020-40



12020-41



12020-42



12020-43

### For 1/4" NPT and 1/2" NPT Ports

Compression fittings are designed for liquid-tight connection of semi-rigid tubing to NPT ports; for tubing diameters 1/4" to 3/4" OD. Useful for pressurized applications under 100 psi. Make a selection based on your tubing outside diameter. All fittings are comprised of two-piece molded polypropylene (PP) components and do not include a separate ferrule. Wrap NPT threads 3 to 4 times with PTFE tape and wrench tighten for leak-resistant connections.

### Fittings for Semi-Rigid Tubing

Description	OD	Thread	Item#
Tubing connection, 1/4" and 6 mm OD tubing x 1/4" NPT, PP, 5 pack	1/4-inch	1/4" NPT	12020-36
Tubing connection, 5/8" OD tubing x 1/4" NPT, PP, 5 pack	5/8-inch	1/4" NPT	12020-37
Tubing connection, 3/4" OD tubing x 1/4" NPT, PP, 5 pack	3/4-inch	1/4" NPT	12020-38
Tubing connection, 1/2" OD tubing x 1/4" NPT, PP, 5 pack	1/2-inch	1/4" NPT	12020-39
Tubing connection, 3/4" OD tubing x 1/2" NPT, PP, 5 pack	3/4-inch	1/2" NPT	12020-40
Tubing connection, 1/2" OD tubing x 1/2" NPT, PP, 5 pack	1/2-inch	1/2" NPT	12020-41
Tubing connection, 3/4" OD tubing x 1/2" NPT, PP, 5 pack	3/4-inch	1/2" NPT	12020-42
Tubing connection, 3/4" OD tubing x 1/2" NPT, PP, 5 pack	3/4-inch	1/2" NPT	12020-43

# PORT PLUGS

## Port Plugs



12020-44



12020-45



12020-46



12020-47



12020-48



12020-49



12020-50



12020-51

### For NPT and UNF Ports

Available in multiple materials, use the following plugs to seal unused manifold and bottle cap ports. Options for NPT ports are 1/8", 1/4", 3/8", and 1/2" NPT, and should be wrapped 3 to 4 times with PTFE tape for leak-resistant connections. Bottom-sealing UNF thread options include 1/4-28 and 5/16-24 and do not require PTFE tape.

### Plugs

Description	Thread	Material	Item#
Plugs, 1/4" NPT, PP, 10 pack	1/4" NPT	pp	12020-44
Plugs, 1/2" NPT, PP, 10 pack	1/2" NPT	pp	12020-45
Plugs, 1/4-28, black acetal, 10 pack	1/4-28	Acetal	12020-46
Plugs, 1/4-28, PTFE, 10 pack	1/4-28	PTFE	12020-47
Plugs, 1/4" NPT male, PTFE	1/4" NPT	PTFE	12020-48
Plugs, 3/8" NPT male, PP, 10 pack	3/8" NPT	pp	12020-49
Plugs, 1/8" NPT, PP, 10 pack	1/8" NPT	pp	12020-50
Plugs, 5/16-24, PTFE	5/16-24	PTFE	12020-51

# VENTILATION CONTROL VALVES

## Ventilation Control Valves



12020-52 / 12020-56



12020/58 / 12020-59 / 12020-60

### For 1/4-28 and 1/4" NPT Ports

Although Vaplock solvent supply caps are available with built-in check valve elements, ventilation control valves may also be purchased as stand-alone units. With air inlet, relief and reversible configurations, vent control valves may be selected in two cracking pressure and with Viton, EPDM, and FFKM seal materials. Air inlet valves permit air to enter a bottle to displace vacuum while solvent is pumped out to an instrument. Relief valves allow pressurized bottle contents to escape above the cracking pressure. Reversible valves may serve either purpose, air inlet or relief, depending on the orientation once installed.

### Plugs

Description	Thread	Cracking pressure	Seal material	Item#
Air inlet valve, 1/4-28 male, PTFE with Viton check element	1/4-28	0.1-0.25 psi	Viton	12020-52
Air inlet valve, 1/4-28 male, PTFE with EPDM check element	1/4-28	0.1-0.25 psi	EPDM	12020-53
Air inlet valve, 1/4-28 male, PTFE with FFKM check element	1/4-28	0.1-0.25 psi	FFKM	12020-61
Relief valve, 1/4-28 male, PTFE with Viton check element	1/4-28	0.1-0.25 psi	Viton	12020-54
Relief valve, 1/4-28 male, PTFE with EPDM check element	1/4-28	0.1-0.25 psi	EPDM	12020-55
Relief valve, 1/4-28 male, PTFE with FFKM check element	1/4-28	0.1-0.25 psi	FFKM	12020-62
Relief valve, 1/4-28 male, PTFE with Viton check element	1/4-28	1-2.5 psi	Viton	12020-56
Relief valve, 1/4-28 male, PTFE with EPDM check element	1/4-28	1-2.5 psi	EPDM	12020-57
Relief valve, 1/4-28 male, PTFE with FFKM check element	1/4-28	1-2.5 psi	FFKM	12020-63
Reversible control valve, 1/4" MNPT x 1/4" MNPT, PP with Viton check element	1/4"NPT	0.1-0.25 psi	Viton	12020-58
Reversible control valve, 1/4" MNPT x 1/4" MNPT, PP with EPDM check element	1/4"NPT	0.1-0.25 psi	EPDM	12020-59
Reversible control valve, 1/4" MNPT x 1/4" MNPT, PP with FFKM check element	1/4"NPT	0.1-0.25 psi	FFKM	12020-60

# SAFETY FUNNELS

- Capture waste and hazardous solvents securely
- Reduce fumes and harmful vapor exhaust
- Quick connect to Justrite Centura safety containers

## Versatile Configurations

Cole-Parmer VapLock "SF Series" funnels allow for safer disposal of pourable laboratory waste. A locking, hinged lid minimizes leaks and spills when the funnel is closed. If used in tandem with other VapLock products, such as manifold and exhaust filter, a closed system may be maintained for passive wastes while the funnel is sealed.

Justrite Centura containers are available with two quick-disconnect materials: polypropylene (with EPDM O-ring) and stainless steel (with PTFE O-ring). Select a safety funnel according to the type of disconnect material present on the safety container. Funnels are constructed of high-density polyethylene (HDPE) and polypropylene (PP), and a Viton sealing gasket.

Note: As will all solvent applications, chemical compatibility of the solvent and product should be noted prior to purchase.

## Safety Funnels



12020-64  
safety funnel on  
Justrite PP12752

Description	Item#
Safety funnel with polypropylene disconnect and EPDM O-ring	12020-64
Safety funnel with stainless steel disconnect and PTFE O-ring	12020-65
Safety funnel with no quick disconnect, with 1/2" NPT male thread	12020-66

## Cole-Parmer Liquid Hand Sanitizer, 80% Alcohol

**Stop the risk of cross-contamination-  
no rinsing required**

- Made in accordance with the World Health Organization (WHO) Formulation
- Produced with zero nonessential additives
- Unscented
- Low viscosity provides a water-like consistency that is quick drying
- Available for sale in the continental United States only, not available for sale in Alaska or Hawaii

This liquid hand sanitizer is made following FDA/WHO Guidelines with 80% alcohol content to kill 99.9% of bacteria, germs and viruses. Since no rinsing or drying is required, each application is fast and easy.



Alcohol concentration (v/v)	Packaging	Catalog number
80%	Jug, 3785 ml (1 gallon)	ML-78900-47
80%	Spray bottle, 236 ml (8 ounces)	ML-78900-48
80%	Spray bottle, 236 ml (8 ounces) Case of 24 bottles	ML-78900-49
80%	Drum, 55 gallons	ML-78900-89

## Disposable Face Shield

**Wrap-around design provides full facial protection**

- Foam-padded headband offers extra comfort
- Clear PET delivers maximum visibility-remove protective film before use
- Suitable to wear over eyeglasses

The disposable face shield protects your eyes, mouth, and nose from droplets, sprays, aerosols, splatters, and flying debris. Transparent PET shield is lightweight, breathable, and comfortable to wear. The 1½" elastic nylon strap and foam-padded headband offer comfortable extended wear.

Description	Quantity	Catalog number
Disposable face shield	Case of 200	ML-78900-46



## Cole-Parmer® Benchtop Splash Guard

**Be safer, cleaner, and more comfortable**

- Protect yourself from splashing water, flying debris, and mishaps in the lab
- Made from ¼" clear acrylic and solvent bonded to a plastic base
- Position several units along benchtop to keep lab set-ups separated

Thickness	Dimensions (W x H x D)	Catalog number
¼" (0.6 cm)	5" x 24" x 24" (12.7 x 61 x 61 cm)	ML-06771-10





# FDA-Cleared Noncontact Infrared Forehead Thermometer

Stay safe-get precise forehead temperature measurements without physical contact

This noncontact infrared (IR) thermometer is specially designed to take the body temperature of a person regardless of room temperature. Taking temperature measurements with lack of contact means the disinfection process between uses for the thermometer is minimal or unnecessary, allowing for easier and faster use when screening large numbers of people. Simply hold the IR thermometer 2" to 5.9" (5 to 15 cm) away from the person to measure temperature on the forehead or behind the ear lobe.

This noncontact infrared (IR) thermometer is intended for industrial and office health screenings and monitoring. When this product is used for human body temperature measurement, it is only used as a reference for fever screening and cannot be used for medical identification. Use of this thermometer is not intended as a substitute for consultation with a healthcare professional.

This device is FDA cleared (manufacturer's model # DT-8806H) and within accordance of ASTM E1965-1998; EN 980: graphical symbols for use in the labeling of medical devices; EN 1041: information supplied by the manufacturer with medical devices; EN 60601-1: medical electrical equipment part 1: general requirements for safety (IEC:60601-1:1998); and EN 60601-1-2: medical electrical equipment part 1-2: general requirements for safety collateral standard electromagnetic compatibility requirements and test (IEC 60601-1-2:2001).

What's included: two AA alkaline batteries and carrying case.



## Specifications

**Response time:** 500 millisecond

**Measuring distance:** 2" to 5.9" (5 to 15 cm)

**Data logging:** yes, 32 internal readings

**Dimensions (L x W x H):** 5.9" x 3" x 1.7" (15 x 7.6 x 4.3 cm)

**Power:** two AA batteries (included)

CE:

Body mode			Surface mode			Manf. number	Catalog number
Range	Resolution	Accuracy	Range	Resolution	Accuracy		
89.6 to 108.5° F (32.0 to 42.5° C)	0.1° F/C	± 1.5° F (±0.8° C) below 89.6° F (32° C)	32 to 140° F (0 to 60° C)	0.1° F/C	± 1.5° F (±0.8° C)	DT-8806H	ML-39642-02
		± 0.5° F (±0.3° C) from 89.6 to 96.6° F (32 to 35.9° C)					
		± 0.4° F (±0.2° C) from 96.6 to 102.2° F (36 to 39° C)					
		± 0.5° F (±0.3° C) from 102.2 to 108.5° F (39 to 42.5° C)					

# LabExact Cotton Cloth 70% IPA Wipes

Meets major health and regulatory agency recommendations for concentration and strength to keep surfaces clean

- Lays flat easily and will not tear or bunch up on rough surfaces
- The environmentally safe cotton is 100% biodegradable and incinerates cleanly
- No dyes, ammonia, bleach, or fragrance added

The 100% high purity, 3 x rinsed virgin cotton cloth is similar to that of a 400-thread count bedsheet. The material is thicker, wetter and more durable than synthetic non-woven veil materials. This thickness allows for maximum absorption of IPA so that your wipe does not dry out during use. The wet wipe is effective for use on tables, counters, carts, fixtures, door handles, and equipment. Nonsterile\_

Material	Wipe size	Wipes/container	Catalog number
70% Isopropyl alcohol	6" x 6" (15.2 x 15.2 cm)	80	ML-78900-93



## Wearwell® Footwear Sanitizing Mats

### Don't contaminate your work areas

- Rubber fingers scrub the crevices in soles of shoes
- Disinfectant solution sanitizes surface
- Standard mat holds up to one gallon of disinfectant; tall-wall mats hold up to 5½ gallons



Size (W x L)	Color	Thickness	Catalog number
<b>Standard length</b>			
24" X 32" (61 x 81 cm)	Black	½" (1.3cm)	ML-84580-01
<b>Tall wall length</b>			
32" X 39" (81.3 x 99 cm)	Black	2½" (6.4 cm)	ML-84580-02
	Black/yellow		ML-84580-03

ML-86306-15 DisCide® disinfectant. Case of 4 one-gallon bottles

## Disinfectant Solution

### Tough on pathogens, not on people

- Disinfects surfaces in less than one minute
- Ready-to-use one-step disinfectant saves you time
- Non-irritating to skin and eyes

Wipe any hard, nonporous surface and allow the surface to remain wet for up to one minute. With no added phosphates, phenols, and fragrance, this cleaner meets the lowest EPA toxicity category and is environmentally responsible-active ingredients break down into oxygen and water.

Disinfectant is effective against key pathogens such as TB, MSRA, Norovirus, and VRE. It kills HBV, HCV, and HIV in one minute; and is a potent tuberculocide and fungicide to effectively clean, disinfect, and deodorize.

Note: Food contact surfaces must be rinsed with potable water after using. Do not use on glassware, utensils, or dishes. If you are unsure of compatibility, it is recommended to test on a small, discreet surface.



## Respirators and Masks

### Protect yourself appropriately

Respirators and masks are made for specific applications. One type does not fit every application. We offer a variety of respirators and masks.



## Disposable Gloves

### Don't lose your grip

- Protect yourself by wearing disposable gloves
- We offer a large variety of gloves



Description	Packaging	Catalog number
Disinfectant solution	Four gallon-sized jugs	ML-78900-87
	One 55-gallon drum	ML-78900-86


# Cole-Parmer® Cryogenic Safety Apparel Kits











Stay protected and save money with these bundled kits





- Gloves protect at temperatures as low as –256°F (–160°C) and multilayered insulated construction provides maximum thermal protection while maintaining flexibility and dexterity
  - Apron's 100% waterproof liner prevents spilled fluid and cold equipment from coming in contact with the torso, and the adjustable plastic fasteners at waist and neck snap easily into place
- Water-resistant Cryo-Gloves provide protection in closed cryogenic systems with limited risk of exposure to cryogenic fluids. A stay-dry lining keeps you warm and comfortable. Cryo-Apron is rated for use with LN2 vapor phase and liquefied natural gas (LNG). Lightweight insulation is nontoxic and asbestos-free; provides warmth without bulk. Aprons are machine washable/dryable.


**Note:** Do not immerse apparel in liquid nitrogen.

item	Material	Size	Description
 EW-25000-75	Nylon	Medium	Cryogenic Safety Kit; Medium Gloves and 36" Long Apron

item		Material	Size	Description
	EW-25000-76	Nylon	Medium	Cryogenic Safety Kit; Medium Gloves and 42" Long Apron
	EW-25000-77	Nylon	Medium	Cryogenic Safety Kit; Medium Gloves and 48" Long Apron
	EW-25000-78	Nylon	Large	Cryogenic Safety Kit; Large Gloves and 36" Long Apron
	EW-25000-79	Nylon	Large	Cryogenic Safety Kit; Large Gloves and 42" Long Apron

item		Material	Size	Description
	EW-25000-80	Nylon	Large	Cryogenic Safety Kit; Large Gloves and 48" Long Apron
	EW-25000-81	Nylon	X-Large	Cryogenic Safety Kit; X-Large Gloves and 36" Long Apron
	EW-25000-82	Nylon	X-Large	Cryogenic Safety Kit; X-Large Gloves and 42" Long Apron
	EW-25000-83	Nylon	X-Large	Cryogenic Safety Kit; X-Large Gloves and 48" Long Apron

item	Material	Size	Description
 EW-25000-85	Nylon	Medium	Cryogenic Safety Kit; Medium Gloves, 42" Long Apron, and Face Shield
 EW-25000-88	Nylon	Large	Cryogenic Safety Kit; Large Gloves, 42" Long Apron, and Face Shield
 EW-25000-89	Nylon	Large	Cryogenic Safety Kit; Large Gloves, 48" Long Apron, and Face Shield
 EW-25000-90	Nylon	X-Large	Cryogenic Safety Kit; X-Large Gloves, 36" Long Apron, and Face Shield


item	Material	Size	Description
 EW-25000-92	Nylon	X-Large	Cryogenic Safety Kit; X-Large Gloves, 48" Long Apron, and Face Shield

# Cole-Parmer® Men's Easy Care White Poly/Cotton Blend Lab Coats







Made of 65% polyester/35% cotton blend for easy care

Knee-length lab coats feature one upper left breast pocket, two roomy lower pockets, and a sewn-down back belt. Side-slits allow easy access to pants' pockets.

item	Length (in)	Men's Size	Width (in)
 EW-78901-70	40	Small (36)	25



item		Length (in)	Men's Size	Width (in)
	EW-78901-71	40.5	Medium (40)	25.5
	EW-78901-72	41	Large (44)	26
	EW-78901-73	42	X-Large (48)	28
	EW-78901-74	43	XX-Large (50)	30



# Cole-Parmer® Women's Easy Care White Poly/Cotton Blend Lab Coats






Made of 65% polyester/35% cotton blend for easy care

Knee-length lab coats feature one upper left breast pocket, two roomy lower pockets, and a sewn-down back belt. Side-slits allow easy access to pants' pockets.

**Note:** Women's sizes correspond to women's dress sizes.

item	Length (in)	Width (in)	Womens Size
 EW-78901-75	39	24	Small (4-6)
 EW-78901-76	39.5	24.5	Medium (8-10)



item	Length (in)	Width (in)	Womens Size
 EW-78901-77	40	25	Large (12-14)
 EW-78901-78	41	27	X-Large (16-18)
 EW-78901-79	42	29	XX-Large (20-22)

# Cole-Parmer® Chemical-Resistant Vinyl Aprons



Flexible, chemical-resistant vinyl fabric offers comfortable wear

- Reinforced at points of strain for durability
- Cloth ties at the neck and waist to easily adjust fit

item	Length (in)	Material	Width (in)
 EW-78901-84	30	Vinyl	24
 EW-78901-85	36	Vinyl	27

item		Length (in)	Material	Width (in)
	EW-78901-86	42	Vinyl	27
	EW-78901-87	46	Vinyl	36



# Cole-Parmer® Chemical-Resistant PVC-Coated Aprons





## Cole-Parmer® Essentials Chemical-Resistant PVC-Coated Aprons

- PVC-coated fabric stays flexible for comfort
- Reinforcement at the point of strain offers durability
- Cloth ties at the neck and waist to easily adjust fit

•

item	Length (in)	Material	Width (in)
 EW-78901-80	36	Polyvinyl Chloride (PVC)	27
 EW-78901-81	42	Polyvinyl Chloride (PVC)	27

item	Length (in)	Material	Width (in)
<div data-bbox="126 253 256 376"></div> <div data-bbox="264 253 432 286">EW-78901-82</div>	42	Polyvinyl Chloride (PVC)	36
<div data-bbox="126 607 256 730"></div> <div data-bbox="264 607 432 640">EW-78901-83</div>	46	Polyvinyl Chloride (PVC)	36



# Cole-Parmer Disposable Shoe Covers, CPE; 50 Pairs/Pk



Cole-Parmer – Item # EW-78901-23

Create a physical barrier between your shoe and environment

- CPE (chlorinated polyethylene) construction Elastic band forms tight fit Compatible with most shoes

## Specifications & Description

• Material	Polyethylene(PE)
• Color	Blue
• Description	Disposable Shoe Covers, CPE; 50 Pairs/Pk

### MORE ABOUT THIS ITEM

Disposable shoe covers are made from chlorinated polyethylene (CPE) and are ideal for protection in work environments. Feature an elastic top to ensure they stay on while on the move. Fits most shoe sizes.

# Cole-Parmer Benchtop Splash-Guard, Arcylic, 24" W x 24" H x 1/4" Thick



Cole-Parmer – Item # EW-06771-10

4.5

of respondents would recommend this to a friend

Provides a safer, cleaner and comfortable work environment!

- Fabricated from 1/4" clear acrylic
- Two finger holes offer easy lifting

## Specifications & Description

• Color	Clear
• Exterior Width (in)	5
• Exterior Height (in)	24
• Exterior Depth (in)	24
• Exterior Width (cm)	12.7
• Exterior Height (cm)	60.96
• Exterior Depth (cm)	60.96
• Description	Benchtop Splash-Guard, Arcylic, 24" W x 24" H x 1/4" Thick

# Cole-Parmer Benchtop Curved Splash Shield



Cole-Parmer – Item # EW-06771-11

Provides optimal visibility and protection

- Wide top protects against splashes
- Nonskid feet provide stability

## Specifications & Description

• Thickness (in)	1/4
• Thickness (cm)	0.064
• Width (in)	20
• Depth (in)	12
• Height (in)	20
• Width (cm)	50.8
• Depth (cm)	30.48
• Height (cm)	50.8
• Description	Benchtop Safety Shield

# Cole-Parmer Diamond Grip Nitrile Gloves, Size 9, Double-Layer; 12 Pair/Bag



Cole-Parmer – Item # EW-40216-13

Offers superior wet and dry grip

- Hypoallergenic
- USDA compliant

## Specifications & Description

• Thickness (mil)	15
• Material	Nitrile
• Size	9
• Length (in)	12
• Length (cm)	30.5
• Color	Green
• Compliance	FDA 21 CFR 177.2600; ISO 9002
• Sterile	No
• Description	Diamond Grip Nitrile Gloves, Size 9, Double-Layer; 12 Pair/Bg

### MORE ABOUT THIS ITEM


Embossed diamond pattern provides superior wet and dry grip. Latex-free nitrile gloves resist punctures, cuts, snags, and abrasion. Silicone free—suitable for use in paint and powder coat applications. Hypoallergenic. **Compliance:** USDA accepted per 21CFR 177.2600 for food and drug handling, manufactured under ISO 9002 standards.





# Cole-Parmer® ThinTouch Nitrile Gloves, AQL 1.5







Enhanced tactile sensitivity for a superior “touch & feel” experience

- Advanced nitrile formulation with soft finish delivers optimal comfort and dexterity
  - Reliable protection against a wide range of chemicals
  - Textured fingertips ensure a secure grip in wet or dry conditions
  - High tensile strength for excellent tear and puncture resistance
  - Meets acceptable quality level (AQL) of 1.5
- These nitrile gloves provide you protection against a variety of chemicals and are puncture resistant with a 3.2 mil palm thickness. The gloves offer a soft, comfortable fit, are latex- and powder-free, and help reduce fatigue. Textured fingertips enhance wet or dry grip. Available in 9.5” length and four sizes – small, medium, large, and X-large. Ambidextrous.
- Permeation Performance Levels per EN ISO 374:2016
  -

item	Length (in)	Material	Size
  EW-15957-64	9 1/2	Nitrile	Small

item	Length (in)	Material	Size
  EW-15957-65	9 1/2	Nitrile	Medium
  EW-15957-66	9 1/2	Nitrile	Large
  EW-15957-67	9 1/2	Nitrile	X-Large
 EW-15957-68	9 1/2	Nitrile	Small

item	Length (in)	Material	Size
  EW-15957-69	9 1/2	Nitrile	Medium
  EW-15957-70	9 1/2	Nitrile	Large
 EW-15957-71	9 1/2	Nitrile	X-Large
 EW-15957-80	9 1/2	Nitrile	Small, Medium, Large, X-Large



# Cole-Parmer Adhesive Floor Mats, 45.5" x 18"; 120/Box



Cole-Parmer – Item # EW-09411-00

No ReviewsWrite the First Review

Easy remove contamination from shoes

- Simply peel back layer to expose clean surface

## Specifications & Description

• Material	Polyethylene
• Width (in)	18
• Width (cm)	45.72
• Color	Blue
• Description	adhesive floor mats; 45.5" x 18", 120/box

### MORE ABOUT THIS ITEM

Cut contamination with these adhesive floor mats. Adhesive-coated surfaces remove dirt from shoes and cart wheels. Peel away the top layer to expose a fresh surface. Four 30-sheet mats per box.



## По вопросам продаж и поддержки обращайтесь:

Алматы (727)345-47-04  
Ангарск (3955)60-70-56  
Архангельск (8182)63-90-72  
Астрахань (8512)99-46-04  
Барнаул (3852)73-04-60  
Белгород (4722)40-23-64  
Благовещенск (4162)22-76-07  
Брянск (4832)59-03-52  
Владивосток (423)249-28-31  
Владикавказ (8672)28-90-48  
Владимир (4922)49-43-18  
Волгоград (844)278-03-48  
Вологда (8172)26-41-59  
Воронеж (473)204-51-73  
Екатеринбург (343)384-55-89

Иваново (4932)77-34-06  
Ижевск (3412)26-03-58  
Иркутск (395)279-98-46  
Казань (843)206-01-48  
Калининград (4012)72-03-81  
Калуга (4842)92-23-67  
Кемерово (3842)65-04-62  
Киров (8332)68-02-04  
Коломна (4966)23-41-49  
Кострома (4942)77-07-48  
Краснодар (861)203-40-90  
Красноярск (391)204-63-61  
Курск (4712)77-13-04  
Курган (3522)50-90-47  
Липецк (4742)52-20-81

Магнитогорск (3519)55-03-13  
Москва (495)268-04-70  
Мурманск (8152)59-64-93  
Набережные Челны (8552)20-53-41  
Нижегород (831)429-08-12  
Новокузнецк (3843)20-46-81  
Ноябрьск (3496)41-32-12  
Новосибирск (383)227-86-73  
Омск (3812)21-46-40  
Орел (4862)44-53-42  
Оренбург (3532)37-68-04  
Пенза (8412)22-31-16  
Петрозаводск (8142)55-98-37  
Псков (8112)59-10-37  
Пермь (342)205-81-47

Ростов-на-Дону (863)308-18-15  
Рязань (4912)46-61-64  
Самара (846)206-03-16  
Санкт-Петербург (812)309-46-40  
Саратов (845)249-38-78  
Севастополь (8692)22-31-93  
Саранск (8342)22-96-24  
Симферополь (3652)67-13-56  
Смоленск (4812)29-41-54  
Сочи (862)225-72-31  
Ставрополь (8652)20-65-13  
Сургут (3462)77-98-35  
Сыктывкар (8212)25-95-17  
Тамбов (4752)50-40-97  
Тверь (4822)63-31-35

Тольятти (8482)63-91-07  
Томск (3822)98-41-53  
Тула (4872)33-79-87  
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