



KX VaporSafe™ is 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, VaporSafe 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.

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. VaporSafe solvent caps provide versatile, leak-resistant connections where mobile phase tubing may be attached securely.

1B SOLVENT RESERVOIR VENTILATION CONTROL

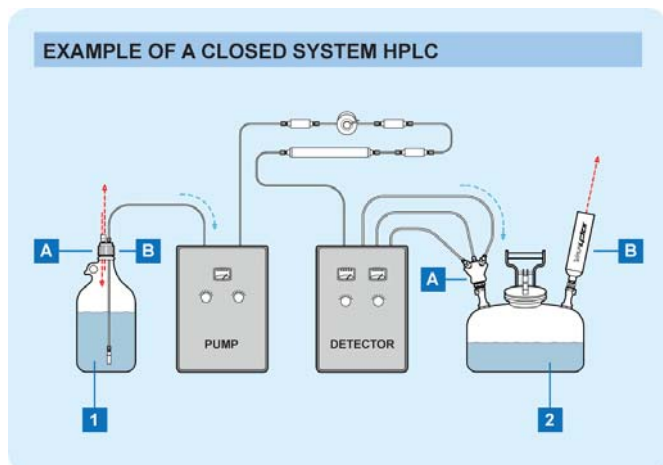
In reservoirs where fluid is actively removed and no new solvent or gas pressure is simultaneously added, to complete the closed system the container requires a device to control solvent evaporation. With use of an automatic control valve, air may still enter the bottle as a pump moves the liquid phase out to the instrument. VaporSafe solutions for closed-system solvent delivery includes both stand-alone 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 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. VaporSafe 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, VaporSafe 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 VaporSafe breakthrough color indicators to determine longevity and establish a replacement sched-





S45X-2H



S45X-3H



S45X-4H

GL45 CAP WITH STAINLESS THREAD INSERT

Closed System Design

Reduce chemical evaporation and exposure to hazardous vapors with VaporSafe solvent reservoir caps. Combine with secure fluid connections and VaporSafe 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 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" (3.2mm) 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 collar is non-wetted. Caps may be autoclaved to 140°C. Please inquire for other material options and custom designs.

Solvent Bottle Caps

Part #	Description	# Ports	Materials
S45X-2H	BOTTLE CAP, GL45, (2) 1/4-28 ports with stainless steel thread inserts, PTFE with PP collar.	(2) 1/4-28	PTFE, PP, SS
S45X-3H	BOTTLE CAP, GL45, (3) 1/4-28 ports with stainless steel thread inserts, PTFE with PP collar.	(3) 1/4-28	PTFE, PP, SS
S45X-4H	BOTTLE CAP, GL45, (4) 1/4-28 ports with stainless steel thread inserts, PTFE with PP collar.	(4) 1/4-28	PTFE, PP, SS



S45X-2D



S45X-3D



S45X-4D

GL45 CAP WITH THREADED PORT

Closed System Design

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

1/4-28 Port Threads

Designed to accept industry-standard 1/4-28 threaded fittings. For use with semi-rigid tubing equal to or less than 1/8" (3.2mm) 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 collar is non-wetted. Caps may be autoclaved to 140°C. Please inquire for other material options and custom designs.

Solvent Bottle Caps

Part #	Description	# Ports	Materials
S45X-2D	BOTTLE CAP, GL45, (2) 1/4-28 ports, PTFE with PP collar.	(2) 1/4-28	PTFE, PP
S45X-3D	BOTTLE CAP, GL45, (3) 1/4-28 ports, PTFE with PP collar.	(3) 1/4-28	PTFE, PP
S45X-4D	BOTTLE CAP, GL45, (4) 1/4-28 ports, PTFE with PP collar.	(4) 1/4-28	PTFE, PP



S45XFV-2D



S45XEV-2D



S45XVW-2D



S45XFV-4D



S45XEV-4D



S45XVW-4D

GL45 CAP WITH INTEGRATED AIR INLET VALVE

Closed System Design

Reduce exposure to hazardous chemical vapors with VaporSafe 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 50µm PTFE Filter covers the valve assembly to reduce particulates.

1/4-28 Port Threads

Designed to accept industry-standard 1/4-28 threaded fittings. For use with semi-rigid tubing equal to or less than 1/8" (3.2mm) 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

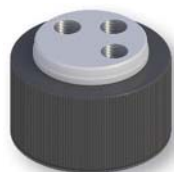
Constructed of inert PTFE, the body of the cap provides ideal chemical compatibility with laboratory solvents. The air inlet valve is assembled with PTFE and 300-series stainless steel components, with Viton, inert FFKM, or white USP class VI EPDM seal options. Under normal use, the outer Polypropylene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

Solvent Bottle Caps

Part #	Description	# Ports	Valve Seal Material
S45XFV-2D	BOTTLE CAP, GL45, (2) 1/4-28 ports, PTFE with yellow PP collar, FFKM air inlet valve.	(2) 1/4-28	FFKM
S45XEV-2D	BOTTLE CAP, GL45, (2) 1/4-28 ports, PTFE with green PP collar, EPDM air inlet valve.	(2) 1/4-28	EPDM
S45XVW-2D	BOTTLE CAP, GL45, (2) 1/4-28 ports, PTFE with blue PP collar, Viton air inlet valve.	(2) 1/4-28	Viton
S45XFV-4D	BOTTLE CAP, GL45, (4) 1/4-28 ports, PTFE with yellow PP collar, FFKM air inlet valve.	(4) 1/4-28	FFKM
S45XEV-4D	BOTTLE CAP, GL45, (4) 1/4-28 ports, PTFE with green PP collar, EPDM air inlet valve.	(4) 1/4-28	EPDM
S45XVW-4D	BOTTLE CAP, GL45, (4) 1/4-28 ports, PTFE with blue PP collar, Viton air inlet valve.	(4) 1/4-28	Viton



S38X-2H



S38X-3H



S38X-4H

GL38 CAP WITH STAINLESS THREAD INSERT

Closed System Design

Reduce chemical evaporation and exposure to hazardous vapors with VaporSafe solvent reservoir caps. Combine with secure fluid connections and VaporSafe 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 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" (3.2mm) 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 collar is non-wetted. Caps may be autoclaved to 140°C. Please inquire for other material options and custom designs.

Solvent Bottle Caps

Part #	Description	# Ports	Materials
S38X-2H	BOTTLE CAP, GL38, (2) 1/4-28 ports with stainless steel thread inserts, PTFE with PP collar.	(2) 1/4-28	PTFE, PP, SS
S38X-3H	BOTTLE CAP, GL38, (3) 1/4-28 ports with stainless steel thread inserts, PTFE with PP collar.	(3) 1/4-28	PTFE, PP, SS
S38X-4H	BOTTLE CAP, GL38, (4) 1/4-28 ports with stainless steel thread inserts, PTFE with PP collar.	(4) 1/4-28	PTFE, PP, SS



S38X-2D



S38X-3D



S38X-4D

GL38 CAP WITH THREADED PORT

Closed System Design

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

1/4-28 Port Threads

Designed to accept industry-standard 1/4-28 threaded fittings. For use with semi-rigid tubing equal to or less than 1/8" (3.2mm) 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 collar is non-wetted. Caps may be autoclaved to 140°C. Please inquire for other material options and custom designs.

Solvent Bottle Caps

Part #	Description	# Ports	Materials
S38X-2D	BOTTLE CAP, GL38, (2) 1/4-28 ports, PTFE with PP collar.	(2) 1/4-28	PTFE, PP
S38X-3D	BOTTLE CAP, GL38, (3) 1/4-28 ports, PTFE with PP collar.	(3) 1/4-28	PTFE, PP
S38X-4D	BOTTLE CAP, GL38, (4) 1/4-28 ports, PTFE with PP collar.	(4) 1/4-28	PTFE, PP



S38XFV-2D



S38XEV-2D



S38XVV-2D



S38XFV-4D



S38XEV-4D



S38XVV-4D

GL38 CAP WITH INTEGRATED AIR INLET VALVE

Closed System Design

Reduce exposure to hazardous chemical vapors with VaporSafe 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 50µm PTFE Filter covers the valve assembly to reduce particulates.

1/4-28 Port Threads

Designed to accept industry-standard 1/4-28 threaded fittings. For use with semi-rigid tubing equal to or less than 1/8" (3.2mm) 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 Viton, inert FFKM, or white USP class VI EPDM 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.

Solvent Bottle Caps

Part #	Description	# Ports	Valve Seal Material
S38XFV-2D	BOTTLE CAP, GL38, (2) 1/4-28 ports, PTFE with PP collar, FFKM air inlet valve.	(2) 1/4-28	FFKM
S38XEV-2D	BOTTLE CAP, GL38, (2) 1/4-28 ports, PTFE with PP collar, EPDM air inlet valve.	(2) 1/4-28	EPDM
S38XVV-2D	BOTTLE CAP, GL38, (2) 1/4-28 ports, PTFE with PP collar, Viton air inlet valve.	(2) 1/4-28	Viton
S38XFV-4D	BOTTLE CAP, GL38, (4) 1/4-28 ports, PTFE with PP collar, FFKM air inlet valve.	(4) 1/4-28	FFKM
S38XEV-4D	BOTTLE CAP, GL38, (4) 1/4-28 ports, PTFE with PP collar, EPDM air inlet valve.	(4) 1/4-28	EPDM
S38XVV-4D	BOTTLE CAP, GL38, (4) 1/4-28 ports, PTFE with PP collar, Viton air inlet valve.	(4) 1/4-28	Viton



S38NX-2H



S38NX-3H



S38NX-4H

NALGENE 38-430 CAP WITH STAINLESS THREAD INSERT

Closed System Design

Reduce chemical evaporation and exposure to hazardous vapors with VaporSafe solvent reservoir caps. Combine with secure fluid connections and VaporSafe 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 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" (3.2mm) 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 collar is non-wetted. Caps may be autoclaved to 140°C. Please inquire for other material options and custom designs.

Solvent Bottle Caps

Part #	Description	# Ports	Materials
S38NX-2H	BOTTLE CAP, for Nalgene 38-430, (2) 1/4-28 ports with stainless steel thread inserts, PTFE with PP collar.	(2) 1/4-28	PTFE, PP, SS
S38NX-3H	BOTTLE CAP, for Nalgene 38-430, (3) 1/4-28 ports with stainless steel thread inserts, PTFE with PP collar.	(3) 1/4-28	PTFE, PP, SS
S38NX-4H	BOTTLE CAP, for Nalgene 38-430, (4) 1/4-28 ports with stainless steel thread inserts, PTFE with PP collar.	(4) 1/4-28	PTFE, PP, SS



S38NX-2D



S38NX-3D



S38NX-4D

NALGENE 38-430 CAP WITH THREADED PORT

Closed System Design

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

1/4-28 Port Threads

Designed to accept industry-standard 1/4-28 threaded fittings. For use with semi-rigid tubing equal to or less than 1/8" (3.2mm) 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 collar is non-wetted. Caps may be autoclaved to 140°C. Please inquire for other material options and custom designs.

Solvent Bottle Caps

Part #	Description	# Ports	Materials
S38NX-2D	BOTTLE CAP, for Nalgene 38-430, (2) 1/4-28 ports, PTFE with PP collar.	(2) 1/4-28	PTFE, PP
S38NX-3D	BOTTLE CAP, for Nalgene 38-430, (3) 1/4-28 ports, PTFE with PP collar.	(3) 1/4-28	PTFE, PP
S38NX-4D	BOTTLE CAP, for Nalgene 38-430, (4) 1/4-28 ports, PTFE with PP collar.	(4) 1/4-28	PTFE, PP



S38NXFV-2D



S38NXEV-2D



S38NXVW-2D



S38NXFV-4D



S38NXEV-4D



S38NXVW-4D

NALGENE 38-430 WITH INTEGRATED AIR INLET VALVE

Closed System Design

Reduce exposure to hazardous chemical vapors with VaporSafe 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 50µm PTFE Filter covers the valve assembly to reduce particulates.

1/4-28 Port Threads

Designed to accept industry-standard 1/4-28 threaded fittings. For use with semi-rigid tubing equal to or less than 1/8" (3.2mm) 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 Viton, inert FFKM, or white USP class VI EPDM 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.

Solvent Bottle Caps

Part #	Description	# Ports	Valve Seal Material
S38NXFV-2D	BOTTLE CAP, for Nalgene 38-430, (2) 1/4-28 ports, PTFE with PP collar, FFKM air inlet valve.	(2) 1/4-28	FFKM
S38NXEV-2D	BOTTLE CAP, for Nalgene 38-430, (2) 1/4-28 ports, PTFE with PP collar, EPDM air inlet valve.	(2) 1/4-28	EPDM
S38NXVW-2D	BOTTLE CAP, for Nalgene 38-430, (2) 1/4-28 ports, PTFE with PP collar, Viton air inlet valve.	(2) 1/4-28	Viton
S38NXFV-4D	BOTTLE CAP, for Nalgene 38-430, (4) 1/4-28 ports, PTFE with PP collar, FFKM air inlet valve.	(4) 1/4-28	FFKM
S38NXEV-4D	BOTTLE CAP, for Nalgene 38-430, (4) 1/4-28 ports, PTFE with PP collar, EPDM air inlet valve.	(4) 1/4-28	EPDM
S38NXVW-4D	BOTTLE CAP, for Nalgene 38-430, (4) 1/4-28 ports, PTFE with PP collar, Viton air inlet valve.	(4) 1/4-28	Viton



S38WX-2H



S38WX-3H



S38WX-4H

38mm-WAKO CAP WITH STAINLESS THREAD INSERT

Closed System Design

Reduce chemical evaporation and exposure to hazardous vapors with VaporSafe solvent reservoir caps. Combine with secure fluid connections and VaporSafe 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 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" (3.2mm) 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 collar is non-wetted. Caps may be autoclaved to 140°C. Please inquire for other material options and custom designs.

Solvent Bottle Caps

Part #	Description	# Ports	Materials
S38WX-2H	BOTTLE CAP, for Wako 38mm, (2) 1/4-28 ports with stainless steel thread inserts, PTFE with PP collar.	(2) 1/4-28	PTFE, PP, SS
S38WX-3H	BOTTLE CAP, for Wako 38mm, (3) 1/4-28 ports with stainless steel thread inserts, PTFE with PP collar.	(3) 1/4-28	PTFE, PP, SS
S38WX-4H	BOTTLE CAP, for Wako 38mm, (4) 1/4-28 ports with stainless steel thread inserts, PTFE with PP collar.	(4) 1/4-28	PTFE, PP, SS



S38WX-2D



S38WX-3D



S38WX-4D

38mm-WAKO CAP WITH THREADED PORT

Closed System Design

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

1/4-28 Port Threads

Designed to accept industry-standard 1/4-28 threaded fittings. For use with semi-rigid tubing equal to or less than 1/8" (3.2mm) 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 collar is non-wetted. Caps may be autoclaved to 140°C. Please inquire for other material options and custom designs.

Solvent Bottle Caps

Part #	Description	# Ports	Materials
S38WX-2D	BOTTLE CAP, for Wako 38mm, (2) 1/4-28 ports, PTFE with PP collar.	(2) 1/4-28	PTFE, PP
S38WX-3D	BOTTLE CAP, for Wako 38mm, (3) 1/4-28 ports, PTFE with PP collar.	(3) 1/4-28	PTFE, PP
S38WX-4D	BOTTLE CAP, for Wako 38mm, (4) 1/4-28 ports, PTFE with PP collar.	(4) 1/4-28	PTFE, PP



S38WXFV-2D



S38WXEV-2D



S38WXVW-2D



S38WXFV-4D



S38WXEV-4D



S38WXVW-4D

38mm-WAKO WITH INTEGRATED AIR INLET VALVE

Closed System Design

Reduce exposure to hazardous chemical vapors with VaporSafe 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 50µm PTFE Filter covers the valve assembly to reduce particulates.

1/4-28 Port Threads

Designed to accept industry-standard 1/4-28 threaded fittings. For use with semi-rigid tubing equal to or less than 1/8" (3.2mm) 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 Viton, inert FFKM, or white USP class VI EPDM 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.

Solvent Bottle Caps

Part #	Description	# Ports	Valve Seal Material
S38WXFV-2D	BOTTLE CAP, for Wako 38mm, (2) 1/4-28 ports, PTFE with PP collar, FFKM air inlet valve.	(2) 1/4-28	FFKM
S38WXEV-2D	BOTTLE CAP, for Wako 38mm, (2) 1/4-28 ports, PTFE with PP collar, EPDM air inlet valve.	(2) 1/4-28	EPDM
S38WXVW-2D	BOTTLE CAP, for Wako 38mm, (2) 1/4-28 ports, PTFE with PP collar, Viton air inlet valve.	(2) 1/4-28	Viton
S38WXFV-4D	BOTTLE CAP, for Wako 38mm, (4) 1/4-28 ports, PTFE with PP collar, FFKM air inlet valve.	(4) 1/4-28	FFKM
S38WXEV-4D	BOTTLE CAP, for Wako 38mm, (4) 1/4-28 ports, PTFE with PP collar, EPDM air inlet valve.	(4) 1/4-28	EPDM
S38WXVW-4D	BOTTLE CAP, for Wako 38mm, (4) 1/4-28 ports, PTFE with PP collar, Viton air inlet valve.	(4) 1/4-28	Viton



S32X-2H



S32X-3H



S32X-4H

GL32 CAP WITH STAINLESS THREAD INSERT

Closed System Design

Reduce chemical evaporation and exposure to hazardous vapors with VaporSafe solvent reservoir caps. Combine with secure fluid connections and VaporSafe 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 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" (3.2mm) 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 collar is non-wetted. Caps may be autoclaved to 140°C. Please inquire for other material options and custom designs.

Solvent Bottle Caps

Part #	Description	# Ports	Materials
S32X-2H	BOTTLE CAP, GL32, (2) 1/4-28 ports with stainless steel thread inserts, PTFE with PP collar.	(2) 1/4-28	PTFE, PP, SS
S32X-3H	BOTTLE CAP, GL32, (3) 1/4-28 ports with stainless steel thread inserts, PTFE with PP collar.	(3) 1/4-28	PTFE, PP, SS
S32X-4H	BOTTLE CAP, GL32, (4) 1/4-28 ports with stainless steel thread inserts, PTFE with PP collar.	(4) 1/4-28	PTFE, PP, SS



S32X-2D



S32X-3D



S32X-4D

GL32 CAP WITH THREADED PORT

Closed System Design

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

1/4-28 Port Threads

Designed to accept industry-standard 1/4-28 threaded fittings. For use with semi-rigid tubing equal to or less than 1/8" (3.2mm) 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 collar is non-wetted. Caps may be autoclaved to 140°C. Please inquire for other material options and custom designs.

Solvent Bottle Caps

Part #	Description	# Ports	Materials
S32X-2D	BOTTLE CAP, GL32, (2) 1/4-28 ports, PTFE with PP collar.	(2) 1/4-28	PTFE, PP
S32X-3D	BOTTLE CAP, GL32, (3) 1/4-28 ports, PTFE with PP collar.	(3) 1/4-28	PTFE, PP
S32X-4D	BOTTLE CAP, GL32, (4) 1/4-28 ports, PTFE with PP collar.	(4) 1/4-28	PTFE, PP



S25X-2D



S25X-3D

GL25 CAP WITH THREADED PORT

Closed System Design

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

1/4-28 Port Threads

Designed to accept industry-standard 1/4-28 threaded fittings. For use with semi-rigid tubing equal to or less than 1/8" (3.2mm) 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 collar is non-wetted. Caps may be autoclaved to 140°C. Please inquire for other material options and custom designs.

Solvent Bottle Caps

Part #	Description	# Ports	Materials
S25X-2D	BOTTLE CAP, GL25, (2) 1/4-28 ports, PTFE with PP collar.	(2) 1/4-28	PTFE, PP
S25X-3D	BOTTLE CAP, GL25, (3) 1/4-28 ports, PTFE with PP collar.	(3) 1/4-28	PTFE, PP



WM38P-10

GL38 WASTE CAPS

Vapor Tight Connection

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

Chemical Resistance

Materials of construction include your choice of Polypropylene or PTFE manifold and insert with Polypropylene 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 EF-100 Filter and indicator.

*See the emissions and filter section of our catalog



WM38P-4

Manifold Caps

Part #	Description	# Ports	Manifold Material
WM38P-4	WASTE MANIFOLD for GL38 threaded container, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, Polypropylene	(3) 1/4 NPT (1) 1/2 NPT	PP
WM38X-4	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
WM38P-10	WASTE MANIFOLD for GL38 threaded container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28, Polypropylene	(1) 1/2 NPT (3) 1/4 NPT (6) 1/4-28	PP
WM38X-10	WASTE MANIFOLD for GL38 threaded container, 10-port with (3) 1/4" NPT, (6) 1/4-28, PTFE	(1) 1/2 NPT, (3) 1/4 NPT, (6) 1/4-28	PTFE

GL38 WASTE KITS

VaporSafe™ Closed Systems for solvent containment minimizes leaks, spills, and vapor escape from solvent waste and supply containers. Use VaporSafe™ 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 VaporSafe™ 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.

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

Kit Contents

- 10-port Waste Manifold
 - (3) 1/4" NPT Polypropylene Plugs
 - (6) 1/4-28 PTFE Plugs
 - (1) 1/2 NPT Polypropylene Plug
 - (1) Organic Vapor Filter
 - (2) 2.2mm OD hard wall tubing connections
 - (1) 2.5mm OD hard wall tubing connection
 - (3) 1/8" OD hard wall tubing connections
 - (2) 1/16" OD hard wall tubing connections
 - (3) BARBED TUBING CONNECTION 1/4 ID tubing x 1/4 NPT Polypropylene
 - (1) BARBED TUBING CONNECTION 1/8 ID tubing x 1/4 NPT Polypropylene
 - (1) BARBED TUBING CONNECTION 3/16 ID tubing x 1/4 NPT Polypropylene
 - (1) BARBED TUBING CONNECTION 3/8 ID tubing x 1/4 NPT Polypropylene
 - (1) BARB TO BARB Y CONNECTOR with 1/4" (6.25mm) Barbs, Polypropylene
 - (1) HARDWALL TUBE EXTENSION includes union connections and 5 feet 1/8 OD PTFE tubing
 - (1) FILTER ADAPTER 1/4 NPT x 1/2 NPT polypropylene
 - (1) BREAKTHROUGH COLOR INDICATOR for VaporSafe™ organic vapor filter
- Container Not Included.



WAK38P-10

Part #	Description	# Ports	Manifold Material
WAK38P-10	HPLC WASTE ACCESSORY KIT for GL38 threaded container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28; includes Polypropylene Manifold, Fittings Kit, Exhaust Filter with adapter and color indicator	(1) 1/2 NPT, (3) 1/4 NPT, (6) 1/4-28	PP
WAK38X-10	HPLC WASTE ACCESSORY KIT for GL38 threaded container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28; includes PTFE Manifold, Fittings Kit, Exhaust Filter with adapter and color indicator	(1) 1/2 NPT, (3) 1/4 NPT, (6) 1/4-28	PTFE

Waste Kits



WM38NP-10



WM38NP-4

NALGENE 38-430 WASTE CAPS

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 Polypropylene or PTFE manifold and insert with Polypropylene 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 EF-100 Filter and indicator.

*See the emissions and filter section of our catalog

Manifold Caps

Part #	Description	# Ports	Manifold Material
WM38NP-4	WASTE MANIFOLD for Nalgene 38-430 threaded container, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, Polypropylene	(3) 1/4 NPT (1) 1/2 NPT	PP
WM38NX-4	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
WM38NP-10	WASTE MANIFOLD for Nalgene 38-430 threaded container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28, Polypropylene	(1) 1/2 NPT, (3) 1/4 NPT, (6) 1/4-28	PP
WM38NX-10	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

NALGENE 38-430 WASTE KITS

VaporSafe™ Closed Systems for solvent containment minimizes leaks, spills, and vapor escape from solvent waste and supply containers. Use VaporSafe™ 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 VaporSafe™ 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.

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

Kit Contents

- 10-port Waste Manifold
- (3) 1/4" NPT Polypropylene Plugs
- (6) 1/4-28 PTFE Plugs
- (1) 1/2 NPT Polypropylene Plug
- (1) Organic Vapor Filter
- (2) 2.2mm OD hard wall tubing connections
- (1) 2.5mm OD hard wall tubing connection
- (3) 1/8" OD hard wall tubing connections
- (2) 1/16" OD hard wall tubing connections
- (3) BARBED TUBING CONNECTION 1/4 ID tubing x 1/4 NPT Polypropylene
- (1) BARBED TUBING CONNECTION 1/8 ID tubing x 1/4 NPT Polypropylene
- (1) BARBED TUBING CONNECTION 3/16 ID tubing x 1/4 NPT Polypropylene
- (1) BARBED TUBING CONNECTION 3/8 ID tubing x 1/4 NPT Polypropylene
- (1) BARB TO BARB Y CONNECTOR with 1/4" (6.25mm) Barbs, Polypropylene
- (1) HARDWALL TUBE EXTENSION includes union connections and 5 feet 1/8 OD PTFE tubing
- (1) FILTER ADAPTER 1/4 NPT x 1/2 NPT polypropylene
- (1) BREAKTHROUGH COLOR INDICATOR for VaporSafe™ organic vapor filter

Container Not Included.



WAK38NP-10

Part #	Description	# Ports	Manifold Material
WAK38NP-10	HPLC WASTE ACCESSORY KIT for Nalgene 38-430 threaded container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28; includes Polypropylene Manifold, Fittings Kit, Exhaust Filter with adapter and color indicator	(1) 1/2 NPT, (3) 1/4 NPT, (6) 1/4-28	PP
WAK38NX-10	HPLC WASTE ACCESSORY KIT for Nalgene 38-430 threaded container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28; includes PTFE Manifold, Fittings Kit, Exhaust Filter with adapter and color indicator	(1) 1/2 NPT, (3) 1/4 NPT, (6) 1/4-28	PTFE

Waste Kits



WM38WP-10



WM38WP-4

WAKO 38mm WASTE CAPS

Vapor Tight Connection

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

Chemical Resistance

Materials of construction include your choice of Polypropylene or PTFE manifold and insert with Polypropylene 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 EF-100 Filter and indicator.

*See the emissions and filter section of our catalog

Manifold Caps

Part #	Description	# Ports	Manifold Material
WM38WP-4	WASTE MANIFOLD for Wako 38mm threaded container, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, Polypropylene	(3) 1/4 NPT (1) 1/2 NPT	PP
WM38WX-4	WASTE MANIFOLD for Wako 38mm threaded container, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, PTFE	(3) 1/4 NPT (1) 1/2 NPT	PTFE
WM38WP-10	WASTE MANIFOLD for Wako 38mm threaded container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28, Polypropylene	(1) 1/2 NPT, (3) 1/4 NPT, (6) 1/4-28	PP
WM38WX-10	WASTE MANIFOLD for Wako 38mm 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

WAKO 38mm WASTE KITS

VaporSafe™ Closed Systems for solvent containment minimizes leaks, spills, and vapor escape from solvent waste and supply containers. Use VaporSafe™ 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 VaporSafe™ 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.

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

Kit Contents

- 10-port Waste Manifold
- (3) 1/4" NPT Polypropylene Plugs
- (6) 1/4-28 PTFE Plugs
- (1) 1/2 NPT Polypropylene Plug
- (1) Organic Vapor Filter
- (2) 2.2mm OD hard wall tubing connections
- (1) 2.5mm OD hard wall tubing connection
- (3) 1/8" OD hard wall tubing connections
- (2) 1/16" OD hard wall tubing connections
- (3) BARBED TUBING CONNECTION 1/4 ID tubing x 1/4 NPT Polypropylene
- (1) BARBED TUBING CONNECTION 1/8 ID tubing x 1/4 NPT Polypropylene
- (1) BARBED TUBING CONNECTION 3/16 ID tubing x 1/4 NPT Polypropylene
- (1) BARBED TUBING CONNECTION 3/8 ID tubing x 1/4 NPT Polypropylene
- (1) BARB TO BARB Y CONNECTOR with 1/4" (6.25mm) Barbs, Polypropylene
- (1) HARDWALL TUBE EXTENSION includes union connections and 5 feet 1/8 OD PTFE tubing
- (1) FILTER ADAPTER 1/4 NPT x 1/2 NPT polypropylene
- (1) BREAKTHROUGH COLOR INDICATOR for VaporSafe™ organic vapor filter

Container Not Included.



WAK38WP-10

Part #	Description	# Ports	Manifold Material
WAK38WP-10	HPLC WASTE ACCESSORY KIT for Wako 38mm threaded container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28; includes Polypropylene Manifold, Fittings Kit, Exhaust Filter with adapter and color indicator	(1) 1/2 NPT, (3) 1/4 NPT, (6) 1/4-28	PP
WAK38WX-10	HPLC WASTE ACCESSORY KIT for Wako 38mm threaded container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28; includes PTFE Manifold, Fittings Kit, Exhaust Filter with adapter and color indicator	(1) 1/2 NPT, (3) 1/4 NPT, (6) 1/4-28	PTFE

Waste Kits



WM45P-10



WM45P-4

GL45 WASTE CAPS

Vapor Tight Connection

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

Chemical Resistance

Materials of construction include your choice of Polypropylene or PTFE manifold and insert with Polypropylene 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 EF-100 Filter and indicator.

*See the emissions and filter section of our catalog

Manifold Caps

Part #	Description	# Ports	Manifold Material
WM45P-4	WASTE MANIFOLD for GL45 threaded container, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, Polypropylene	(3) 1/4 NPT (1) 1/2 NPT	PP
WM45X-4	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
WM45P-10	WASTE MANIFOLD for GL45 threaded container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28, Polypropylene	(1) 1/2 NPT, (3) 1/4 NPT, (6) 1/4-28	PP
WM45X-10	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

GL45 WASTE KITS

VaporSafe™ Closed Systems for solvent containment minimizes leaks, spills, and vapor escape from solvent waste and supply containers. Use VaporSafe™ 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 VaporSafe™ 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.

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

Kit Contents

- 10-port Waste Manifold
- (3) 1/4" NPT Polypropylene Plugs
- (6) 1/4-28 PTFE Plugs
- (1) 1/2 NPT Polypropylene Plug
- (1) Organic Vapor Filter
- (2) 2.2mm OD hard wall tubing connections
- (1) 2.5mm OD hard wall tubing connection
- (3) 1/8" OD hard wall tubing connections
- (2) 1/16" OD hard wall tubing connections
- (3) BARBED TUBING CONNECTION 1/4 ID tubing x 1/4 NPT Polypropylene
- (1) BARBED TUBING CONNECTION 1/8 ID tubing x 1/4 NPT Polypropylene
- (1) BARBED TUBING CONNECTION 3/16 ID tubing x 1/4 NPT Polypropylene
- (1) BARBED TUBING CONNECTION 3/8 ID tubing x 1/4 NPT Polypropylene
- (1) BARB TO BARB Y CONNECTOR with 1/4" (6.25mm) Barbs, Polypropylene
- (1) HARDWALL TUBE EXTENSION includes union connections and 5 feet 1/8 OD PTFE tubing
- (1) FILTER ADAPTER 1/4 NPT x 1/2 NPT polypropylene
- (1) BREAKTHROUGH COLOR INDICATOR for VaporSafe™ organic vapor filter

Container Not Included.



WAK45P-10

Part #	Description	# Ports	Manifold Material
WAK45P-10	HPLC WASTE ACCESSORY KIT for GL45 threaded container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28; includes Polypropylene Manifold, Fittings Kit, Exhaust Filter with adapter and color indicator	(1) 1/2 NPT, (3) 1/4 NPT, (6) 1/4-28	PP
WAK45X-10	HPLC WASTE ACCESSORY KIT for GL45 threaded container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28; includes PTFE Manifold, Fittings Kit, Exhaust Filter with adapter and color indicator	(1) 1/2 NPT, (3) 1/4 NPT, (6) 1/4-28	PTFE

Waste Kits



WM45DP-10



WM45DP-4

DIN 45 WASTE CAPS

Vapor Tight Connection

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

Chemical Resistance

Materials of construction include your choice of Polypropylene 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 EF-100 Filter and indicator.

*See the emissions and filter section of our catalog

Manifold Caps

Part #	Description	# Ports	Manifold Material
WM45DP-4	WASTE MANIFOLD for DIN 45 threaded container, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, Polypropylene	(3) 1/4 NPT (1) 1/2 NPT	PP
WM45DX-4	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
WM45DP-10	WASTE MANIFOLD for DIN 45 threaded container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28, Polypropylene	(1) 1/2 NPT, (3) 1/4 NPT, (6) 1/4-28	PP
WM45DX-10	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

DIN 45 WASTE KITS

VaporSafe™ Closed Systems for solvent containment minimizes leaks, spills, and vapor escape from solvent waste and supply containers. Use VaporSafe™ 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 VaporSafe™ 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.

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

Kit Contents

- 10-port Waste Manifold
- (3) 1/4" NPT Polypropylene Plugs
- (6) 1/4-28 PTFE Plugs
- (1) 1/2 NPT Polypropylene Plug
- (1) Organic Vapor Filter
- (2) 2.2mm OD hard wall tubing connections
- (1) 2.5mm OD hard wall tubing connection
- (3) 1/8" OD hard wall tubing connections
- (2) 1/16" OD hard wall tubing connections
- (3) BARBED TUBING CONNECTION 1/4 ID tubing x 1/4 NPT Polypropylene
- (1) BARBED TUBING CONNECTION 1/8 ID tubing x 1/4 NPT Polypropylene
- (1) BARBED TUBING CONNECTION 3/16 ID tubing x 1/4 NPT Polypropylene
- (1) BARBED TUBING CONNECTION 3/8 ID tubing x 1/4 NPT Polypropylene
- (1) BARB TO BARB Y CONNECTOR with 1/4" (6.25mm) Barbs, Polypropylene
- (1) HARDWALL TUBE EXTENSION includes union connections and 5 feet 1/8 OD PTFE tubing
- (1) FILTER ADAPTER 1/4 NPT x 1/2 NPT polypropylene
- (1) BREAKTHROUGH COLOR INDICATOR for VaporSafe™ organic vapor filter

Container Not Included.



WAK45DP-10

Part #	Description	# Ports	Manifold Material
WAK45DP-10	HPLC WASTE ACCESSORY KIT for DIN 45 threaded container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28; includes Polypropylene Manifold, Fittings Kit, Exhaust Filter with adapter and color indicator	(1) 1/2 NPT, (3) 1/4 NPT, (6) 1/4-28	PP
WAK45DX-10	HPLC WASTE ACCESSORY KIT for DIN 45 threaded container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28; includes PTFE Manifold, Fittings Kit, Exhaust Filter with adapter and color indicator	(1) 1/2 NPT, (3) 1/4 NPT, (6) 1/4-28	PTFE

Waste Kits



WM50P-10



WM50P-4

DIN 50 WASTE CAPS

Vapor Tight Connection

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

Chemical Resistance

Materials of construction include your choice of Polypropylene 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 EF-100 Filter and indicator.

*See the emissions and filter section of our catalog

Manifold Caps

Part #	Description	# Ports	Manifold Material
WM50P-4	WASTE MANIFOLD for DIN 50 threaded container, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, Polypropylene	(3) 1/4 NPT (1) 1/2 NPT	PP
WM50X-4	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
WM50P-10	WASTE MANIFOLD for DIN 50 threaded container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28, Polypropylene	(1) 1/2 NPT, (3) 1/4 NPT, (6) 1/4-28	PP
WM50X-10	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

DIN 50 WASTE KITS

VaporSafe™ Closed Systems for solvent containment minimizes leaks, spills, and vapor escape from solvent waste and supply containers. Use VaporSafe™ 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 VaporSafe™ 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.

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

Kit Contents

- 10-port Waste Manifold
- (3) 1/4" NPT Polypropylene Plugs
- (6) 1/4-28 PTFE Plugs
- (1) 1/2 NPT Polypropylene Plug
- (1) Organic Vapor Filter
- (2) 2.2mm OD hard wall tubing connections
- (1) 2.5mm OD hard wall tubing connection
- (3) 1/8" OD hard wall tubing connections
- (2) 1/16" OD hard wall tubing connections
- (3) BARBED TUBING CONNECTION 1/4 ID tubing x 1/4 NPT Polypropylene
- (1) BARBED TUBING CONNECTION 1/8 ID tubing x 1/4 NPT Polypropylene
- (1) BARBED TUBING CONNECTION 3/16 ID tubing x 1/4 NPT Polypropylene
- (1) BARBED TUBING CONNECTION 3/8 ID tubing x 1/4 NPT Polypropylene
- (1) BARB TO BARB Y CONNECTOR with 1/4" (6.25mm) Barbs, Polypropylene
- (1) HARDWALL TUBE EXTENSION includes union connections and 5 feet 1/8 OD PTFE tubing
- (1) FILTER ADAPTER 1/4 NPT x 1/2 NPT polypropylene
- (1) BREAKTHROUGH COLOR INDICATOR for VaporSafe™ organic vapor filter

Container Not Included.



Part #	Description	# Ports	Manifold Material
WAK50P-10	HPLC WASTE ACCESSORY KIT for DIN 50 threaded container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28; includes Polypropylene Manifold, Fittings Kit, Exhaust Filter with adapter and color indicator	(1) 1/2 NPT, (3) 1/4 NPT, (6) 1/4-28	PP
WAK50X-10	HPLC WASTE ACCESSORY KIT for DIN 50 threaded container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28; includes PTFE Manifold, Fittings Kit, Exhaust Filter with adapter and color indicator	(1) 1/2 NPT, (3) 1/4 NPT, (6) 1/4-28	PTFE

Waste Kits



WM51P-10



WM51P-4

51mm WASTE CAPS

Vapor Tight Connection

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

Chemical Resistance

Materials of construction include your choice of Polypropylene 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 EF-100 Filter and indicator.

*See the emissions and filter section of our catalog

Manifold Caps

Part #	Description	# Ports	Manifold Material
WM51P-4	WASTE MANIFOLD for 51mm threaded container, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, Polypropylene	(3) 1/4 NPT (1) 1/2 NPT	PP
WM51X-4	WASTE MANIFOLD for 51mm threaded container, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, PTFE	(3) 1/4 NPT (1) 1/2 NPT	PTFE
WM51P-10	WASTE MANIFOLD for 51mm threaded container, 10-port with (3) 1/4" NPT, (1) 1/2" NPT, (6) 1/4-28, Polypropylene	(1) 1/2 NPT (3) 1/4 NPT (6) 1/4-28	PP
WM51X-10	WASTE MANIFOLD for 51mm threaded container, 10-port with (3) 1/4" NPT, (1) 1/2" NPT, (6) 1/4-28, PTFE	(1) 1/2 NPT (3) 1/4 NPT (6) 1/4-28	PTFE

51mm WASTE KITS

VaporSafe™ Closed Systems for solvent containment minimizes leaks, spills, and vapor escape from solvent waste and supply containers. Use VaporSafe™ 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 VaporSafe™ 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.

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

Kit Contents

- 10-port Waste Manifold
- (3) 1/4" NPT Polypropylene Plugs
- (6) 1/4-28 PTFE Plugs
- (1) 1/2 NPT Polypropylene Plug
- (1) Organic Vapor Filter
- (2) 2.2mm OD hard wall tubing connections
- (1) 2.5mm OD hard wall tubing connection
- (3) 1/8" OD hard wall tubing connections
- (2) 1/16" OD hard wall tubing connections
- (3) BARBED TUBING CONNECTION 1/4 ID tubing x 1/4 NPT Polypropylene
- (1) BARBED TUBING CONNECTION 1/8 ID tubing x 1/4 NPT Polypropylene
- (1) BARBED TUBING CONNECTION 3/16 ID tubing x 1/4 NPT Polypropylene
- (1) BARBED TUBING CONNECTION 3/8 ID tubing x 1/4 NPT Polypropylene
- (1) BARB TO BARB Y CONNECTOR with 1/4" (6.25mm) Barbs, Polypropylene
- (1) HARDWALL TUBE EXTENSION includes union connections and 5 feet 1/8 OD PTFE tubing
- (1) FILTER ADAPTER 1/4 NPT x 1/2 NPT polypropylene
- (1) BREAKTHROUGH COLOR INDICATOR for VaporSafe™ organic vapor filter

Container Not Included.



WAK51P-10

Part #	Description	# Ports	Manifold Material
WAK51P-10	HPLC WASTE ACCESSORY KIT for 51mm threaded container, 10-port; includes Polypropylene Manifold, Fittings Kit, Exhaust Filter with adapter and color indicator	(1) 1/2 NPT (3) 1/4 NPT (6) 1/4-28	PP
WAK51X-10	HPLC WASTE ACCESSORY KIT for 51mm threaded container, 10-port; includes PTFE Manifold, Fittings Kit, Exhaust Filter with adapter and color indicator	(1) 1/2 NPT (3) 1/4 NPT (6) 1/4-28	PTFE

Waste Kits



WM53P-10



WM53P-4

NALGENE 53B WASTE CAPS

Vapor Tight Connection

Waste manifolds are designed to fit standard 53B threaded lab bottles.

Chemical Resistance

Materials of construction include your choice of Polypropylene or PTFE manifold and insert with Polypropylene 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 EF-100 Filter and indicator.

*See the emissions and filter section of our catalog

Manifold Caps

Part #	Description	# Ports	Manifold Material
WM53P-4	WASTE MANIFOLD for 53B threaded container, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, Polypropylene	(3) 1/4 NPT (1) 1/2 NPT	PP
WM53X-4	WASTE MANIFOLD for 53B threaded container, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, PTFE	(3) 1/4 NPT (1) 1/2 NPT	PTFE
WM53P-10	WASTE MANIFOLD for 53B threaded container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28, Polypropylene	(1) 1/2 NPT, (3) 1/4 NPT, (6) 1/4-28	PP
WM53X-10	WASTE MANIFOLD for 53B 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

NALGENE 53B WASTE KITS

VaporSafe™ Closed Systems for solvent containment minimizes leaks, spills, and vapor escape from solvent waste and supply containers. Use VaporSafe™ 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 VaporSafe™ 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.

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

Kit Contents

- 10-port Waste Manifold
- (3) 1/4" NPT Polypropylene Plugs
- (6) 1/4-28 PTFE Plugs
- (1) 1/2 NPT Polypropylene Plug
- (1) Organic Vapor Filter
- (2) 2.2mm OD hard wall tubing connections
- (1) 2.5mm OD hard wall tubing connection
- (3) 1/8" OD hard wall tubing connections
- (2) 1/16" OD hard wall tubing connections
- (3) BARBED TUBING CONNECTION 1/4 ID tubing x 1/4 NPT Polypropylene
- (1) BARBED TUBING CONNECTION 1/8 ID tubing x 1/4 NPT Polypropylene
- (1) BARBED TUBING CONNECTION 3/16 ID tubing x 1/4 NPT Polypropylene
- (1) BARBED TUBING CONNECTION 3/8 ID tubing x 1/4 NPT Polypropylene
- (1) BARB TO BARB Y CONNECTOR with 1/4" (6.25mm) Barbs, Polypropylene
- (1) HARDWALL TUBE EXTENSION includes union connections and 5 feet 1/8 OD PTFE tubing
- (1) FILTER ADAPTER 1/4 NPT x 1/2 NPT polypropylene
- (1) BREAKTHROUGH COLOR INDICATOR for VaporSafe™ organic vapor filter

Container Not Included.



WAK53P-10

Part #	Description	# Ports	Manifold Material
WAK53P-10	HPLC WASTE ACCESSORY KIT for 53B threaded container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28; includes Polypropylene Manifold, Fittings Kit, Exhaust Filter with adapter and color indicator	(1) 1/2 NPT, (3) 1/4 NPT, (6) 1/4-28	PP
WAK53X-10	HPLC WASTE ACCESSORY KIT for 53B threaded container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28; includes PTFE Manifold, Fittings Kit, Exhaust Filter with adapter and color indicator	(1) 1/2 NPT, (3) 1/4 NPT, (6) 1/4-28	PTFE

Waste Kits



WM60P-10



WM60P-4

DIN 60 WASTE CAPS

Vapor Tight Connection

Waste manifolds are designed to fit standard DIN 60 threaded containers.

Chemical Resistance

Materials of construction include your choice of Polypropylene 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 EF-100 Filter and indicator.

*See the emissions and filter section of our catalog

Manifold Caps

Part #	Description	# Ports	Manifold Material
WM60P-4	WASTE MANIFOLD for DIN 60 threaded container, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, Polypropylene	(3) 1/4 NPT, (1) 1/2 NPT	PP
WM60X-4	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
WM60P-10	WASTE MANIFOLD for DIN 60 threaded container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28, Polypropylene	(1) 1/2 NPT, (3) 1/4 NPT, (6) 1/4-28	PP
WM60X-10	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

DIN 60 WASTE KITS

VaporSafe™ Closed Systems for solvent containment minimizes leaks, spills, and vapor escape from solvent waste and supply containers. Use VaporSafe™ 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 VaporSafe™ 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.

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

Kit Contents

- 10-port Waste Manifold
- (3) 1/4" NPT Polypropylene Plugs
- (6) 1/4-28 PTFE Plugs
- (1) 1/2 NPT Polypropylene Plug
- (1) Organic Vapor Filter
- (2) 2.2mm OD hard wall tubing connections
- (1) 2.5mm OD hard wall tubing connection
- (3) 1/8" OD hard wall tubing connections
- (2) 1/16" OD hard wall tubing connections
- (3) BARBED TUBING CONNECTION 1/4 ID tubing x 1/4 NPT Polypropylene
- (1) BARBED TUBING CONNECTION 1/8 ID tubing x 1/4 NPT Polypropylene
- (1) BARBED TUBING CONNECTION 3/16 ID tubing x 1/4 NPT Polypropylene
- (1) BARBED TUBING CONNECTION 3/8 ID tubing x 1/4 NPT Polypropylene
- (1) BARB TO BARB Y CONNECTOR with 1/4" (6.25mm) Barbs, Polypropylene
- (1) HARDWALL TUBE EXTENSION includes union connections and 5 feet 1/8 OD PTFE tubing
- (1) FILTER ADAPTER 1/4 NPT x 1/2 NPT polypropylene
- (1) BREAKTHROUGH COLOR INDICATOR for VaporSafe™ organic vapor filter

Container Not Included.



WAK60P-10

Part #	Description	# Ports	Manifold Material
WAK60P-10	HPLC WASTE ACCESSORY KIT for DIN 60 threaded container, 10-port; includes Polypropylene Manifold, Fittings Kit, Exhaust Filter with adapter and color indicator	(1) 1/2 NPT, (3) 1/4 NPT, (6) 1/4-28	PP
WAK60X-10	HPLC WASTE ACCESSORY KIT for DIN 60 threaded container, 10-port; includes PTFE Manifold, Fittings Kit, Exhaust Filter with adapter and color indicator	(1) 1/2 NPT, (3) 1/4 NPT, (6) 1/4-28	PTFE

Waste Kits



WM61P-10

61mm WASTE CAPS

Vapor Tight Connection

Waste manifolds are designed to fit standard 61mm threaded containers.

Chemical Resistance

Materials of construction include your choice of Polypropylene 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 EF-100 Filter and indicator.

*See the emissions and filter section of our catalog



WM61P-4

Manifold Caps

Part #	Description	# Ports	Manifold Material
WM61P-4	WASTE MANIFOLD for 61mm threaded container, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, PP Manifold	(3) 1/4 NPT, (1) 1/2 NPT	PP
WM61X-4	WASTE MANIFOLD for 61mm threaded container, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, PTFE	(3) 1/4 NPT, (1) 1/2 NPT	PTFE
WM61P-10	WASTE MANIFOLD for 61mm threaded container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28, Polypropylene	(1) 1/2 NPT, (3) 1/4 NPT, (6) 1/4-28	PP
WM61X-10	WASTE MANIFOLD for 61mm 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

61mm WASTE KITS

VaporSafe™ Closed Systems for solvent containment minimizes leaks, spills, and vapor escape from solvent waste and supply containers. Use VaporSafe™ 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 VaporSafe™ 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.

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

Kit Contents

- 10-port Waste Manifold
- (3) 1/4" NPT Polypropylene Plugs
- (6) 1/4-28 PTFE Plugs
- (1) 1/2 NPT Polypropylene Plug
- (1) Organic Vapor Filter
- (2) 2.2mm OD hard wall tubing connections
- (1) 2.5mm OD hard wall tubing connection
- (3) 1/8" OD hard wall tubing connections
- (2) 1/16" OD hard wall tubing connections
- (3) BARBED TUBING CONNECTION 1/4 ID tubing x 1/4 NPT Polypropylene
- (1) BARBED TUBING CONNECTION 1/8 ID tubing x 1/4 NPT Polypropylene
- (1) BARBED TUBING CONNECTION 3/16 ID tubing x 1/4 NPT Polypropylene
- (1) BARBED TUBING CONNECTION 3/8 ID tubing x 1/4 NPT Polypropylene
- (1) BARB TO BARB Y CONNECTOR with 1/4" (6.25mm) Barbs, Polypropylene
- (1) HARDWALL TUBE EXTENSION includes union connections and 5 feet 1/8 OD PTFE tubing
- (1) FILTER ADAPTER 1/4 NPT x 1/2 NPT polypropylene
- (1) BREAKTHROUGH COLOR INDICATOR for VaporSafe™ organic vapor filter

Container Not Included.



WAK61P-10

Part #	Description	# Ports	Manifold Material
WAK61P-10	HPLC WASTE ACCESSORY KIT for 61mm threaded container, 10-port; includes Polypropylene Manifold, Fittings Kit, Exhaust Filter with adapter and color indicator	(1) 1/2 NPT, (3) 1/4 NPT, (6) 1/4-28	PP
WAK61X-10	HPLC WASTE ACCESSORY KIT for 61mm threaded container, 10-port; includes PTFE Manifold, Fittings Kit, Exhaust Filter with adapter and color indicator	(1) 1/2 NPT, (3) 1/4 NPT, (6) 1/4-28	PTFE

Waste Kits



WM63P-10



WM63P-4

63mm WASTE CAPS (RIEKE/NOWPAK)

Vapor Tight Connection

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

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

Chemical Resistance

Materials of construction include your choice of Polypropylene 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 EF-100 Filter and indicator.

*See the emissions and filter section of our catalog

Manifold Caps

Part #	Description	# Ports	Manifold Material
WM63P-4	WASTE MANIFOLD for 63mm threaded container, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, PP Manifold	(3) 1/4 NPT (1) 1/2 NPT	PP
WM63X-4	WASTE MANIFOLD for 63mm threaded container, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, PTFE	(3) 1/4 NPT (1) 1/2 NPT	PTFE
WM63P-10	WASTE MANIFOLD for 63mm threaded container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28, Polypropylene	(1) 1/2 NPT, (3) 1/4 NPT, (6) 1/4-28	PP
WM63X-10	WASTE MANIFOLD for 63mm 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

63mm WASTE KITS (RIEKE/NOWPAK)

VaporSafe™ Closed Systems for solvent containment minimizes leaks, spills, and vapor escape from solvent waste and supply containers. Use VaporSafe™ 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 VaporSafe™ 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.

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

Kit Contents

- 10-port Waste Manifold
- (3) 1/4" NPT Polypropylene Plugs
- (6) 1/4-28 PTFE Plugs
- (1) 1/2 NPT Polypropylene Plug
- (1) Organic Vapor Filter
- (2) 2.2mm OD hard wall tubing connections
- (1) 2.5mm OD hard wall tubing connection
- (3) 1/8" OD hard wall tubing connections
- (2) 1/16" OD hard wall tubing connections
- (3) BARBED TUBING CONNECTION 1/4 ID tubing x 1/4 NPT Polypropylene
- (1) BARBED TUBING CONNECTION 1/8 ID tubing x 1/4 NPT Polypropylene
- (1) BARBED TUBING CONNECTION 3/16 ID tubing x 1/4 NPT Polypropylene
- (1) BARBED TUBING CONNECTION 3/8 ID tubing x 1/4 NPT Polypropylene
- (1) BARB TO BARB Y CONNECTOR with 1/4" (6.25mm) Barbs, Polypropylene
- (1) HARDWALL TUBE EXTENSION includes union connections and 5 feet 1/8 OD PTFE tubing
- (1) FILTER ADAPTER 1/4 NPT x 1/2 NPT polypropylene
- (1) BREAKTHROUGH COLOR INDICATOR for VaporSafe™ organic vapor filter

Container Not Included.



WAK63P-10

Part #	Description	# Ports	Manifold Material
WAK63P-10	HPLC WASTE ACCESSORY KIT for 63mm threaded container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28; includes Polypropylene Manifold, Fittings Kit, Exhaust Filter with adapter and color indicator	(1) 1/2 NPT, (3) 1/4 NPT, (6) 1/4-28	PP
WAK63X-10	HPLC WASTE ACCESSORY KIT for 63mm threaded container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28; includes PTFE Manifold, Fittings Kit, Exhaust Filter with adapter and color indicator	(1) 1/2 NPT, (3) 1/4 NPT, (6) 1/4-28	PTFE

Waste Kits



WM70P-10



WM70P-4

70mm WASTE CAPS (8TPI RIEKE/HEDWIN)

Vapor Tight Connection

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

Note: Please enquire for 70mm 6TPI options.

Chemical Resistance

Materials of construction include your choice of Polypropylene 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 EF-100 Filter and indicator.

*See the emissions and filter section of our catalog

Manifold Caps

Part #	Description	# Ports	Manifold Material
WM70P-4	WASTE MANIFOLD for 70mm threaded Hedwin/Rieke container, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, Polypropylene	(3) 1/4 NPT, (1) 1/2 NPT	PP
WM70X-4	WASTE MANIFOLD for 70mm threaded Hedwin/Rieke container, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, PTFE	(3) 1/4 NPT, (1) 1/2 NPT	PTFE
WM70P-10	WASTE MANIFOLD for 70mm threaded Hedwin/Rieke container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28, Polypropylene	(1) 1/2 NPT, (3) 1/4 NPT, (6) 1/4-28	PP
WM70X-10	WASTE MANIFOLD for 70mm threaded Hedwin/Rieke 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

70mm WASTE CAPS (8TPI RIEKE/HEDWIN)

VaporSafe™ Closed Systems for solvent containment minimizes leaks, spills, and vapor escape from solvent waste and supply containers. Use VaporSafe™ 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 VaporSafe™ 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.

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

Kit Contents

- 10-port Waste Manifold
- (3) 1/4" NPT Polypropylene Plugs
- (6) 1/4-28 PTFE Plugs
- (1) 1/2 NPT Polypropylene Plug
- (1) Organic Vapor Filter
- (2) 2.2mm OD hard wall tubing connections
- (1) 2.5mm OD hard wall tubing connection
- (3) 1/8" OD hard wall tubing connections
- (2) 1/16" OD hard wall tubing connections
- (3) BARBED TUBING CONNECTION 1/4 ID tubing x 1/4 NPT Polypropylene
- (1) BARBED TUBING CONNECTION 1/8 ID tubing x 1/4 NPT Polypropylene
- (1) BARBED TUBING CONNECTION 3/16 ID tubing x 1/4 NPT Polypropylene
- (1) BARBED TUBING CONNECTION 3/8 ID tubing x 1/4 NPT Polypropylene
- (1) BARB TO BARB Y CONNECTOR with 1/4" (6.25mm) Barbs, Polypropylene
- (1) HARDWALL TUBE EXTENSION includes union connections and 5 feet 1/8 OD PTFE tubing
- (1) FILTER ADAPTER 1/4 NPT x 1/2 NPT polypropylene
- (1) BREAKTHROUGH COLOR INDICATOR for VaporSafe™ organic vapor filter

Container Not Included.



WAK70P-10

Part #	Description	# Ports	Manifold Material
WAK70P-10	HPLC WASTE ACCESSORY KIT for 70mm threaded container, 10-port; includes Polypropylene Manifold, Fittings Kit, Exhaust Filter with adapter and color indicator	(1) 1/2 NPT, (3) 1/4 NPT, (6) 1/4-28	PP
WAK70X-10	HPLC WASTE ACCESSORY KIT for 70mm threaded container, 10-port; includes PTFE Manifold, Fittings Kit, Exhaust Filter with adapter and color indicator	(1) 1/2 NPT, (3) 1/4 NPT, (6) 1/4-28	PTFE

Waste Kits



WM70NP-10



WM70NP-4

70mm WASTE CAPS (NALGENE)

Vapor Tight Connection

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

Chemical Resistance

Materials of construction include your choice of Polypropylene or PTFE manifold and insert with Polypropylene 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 EF-100 Filter and indicator.

*See the emissions and filter section of our catalog

Manifold Caps

Part #	Description	# Ports	Manifold Material
WM70NP-4	WASTE MANIFOLD for 70mm threaded Nalgene container, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, Polypropylene	(3) 1/4 NPT (1) 1/2 NPT	PP
WM70NX-4	WASTE MANIFOLD for 70mm threaded Nalgene container, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, PTFE	(3) 1/4 NPT (1) 1/2 NPT	PTFE
WM70NP-10	WASTE MANIFOLD for 70mm threaded Nalgene container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28, Polypropylene	(1) 1/2 NPT, (3) 1/4 NPT, (6) 1/4-28	PP
WM70NX-10	WASTE MANIFOLD for 70mm 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

70mm WASTE KITS (NALGENE)

VaporSafe™ Closed Systems for solvent containment minimizes leaks, spills, and vapor escape from solvent waste and supply containers. Use VaporSafe™ 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 VaporSafe™ 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.

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

Kit Contents

- 10-port Waste Manifold
- (3) 1/4" NPT Polypropylene Plugs
- (6) 1/4-28 PTFE Plugs
- (1) 1/2 NPT Polypropylene Plug
- (1) Organic Vapor Filter
- (2) 2.2mm OD hard wall tubing connections
- (1) 2.5mm OD hard wall tubing connection
- (3) 1/8" OD hard wall tubing connections
- (2) 1/16" OD hard wall tubing connections
- (3) BARBED TUBING CONNECTION 1/4 ID tubing x 1/4 NPT Polypropylene
- (1) BARBED TUBING CONNECTION 1/8 ID tubing x 1/4 NPT Polypropylene
- (1) BARBED TUBING CONNECTION 3/16 ID tubing x 1/4 NPT Polypropylene
- (1) BARBED TUBING CONNECTION 3/8 ID tubing x 1/4 NPT Polypropylene
- (1) BARB TO BARB Y CONNECTOR with 1/4" (6.25mm) Barbs, Polypropylene
- (1) HARDWALL TUBE EXTENSION includes union connections and 5 feet 1/8 OD PTFE tubing
- (1) FILTER ADAPTER 1/4 NPT x 1/2 NPT polypropylene
- (1) BREAKTHROUGH COLOR INDICATOR for VaporSafe™ organic vapor filter

Container Not Included.



WAK70NP-10

Part #	Description	# Ports	Manifold Material
WAK70NP-10	HPLC WASTE ACCESSORY KIT for 70mm threaded container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28; includes Polypropylene Manifold, Fittings Kit, Exhaust Filter with adapter and color indicator	(1) 1/2 NPT, (3) 1/4 NPT, (6) 1/4-28	PP
WAK70NX-10	HPLC WASTE ACCESSORY KIT for 70mm threaded container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28; includes PTFE Manifold, Fittings Kit, Exhaust Filter with adapter and color indicator	(1) 1/2 NPT, (3) 1/4 NPT, (6) 1/4-28	PTFE

Waste Kits



WM80P-10



WM80P-4

GL80 WASTE CAPS

Vapor Tight Connection

Waste manifolds are designed to fit standard GL80 threaded containers.

Chemical Resistance

Materials of construction include your choice of Polypropylene or PTFE manifold and insert with Polypropylene 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 EF-100 Filter and indicator.

*See the emissions and filter section of our catalog

Manifold Caps

Part #	Description	# Ports	Manifold Material
WM80P-4	WASTE MANIFOLD for GL80 threaded container, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, Polypropylene	(3) 1/4 NPT (1) 1/2 NPT	PP
WM80X-4	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
WM80P-10	WASTE MANIFOLD for GL80 threaded container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28, Polypropylene	(1) 1/2 NPT (3) 1/4 NPT (6) 1/4-28	PP
WM80X-10	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

GL80 WASTE KITS

VaporSafe™ Closed Systems for solvent containment minimizes leaks, spills, and vapor escape from solvent waste and supply containers. Use VaporSafe™ 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 VaporSafe™ 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.

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

Kit Contents

- 10-port Waste Manifold
- (3) 1/4" NPT Polypropylene Plugs
- (6) 1/4-28 PTFE Plugs
- (1) 1/2 NPT Polypropylene Plug
- (1) Organic Vapor Filter
- (2) 2.2mm OD hard wall tubing connections
- (1) 2.5mm OD hard wall tubing connection
- (3) 1/8" OD hard wall tubing connections
- (2) 1/16" OD hard wall tubing connections
- (3) BARBED TUBING CONNECTION 1/4 ID tubing x 1/4 NPT Polypropylene
- (1) BARBED TUBING CONNECTION 1/8 ID tubing x 1/4 NPT Polypropylene
- (1) BARBED TUBING CONNECTION 3/16 ID tubing x 1/4 NPT Polypropylene
- (1) BARBED TUBING CONNECTION 3/8 ID tubing x 1/4 NPT Polypropylene
- (1) BARB TO BARB Y CONNECTOR with 1/4" (6.25mm) Barbs, Polypropylene
- (1) HARDWALL TUBE EXTENSION includes union connections and 5 feet 1/8 OD PTFE tubing
- (1) FILTER ADAPTER 1/4 NPT x 1/2 NPT polypropylene
- (1) BREAKTHROUGH COLOR INDICATOR for VaporSafe™ organic vapor filter

Container Not Included.



WAK80P-10

Part #	Description	# Ports	Manifold Material
WAK80P-10	HPLC WASTE ACCESSORY KIT for GL80 threaded container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28; includes Polypropylene Manifold, Fittings Kit, Exhaust Filter with adapter and color indicator	(1) 1/2 NPT, (3) 1/4 NPT, (6) 1/4-28	PP
WAK80X-10	HPLC WASTE ACCESSORY KIT for GL80 threaded container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28; includes PTFE Manifold, Fittings Kit, Exhaust Filter with adapter and color indicator	(1) 1/2 NPT, (3) 1/4 NPT, (6) 1/4-28	PTFE

Waste Kits



WM83P-10



WM83P-4

NALGENE 83B WASTE CAPS

Vapor Tight Connection

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

Chemical Resistance

Materials of construction include your choice of Polypropylene or PTFE manifold and insert with Polypropylene 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 EF-100 Filter and indicator.

*See the emissions and filter section of our catalog

Manifold Caps

Part #	Description	# Ports	Manifold Material
WM83P-4	WASTE MANIFOLD for 83B threaded container, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, Polypropylene	(3) 1/4 NPT, (1) 1/2 NPT	PP
WM83X-4	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
WM83P-10	WASTE MANIFOLD for 83B threaded container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28, Polypropylene	(1) 1/2 NPT, (3) 1/4 NPT, (6) 1/4-28	PP
WM83X-10	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

NALGENE 83B WASTE KITS

VaporSafe™ Closed Systems for solvent containment minimizes leaks, spills, and vapor escape from solvent waste and supply containers. Use VaporSafe™ 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 VaporSafe™ 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.

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

Kit Contents

- 10-port Waste Manifold
- (3) 1/4" NPT Polypropylene Plugs
- (6) 1/4-28 PTFE Plugs
- (1) 1/2 NPT Polypropylene Plug
- (1) Organic Vapor Filter
- (2) 2.2mm OD hard wall tubing connections
- (1) 2.5mm OD hard wall tubing connection
- (3) 1/8" OD hard wall tubing connections
- (2) 1/16" OD hard wall tubing connections
- (3) BARBED TUBING CONNECTION 1/4 ID tubing x 1/4 NPT Polypropylene
- (1) BARBED TUBING CONNECTION 1/8 ID tubing x 1/4 NPT Polypropylene
- (1) BARBED TUBING CONNECTION 3/16 ID tubing x 1/4 NPT Polypropylene
- (1) BARBED TUBING CONNECTION 3/8 ID tubing x 1/4 NPT Polypropylene
- (1) BARB TO BARB Y CONNECTOR with 1/4" (6.25mm) Barbs, Polypropylene
- (1) HARDWALL TUBE EXTENSION includes union connections and 5 feet 1/8 OD PTFE tubing
- (1) FILTER ADAPTER 1/4 NPT x 1/2 NPT polypropylene
- (1) BREAKTHROUGH COLOR INDICATOR for VaporSafe™ organic vapor filter

Container Not Included.



Part #	Description	# Ports	Manifold Material
WAK83P-10	HPLC WASTE ACCESSORY KIT for 83B threaded container, 10-port; includes Polypropylene Manifold, Fittings Kit, Exhaust Filter with adapter and color indicator	(1) 1/2 NPT, (3) 1/4 NPT, (6) 1/4-28	PP
WAK83X-10	HPLC WASTE ACCESSORY KIT for 83B threaded container, 10-port; includes PTFE Manifold, Fittings Kit, Exhaust Filter with adapter and color indicator	(1) 1/2 NPT, (3) 1/4 NPT, (6) 1/4-28	PTFE

Waste Kits



WM100P-10



WM100P-4

NALGENE 100-415 WASTE CAPS

Vapor Tight Connection

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

Chemical Resistance

Materials of construction include your choice of Polypropylene or PTFE manifold and insert with Polypropylene 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 EF-100 Filter and indicator.

*See the emissions and filter section of our catalog

Manifold Caps

Part #	Description	# Ports	Manifold Material
WM100P-4	WASTE MANIFOLD for 100-415 threaded container, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, Polypropylene	(3) 1/4 NPT (1) 1/2 NPT	PP
WM100X-4	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
WM100P-10	WASTE MANIFOLD for 100-415 threaded container, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28, Polypropylene	(1) 1/2 NPT (3) 1/4 NPT (6) 1/4-28	PP
WM100X-10	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

NALGENE 100-415 WASTE KITS

VaporSafe™ Closed Systems for solvent containment minimizes leaks, spills, and vapor escape from solvent waste and supply containers. Use VaporSafe™ 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 VaporSafe™ 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.

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

Kit Contents

- 10-port Waste Manifold
- (3) 1/4" NPT Polypropylene Plugs
- (6) 1/4-28 PTFE Plugs
- (1) 1/2 NPT Polypropylene Plug
- (1) Organic Vapor Filter
- (2) 2.2mm OD hard wall tubing connections
- (1) 2.5mm OD hard wall tubing connection
- (3) 1/8" OD hard wall tubing connections
- (2) 1/16" OD hard wall tubing connections
- (3) BARBED TUBING CONNECTION 1/4 ID tubing x 1/4 NPT Polypropylene
- (1) BARBED TUBING CONNECTION 1/8 ID tubing x 1/4 NPT Polypropylene
- (1) BARBED TUBING CONNECTION 3/16 ID tubing x 1/4 NPT Polypropylene
- (1) BARBED TUBING CONNECTION 3/8 ID tubing x 1/4 NPT Polypropylene
- (1) BARB TO BARB Y CONNECTOR with 1/4" (6.25mm) Barbs, Polypropylene
- (1) HARDWALL TUBE EXTENSION includes union connections and 5 feet 1/8 OD PTFE tubing
- (1) FILTER ADAPTER 1/4 NPT x 1/2 NPT polypropylene
- (1) BREAKTHROUGH COLOR INDICATOR for VaporSafe™ organic vapor filter

Container Not Included.



WAK100P-10

Part #	Description	# Ports	Manifold Material
WAK100P-10	HPLC WASTE ACCESSORY KIT for 100-415 threaded container, 10-port; includes Polypropylene Manifold, Fittings Kit, Exhaust Filter with adapter and color indicator	(1) 1/2 NPT, (3) 1/4 NPT, (6) 1/4-28	PP
WAK100X-10	HPLC WASTE ACCESSORY KIT for 100-415 threaded container, 10-port; includes PTFE Manifold, Fittings Kit, Exhaust Filter with adapter and color indicator	(1) 1/2 NPT, (3) 1/4 NPT, (6) 1/4-28	PTFE

Waste Kits



WMJTPS-10

JUSTRITE® CONTAINER QUICK DISCONNECT WASTE CAPS

Vapor Tight Connection

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

Chemical Resistance

Materials of construction include your choice of Polypropylene or PTFE manifold with Polypropylene or stainless steel 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 VaporSafe emissions filter to the separate exhaust port quick disconnect using the appropriate adapter.

*See the emissions and filter section of our catalog



WMJTTP-10

Manifold Caps

Part #	Description	# Ports	Manifold Material
WMJTTP-4	WASTE MANIFOLD for Justrite container, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, Polypropylene Manifold, Polypropylene disconnect	(3) 1/4 NPT, (1) 1/2 NPT	PP
WMJTPS-4	WASTE MANIFOLD for Justrite container, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, Polypropylene Manifold, Stainless Steel disconnect	(3) 1/4 NPT, (1) 1/2 NPT	PP
WMJTXS-4	WASTE MANIFOLD for Justrite container, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, PTFE Manifold, Stainless Steel disconnect	(3) 1/4 NPT, (1) 1/2 NPT	PTFE
WMJTTP-10	WASTE MANIFOLD for Justrite container container, 10-port with (3) 1/4" NPT, (1) 1/2" NPT, (6) 1/4-28, Polypropylene Manifold, Polypropylene disconnect	(1) 1/2 NPT, (3) 1/4 NPT, (6) 1/4-28	PP
WMJTPS-10	WASTE MANIFOLD for Justrite container container, 10-port with (3) 1/4" NPT, (1) 1/2" NPT, (6) 1/4-28, Polypropylene Manifold, Stainless Steel disconnect	(1) 1/2 NPT, (3) 1/4 NPT, (6) 1/4-28	PP
WMJTXS-10	WASTE MANIFOLD for Justrite container container, 10-port with (3) 1/4" NPT, (1) 1/2" NPT, (6) 1/4-28, PTFE Manifold, Stainless Steel disconnect	(1) 1/2 NPT, (3) 1/4 NPT, (6) 1/4-28	PTFE

JUSTRITE® CONTAINER QUICK DISCONNECT WASTE KITS

VaporSafe™ Closed Systems for solvent containment minimizes leaks, spills, and vapor escape from solvent waste and supply containers. Use VaporSafe™ 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 VaporSafe™ 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.

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

Kit Contents

- 10-port Waste Manifold
- (3) 1/4" NPT Polypropylene Plugs
- (6) 1/4-28 PTFE Plugs
- (1) 1/2 NPT Polypropylene Plug
- (1) Organic Vapor Filter
- (2) 2.2mm OD hard wall tubing connections
- (1) 2.5mm OD hard wall tubing connection
- (3) 1/8" OD hard wall tubing connections
- (2) 1/16" OD hard wall tubing connections
- (3) BARBED TUBING CONNECTION 1/4 ID tubing x 1/4 NPT Polypropylene
- (1) BARBED TUBING CONNECTION 1/8 ID tubing x 1/4 NPT Polypropylene
- (1) BARBED TUBING CONNECTION 3/16 ID tubing x 1/4 NPT Polypropylene
- (1) BARBED TUBING CONNECTION 3/8 ID tubing x 1/4 NPT Polypropylene
- (1) BARB TO BARB Y CONNECTOR with 1/4" (6.25mm) Barbs, Polypropylene
- (1) HARDWALL TUBE EXTENSION includes union connections and 5 feet 1/8 OD PTFE tubing
- (1) FILTER ADAPTER 1/4 NPT x 1/2 NPT polypropylene
- (1) BREAKTHROUGH COLOR INDICATOR for VaporSafe™ organic vapor filter

Container Not Included.



WAKJTPS-10

Part #	Description	# Ports	Manifold Material
WAKJTPP-10	HPLC WASTE ACCESSORY KIT for Justrite container, 10-port; includes Polypropylene Manifold, Polypropylene Disconnect, Fittings Kit, Exhaust Filter with adapter and color indicator	(1) 1/2 NPT, (3) 1/4 NPT, (6) 1/4-28	PP
WAKJTPS-10	HPLC WASTE ACCESSORY KIT for Justrite container, 10-port; includes Polypropylene Manifold, Stainless Steel Disconnect, Fittings Kit, Exhaust Filter with adapter and color indicator	(1) 1/2 NPT, (3) 1/4 NPT, (6) 1/4-28	PP
WAKJTXS-10	HPLC WASTE ACCESSORY KIT for Justrite container, 10-port; includes PTFE Manifold, Stainless Steel Disconnect, Fittings Kit, Exhaust Filter with adapter and color indicator	(1) 1/2 NPT, (3) 1/4 NPT, (6) 1/4-28	PTFE

Waste Kits



DMFTP-10

DRUM WASTE CAPS (2" FINE THREAD)

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 Polypropylene or PTFE manifold with Polypropylene 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 EF-100 Filter and indicator.

*See the emissions and filter section of our catalog

Manifold Caps

Part #	Description	# Ports	Manifold Material
DMFTP-4	WASTE MANIFOLD for Drum 2" Fine thread, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, Polypropylene	(3) 1/4 NPT, (1) 1/2 NPT	PP
DMFTX-4	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
DMFTP-10	WASTE MANIFOLD for Drum 2" Fine thread, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28, Polypropylene	(1) 1/2 NPT, (3) 1/4 NPT, (6) 1/4-28	PP
DMFTX-10	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

DRUM WASTE KITS (2" FINE THREAD)

VaporSafe™ Closed Systems for solvent containment minimizes leaks, spills, and vapor escape from solvent waste and supply containers. Use VaporSafe™ 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 VaporSafe™ 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.

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

Kit Contents

- 10-port Waste Manifold
- (3) 1/4" NPT Polypropylene Plugs
- (6) 1/4-28 PTFE Plugs
- (1) 1/2 NPT Polypropylene Plug
- (1) Organic Vapor Filter
- (2) 2.2mm OD hard wall tubing connections
- (1) 2.5mm OD hard wall tubing connection
- (3) 1/8" OD hard wall tubing connections
- (2) 1/16" OD hard wall tubing connections
- (3) BARBED TUBING CONNECTION 1/4 ID tubing x 1/4 NPT Polypropylene
- (1) BARBED TUBING CONNECTION 1/8 ID tubing x 1/4 NPT Polypropylene
- (1) BARBED TUBING CONNECTION 3/16 ID tubing x 1/4 NPT Polypropylene
- (1) BARBED TUBING CONNECTION 3/8 ID tubing x 1/4 NPT Polypropylene
- (1) BARB TO BARB Y CONNECTOR with 1/4" (6.25mm) Barbs, Polypropylene
- (1) HARDWALL TUBE EXTENSION includes union connections and 5 feet 1/8 OD PTFE tubing
- (1) FILTER ADAPTER 1/4 NPT x 1/2 NPT polypropylene
- (1) BREAKTHROUGH COLOR INDICATOR for VaporSafe™ organic vapor filter

Container Not Included.



WAKDMFP-10

Part #	Description	# Ports	Manifold Material
WAKDMFP-10	HPLC WASTE ACCESSORY KIT for Drum 2" Fine thread, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28; includes Polypropylene Manifold, Fittings Kit, Exhaust Filter with adapter and color indicator	(1) 1/2 NPT, (3) 1/4 NPT, (6) 1/4-28	PP
WAKDMFX-10	HPLC WASTE ACCESSORY KIT for Drum 2" Fine thread, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28; includes PTFE Manifold, Fittings Kit, Exhaust Filter with adapter and color indicator	(1) 1/2 NPT, (3) 1/4 NPT, (6) 1/4-28	PTFE

Waste Kits



DMCTP-10

DRUM WASTE CAPS (2" COARSE THREAD)

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 Polypropylene or PTFE manifold with Polypropylene 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 EF-100 Filter and indicator.

*See the emissions and filter section of our catalog

Manifold Caps

Part #	Description	# Ports	Manifold Material
DMCTP-4	WASTE MANIFOLD for Drum 2" course thread, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, Polypropylene	(3) 1/4 NPT, (1) 1/2 NPT	PP
DMCTX-4	WASTE MANIFOLD for Drum 2" course thread, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, PTFE	(3) 1/4 NPT, (1) 1/2 NPT	PTFE
DMCTP-10	WASTE MANIFOLD for Drum 2" course thread, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28, Polypropylene	(1) 1/2 NPT, (3) 1/4 NPT, (6) 1/4-28	PP
DMCTX-10	WASTE MANIFOLD for Drum 2" course 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

DRUM WASTE KITS (2" COARSE THREAD)

VaporSafe™ Closed Systems for solvent containment minimizes leaks, spills, and vapor escape from solvent waste and supply containers. Use VaporSafe™ 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 VaporSafe™ 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.

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

Kit Contents

- 10-port Waste Manifold
- (3) 1/4" NPT Polypropylene Plugs
- (6) 1/4-28 PTFE Plugs
- (1) 1/2 NPT Polypropylene Plug
- (1) Organic Vapor Filter
- (2) 2.2mm OD hard wall tubing connections
- (1) 2.5mm OD hard wall tubing connection
- (3) 1/8" OD hard wall tubing connections
- (2) 1/16" OD hard wall tubing connections
- (3) BARBED TUBING CONNECTION 1/4 ID tubing x 1/4 NPT Polypropylene
- (1) BARBED TUBING CONNECTION 1/8 ID tubing x 1/4 NPT Polypropylene
- (1) BARBED TUBING CONNECTION 3/16 ID tubing x 1/4 NPT Polypropylene
- (1) BARBED TUBING CONNECTION 3/8 ID tubing x 1/4 NPT Polypropylene
- (1) BARB TO BARB Y CONNECTOR with 1/4" (6.25mm) Barbs, Polypropylene
- (1) HARDWALL TUBE EXTENSION includes union connections and 5 feet 1/8 OD PTFE tubing
- (1) FILTER ADAPTER 1/4 NPT x 1/2 NPT polypropylene
- (1) BREAKTHROUGH COLOR INDICATOR for VaporSafe™ organic vapor filter

Container Not Included.



WAKDMCP-10

Part #	Description	# Ports	Manifold Material
WAKDMCP-10	HPLC WASTE ACCESSORY KIT for Drum 2" course thread, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28; includes Polypropylene Manifold, Fittings Kit, Exhaust Filter with adapter and color indicator	(1) 1/2 NPT, (3) 1/4 NPT, (6) 1/4-28	PP
WAKDMCX-10	HPLC WASTE ACCESSORY KIT for Drum 2" course thread, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28; includes PTFE Manifold, Fittings Kit, Exhaust Filter with adapter and color indicator	(1) 1/2 NPT, (3) 1/4 NPT, (6) 1/4-28	PTFE

Waste Kits



PMP-10



PMP-4

PANEL MOUNT WASTE CAPS

Vapor Tight Connection

Waste manifolds are configured to fit an aperture drilled to 1-1/4" ID, with panel thickness of 1/16" - 1/2". An area 1-3/4" diameter free of obstruction around the aperture is required for use. Manifold drains to a 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 Polypropylene or PTFE manifold and lock nut.

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 EF-100 Filter and indicator

*See the emissions and filter section of our catalog

Manifold Caps

Part #	Description	# Ports	Manifold Material
PMP-4	WASTE MANIFOLD, Panel-mount, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, Polypropylene	(3) 1/4 NPT, (1) 1/2 NPT	PP
PMX-4	WASTE MANIFOLD, Panel-mount, 4-port with (3) 1/4" NPT, (1) 1/2" NPT, PTFE	(3) 1/4 NPT, (1) 1/2 NPT	PTFE
PMP-10	WASTE MANIFOLD, Panel-mount, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28, Polypropylene	(1) 1/2 NPT, (3) 1/4 NPT, (6) 1/4-28	PP
PMX-10	WASTE MANIFOLD, Panel-mount, 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

PANEL MOUNT WASTE KITS

VaporSafe™ Closed Systems for solvent containment minimizes leaks, spills, and vapor escape from solvent waste and supply containers. Use VaporSafe™ 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 VaporSafe™ 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.

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

Kit Contents

- 10-port Waste Manifold
- (3) 1/4" NPT Polypropylene Plugs
- (6) 1/4-28 PTFE Plugs
- (1) 1/2 NPT Polypropylene Plug
- (1) Organic Vapor Filter
- (2) 2.2mm OD hard wall tubing connections
- (1) 2.5mm OD hard wall tubing connection
- (3) 1/8" OD hard wall tubing connections
- (2) 1/16" OD hard wall tubing connections
- (3) BARBED TUBING CONNECTION 1/4 ID tubing x 1/4 NPT Polypropylene
- (1) BARBED TUBING CONNECTION 1/8 ID tubing x 1/4 NPT Polypropylene
- (1) BARBED TUBING CONNECTION 3/16 ID tubing x 1/4 NPT Polypropylene
- (1) BARBED TUBING CONNECTION 3/8 ID tubing x 1/4 NPT Polypropylene
- (1) BARB TO BARB Y CONNECTOR with 1/4" (6.25mm) Barbs, Polypropylene
- (1) HARDWALL TUBE EXTENSION includes union connections and 5 feet 1/8 OD PTFE tubing
- (1) FILTER ADAPTER 1/4 NPT x 1/2 NPT polypropylene
- (1) BREAKTHROUGH COLOR INDICATOR for VaporSafe™ organic vapor filter

Container Not Included.



WAKPMP-10

Part #	Description	# Ports	Manifold Material
WAKPMP-10	HPLC WASTE ACCESSORY KIT for Panel Mount, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28; includes Polypropylene Manifold, Fittings Kit, Exhaust Filter with adapter and color indicator	(1) 1/2 NPT, (3) 1/4 NPT, (6) 1/4-28	PP
WAKPMX-10	HPLC WASTE ACCESSORY KIT for Panel Mount, 10-port with (1) 1/2" NPT, (3) 1/4" NPT, (6) 1/4-28; includes PTFE Manifold, Fittings Kit, Exhaust Filter with adapter and color indicator	(1) 1/2 NPT, (3) 1/4 NPT, (6) 1/4-28	PTFE

Waste Kits



CHEMICAL EXHAUST FILTERS

Emission Reduction

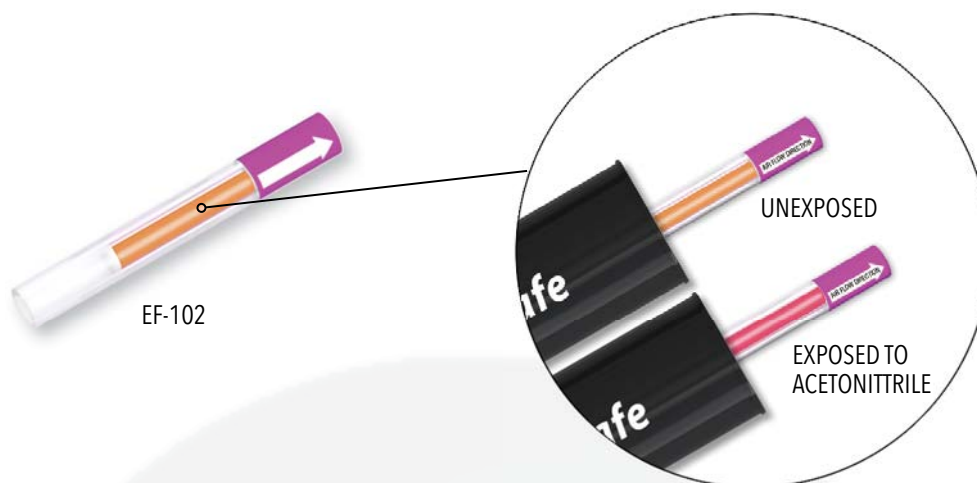
Use VaporSafe exhaust filters to mitigate health hazards and reduce harmful chemical emissions and odors from laboratory solvent containers. Developed and tested specifically for HPLC organic solvents, they may be used in conjunction with VaporSafe breakthrough color indicators to determine longevity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

Adaptable Design

Available in 75g and 300g cartridge sizes, VaporSafe 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 VaporSafe Filter Adapters. Please inquire for other sizes and formats.

Filter Details

Part #	Description	Indicator Included
EF-100	VaporSafe EXHAUST FILTER, 75g with 1/4" NPT female port	NO
EF-100V	VaporSafe EXHAUST FILTER, 75g with 1/4" NPT female port, 5/PK	NO
EF-100-102	VaporSafe EXHAUST FILTER KIT with indicator, 75g with 1/4" NPT female port	YES
EF-200	VaporSafe EXHAUST FILTER, 300g with 1/4" NPT female port	NO



BREAKTHROUGH INDICATORS

Colorimetric Change

Designed to detect the end-of-service life for VaporSafe 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 Acrylate, 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.

Indicator Details

Part #	Description	Filter Included
EF-102	BREAKTHROUGH INDICATOR for VaporSafe exhaust filters	NO
EF-102V	BREAKTHROUGH INDICATOR for VaporSafe exhaust filters , 5/PK	NO
EF-100-102	VaporSafe EXHAUST FILTER KIT with indicator, 75g with 1/4" NPT female port	YES



FA-001



FA-004



FA-005



FA-010



FA-014



FA-015



FA-017



FA-019



FA-023

FILTER ADAPTERS

Versatile Configurations

VaporSafe EF-100 and EF-200 exhaust filters may be attached to various point-source emissions by use of the appropriate adapter. Each filter includes a 1/4" female NPT 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 stainless steel or polypropylene quick disconnects, but are not interchangeable.

Carbon Filter Adapters (page 1 of 2)

Part #	Description	Adapter Type	Material
FA-001	FILTER ADAPTER luer lock x 1/4 NPT natural Polypropylene	Straight	Polypropylene
FA-004	FILTER ADAPTER 1/4 NPT x 1/4 NPT polypropylene	Straight	Polypropylene
FA-005	FILTER ADAPTER 1/4 NPT x 1/2 NPT polypropylene	Straight	Polypropylene
FA-010	FILTER ADAPTER with PP and EPDM Quick Disconnect for Justrite Centura containers	Straight	Polypropylene EPDM
FA-014	FILTER ADAPTER, 90 degree elbow, 1/4" NPT x 1/2" NPT, polypropylene	90 Degree Elbow	Polypropylene
FA-015	FILTER ADAPTER with SS and Teflon quick disconnect for Justrite Centura containers	Straight	Stainless Steel Teflon
FA-017	FILTER ADAPTER 90 degree elbow with Polypropylene and EPDM Quick Disconnect for Justrite Centura containers	90 Degree Elbow	Polypropylene EPDM
FA-019	FILTER ADAPTER, 90 degree elbow, with SS and Teflon Quick Disconnect for Justrite Centura containers	90 Degree Elbow	Stainless Steel Teflon
FA-023	FILTER ADAPTER, 45 degree elbow, 1/4" MNPT x 1/4" MNPT, Nylon	45 Degree Elbow	Nylon



FA-026



FA-027



FA-028



FA-029



FA-030



FA-032



FA-036

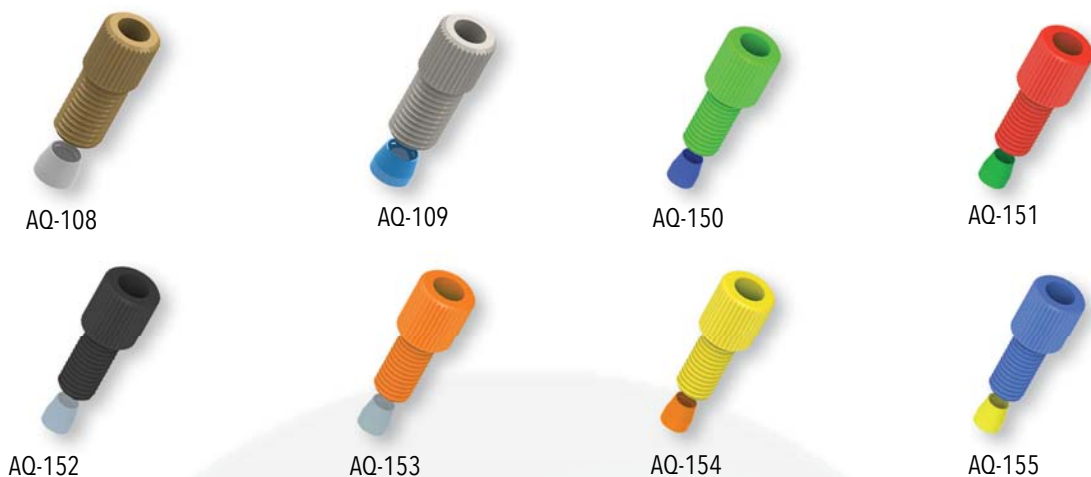
FILTER ADAPTERS

Versatile Configurations

VaporSafe EF-100 and EF-200 exhaust filters may be attached to various point-source emissions by use of the appropriate adapter. Each filter includes a 1/4" female NPT 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 stainless steel or polypropylene quick disconnects, but are not interchangeable.

Carbon Filter Adapters (page 2 of 2)

Part #	Description	Adapter Type	Material
FA-026	FILTER ADAPTER, 90 degree elbow, 1/4" MNPT x 1/4" MNPT, Polypropylene	90 Degree Elbow	Polypropylene
FA-027	FILTER ADAPTER, 1/4" NPT male x 1/4-28 male, red PEEK	Straight	PEEK
FA-028	ADJUSTABLE FILTER ADAPTER for 1/4" NPT female port, black acetal	Adjustable	Acetal
FA-029	ADJUSTABLE FILTER ADAPTER for 1/2" NPT female port, black acetal	Adjustable	Acetal
FA-030	ADJUSTABLE FILTER ADAPTER, with PP and EPDM Quick Disconnect for Justrite Centura containers, black acetal	Adjustable	Polypropylene EPDM, Acetal
FA-032	ADJUSTABLE FILTER ADAPTER, with SS and Teflon Quick Disconnect for Justrite Centura containers, black acetal	Adjustable	SS, EPDM Acetal
FA-036	FILTER ADAPTER, 1/8" NPT x 1/4" NPT, polypropylene	Straight	Polypropylene



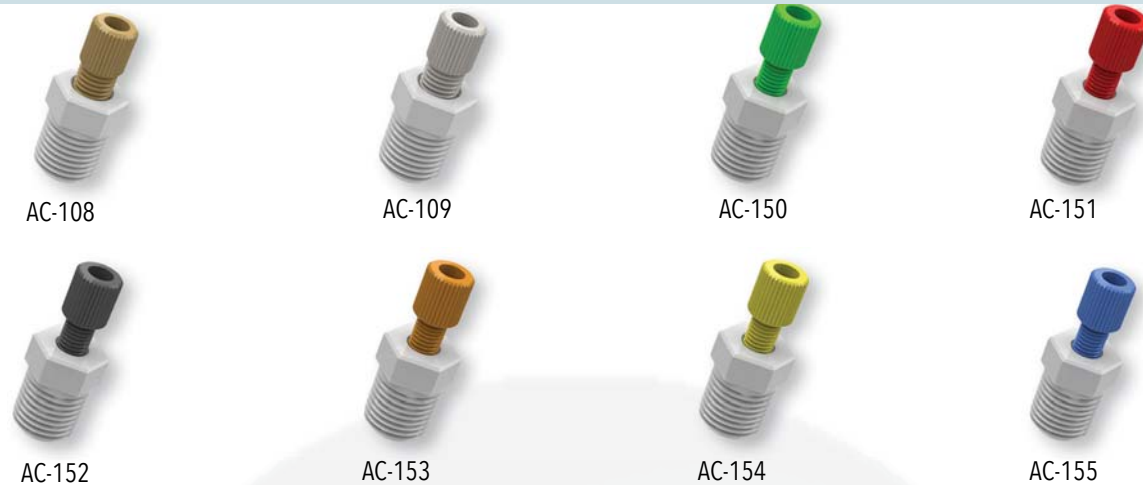
TUBING CONNECTIONS

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 1/16" to 3/16" 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. Part numbers ending "X" denote a pack of 10 fittings.

Fittings for Semi-Rigid Tubing

Part #	Description	Color	Tubing OD
AQ-108	TUBING CONNECTION, 4.0mm OD tubing x 5/16-24, natural Kel-F ferrule.	Brown	4 mm
AQ-109	TUBING CONNECTION, 4.0mm OD tubing x 5/16-24, natural Kel-F ferrule.	White	3/16 in
AQ-150X	TUBING CONNECTION, 1/16" OD tubing x 1/4-28, Green Polypropylene fitting, Blue Tefzel ferrule. 10/PK	Green	1/16 in
AQ-151X	TUBING CONNECTION, 1.8-2.0mm OD tubing x 1/4-28, Red Polypropylene fitting, Green Tefzel ferrule. 10/PK	Red	1.8-2.0 mm
AQ-152X	TUBING CONNECTION, 2.2mm (.085") OD tubing x 1/4-28, Black Polypropylene fitting, White PTFE ferrule. 10/PK	Black	2.2 mm
AQ-153X	TUBING CONNECTION, 2.5mm OD tubing x 1/4-28, Orange Polypropylene fitting, Natural Tefzel ferrule. 10/PK	Orange	2.5 mm
AQ-154X	TUBING CONNECTION, 3.0mm OD tubing x 1/4-28, Yellow Polypropylene fitting, Orange Tefzel ferrule. 10/PK	Yellow	3.0 mm
AQ-155X	TUBING CONNECTION, 1/8" OD tubing x 1/4-28, Blue Polypropylene fitting, Yellow Tefzel ferrule. 10/PK	Blue	1/8 in



TUBING CONNECTION ADAPTERS

For 1/4" NPT Ports

Compression fittings designed for liquid-tight connection of semi-rigid tubing to 1/4" NPT ports, for tubing diameters 1/16" to 3/16" OD. Each connection is comprised of a two-piece nut and ferrule system with polypropylene 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 3-4 times with PTFE tape and wrench tighten for leak-resistant connections.

Fittings for Semi-Rigid Tubing

Part #	Description	OD	Thread	Material	Color
AC-108	TUBING CONNECTION 4.0mm OD tubing x 1/4 NPT natural PTFE fitting natural Kel-F ferrule PP body.	4 mm	1/4" NPT	Polypropylene [PEEK] Tefzel®	Brown
AC-109	TUBING CONNECTION 3/16 OD tubing x 1/4 NPT white Delrin fitting blue Tefzel ferrule PP body.	3/16 in	1/4" NPT	Polypropylene [Tefzel®] Derlin	White
AC-150	TUBING CONNECTION, 1/16" OD tubing x 1/4" NPT, green Polypropylene fitting, Blue Tefzel ferrule, PP adapter.	1/16 in	1/4" NPT	Polypropylene Tefzel®	Green
AC-151	TUBING CONNECTION, 1.8-2.0mm OD tubing x 1/4" NPT, red Polypropylene fitting, Green Tefzel ferrule, PP adapter.	1.8-2 mm	1/4" NPT	Polypropylene Tefzel®	Red
AC-152	TUBING CONNECTION, 2.2mm OD tubing x 1/4" NPT, black Polypropylene fitting, natural Tefzel ferrule, PP adapter.	2.2 mm	1/4" NPT	Polypropylene Tefzel®	Black
AC-153	TUBING CONNECTION, 2.5mm OD tubing x 1/4" NPT, orange Polypropylene fitting, Natural Tefzel ferrule, PP adapter.	2.5 mm	1/4" NPT	Polypropylene Tefzel®	Orange
AC-154	TUBING CONNECTION, 3.0mm OD tubing x 1/4" NPT, yellow 3 mm Polypropylene fitting, Orange Tefzel ferrule, PP adapter.	3 mm	1/4" NPT	Polypropylene Tefzel®	Yellow
AC-155	TUBING CONNECTION, 1/8" OD tubing x 1/4" NPT, blue Polypropylene fitting, Yellow Tefzel ferrule, PP adapter.	1/8 in	1/4" NPT	Polypropylene Tefzel®	Blue



AB-111



AB-112



AB-113



AB-114



AB-115



AB-116



AB-117



AB-118



AB-121



AB-122

BARBED TUBING CONNECTIONS

For 1/8", 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 VaporSafe manifold ports with NPT threads. For tubing diameters 1/16" to 1/2" ID. All fittings are Polypropylene. Make a selection based on your tubing inside diameter (ID). Wrap NPT threads 3-4 times with PTFE tape and wrench tighten for leak-resistant connections. Part numbers ending "X" denote a pack of 10 fittings.

Fittings for Soft-Wall Tubing (page 1 of 2)

Part #	Description	Tubing ID	Thread
AB-111X	BARBED TUBING CONNECTION, 1/16" ID tubing x 1/4" NPT, Polypropylene 10/PK	1/16 in	1/4" NPT
AB-112X	BARBED TUBING CONNECTION, 1/8" ID tubing x 1/4" NPT, Polypropylene 10/PK	1/8 in	1/4" NPT
AB-113X	BARBED TUBING CONNECTION, 3/16" ID tubing x 1/4" NPT, Polypropylene 10/PK	3/16 in	1/4" NPT
AB-114X	BARBED TUBING CONNECTION, 1/4" ID tubing x 1/4" NPT, Polypropylene 10/PK	1/4 in	1/4" NPT
AB-115X	BARBED TUBING CONNECTION, 5/16" ID tubing x 1/4" NPT, Polypropylene 10/PK	5/16 in	1/4" NPT
AB-116X	BARBED TUBING CONNECTION, 3/8" ID tubing x 1/4" NPT, Polypropylene 10/PK	3/8 in	1/4" NPT
AB-117X	BARBED TUBING CONNECTION, 1/2" ID tubing x 1/4" NPT, Polypropylene 10/PK	1/2 in	1/4" NPT
AB-118X	BARBED TUBING CONNECTION, 5/32" ID tubing x 1/4" NPT, Polypropylene 10/PK	5/32 in	1/4" NPT
AB-121X	BARBED TUBING CONNECTION, 1/16" ID tubing x 1/8" NPT, Polypropylene 10/PK	1/16 in	1/8" NPT
AB-122X	BARBED TUBING CONNECTION, 1/8" ID tubing x 1/8" NPT, Polypropylene 10/PK	1/8 in	1/8" NPT



AB-123



AB-124



AB-125



AB-126



AB-204



AB-205



AB-206



AB-207



AB-208

BARBED TUBING CONNECTIONS

For 1/8", 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 VaporSafe manifold ports with NPT threads. For tubing diameters 1/16" to 1/2" ID. All fittings are Polypropylene. Make a selection based on your tubing inside diameter (ID). Wrap NPT threads 3-4 times with PTFE tape and wrench tighten for leak-resistant connections. Part numbers ending "X" denote a pack of 10 fittings.

Fittings for Soft-Wall Tubing (page 2 of 2)

Part #	Description	Tubing ID	Thread
AB-123X	BARBED TUBING CONNECTION, 3/16" ID tubing x 1/8" NPT, Polypropylene 10/PK	3/16 in	1/8" NPT
AB-124X	BARBED TUBING CONNECTION, 1/4" ID tubing x 1/8" NPT, Polypropylene 10/PK	1/4 in	1/8" NPT
AB-125X	BARBED TUBING CONNECTION, 5/16" ID tubing x 1/8" NPT, Polypropylene 10/PK	5/16 in	1/8" NPT
AB-126X	BARBED TUBING CONNECTION, 3/8" ID tubing x 1/8" NPT, Polypropylene 10/PK	3/8 in	1/8" NPT
AB-204X	BARBED TUBING CONNECTION, 1/4" ID tubing x 1/2" NPT, Polypropylene 10/PK	1/4 in	1/2" NPT
AB-205X	BARBED TUBING CONNECTION, 3/8" ID tubing x 1/2" NPT, Polypropylene 10/PK	3/8 in	1/2" NPT
AB-206X	BARBED TUBING CONNECTION, 1/2" ID tubing x 1/2" NPT, Polypropylene 10/PK	1/2 in	1/2" NPT
AB-207X	BARBED TUBING CONNECTION, 5/8" ID tubing x 1/2" NPT, Polypropylene 10/PK	5/8 in	1/2" NPT
AB-208X	BARBED TUBING CONNECTION, 3/4" ID tubing x 1/2" NPT, Polypropylene 10/PK	3/4 in	1/2" NPT



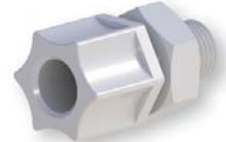
AC-113V



AC-114V



AC-115V



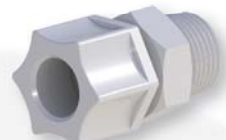
AC-116V



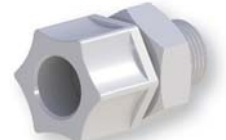
AC-204V



AC-205V



AC-206V



AC-207V

LARGE-BORE TUBING CONNECTIONS

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

Compression fittings 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 (OD). All fittings are comprised of 2-piece molded Polypropylene components and do not include a separate ferrule. Wrap NPT threads 3-4 times with PTFE tape and wrench tighten for leak-resistant connections. Part numbers ending "V" denote a pack of 5 fittings.

Fittings for Semi-Rigid Tubing

Part #	Description	OD	Thread	Material	Color
AC-113V	TUBING CONNECTION 1/4 and 6mm OD tubing x 1/4 NPT Polypropylene 5-pack.	1/4 in	1/4" NPT	Polypropylene	Natural
AC-114V	TUBING CONNECTION 5/16 OD tubing x 1/4 NPT Polypropylene 5-pack.	5/16 in	1/4" NPT	Polypropylene	Natural
AC-115V	TUBING CONNECTION 3/8 OD tubing x 1/4 NPT Polypropylene 5-pack.	3/8 in	1/4" NPT	Polypropylene	Natural
AC-116V	TUBING CONNECTION 1/2 OD tubing x 1/4 NPT Polypropylene 5-pack.	1/2 in	1/4" NPT	Polypropylene	Natural
AC-204V	TUBING CONNECTION 3/8 OD tubing x 1/2 NPT Polypropylene 5-pack.	3/8 in	1/2" NPT	Polypropylene	Natural
AC-205V	TUBING CONNECTION 1/2 OD tubing x 1/2 NPT Polypropylene 5-pack.	1/2 in	1/2" NPT	Polypropylene	Natural
AC-206V	TUBING CONNECTION 5/8 OD tubing x 1/2 NPT Polypropylene 5-pack.	5/8 in	1/2" NPT	Polypropylene	Natural
AC-207V	TUBING CONNECTION 3/4 OD tubing x 1/2 NPT Polypropylene 5-pack.	3/4 in	1/2" NPT	Polypropylene	Natural



PORT PLUGS

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 3-4 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. Part numbers ending "X" denote a pack of 10 plugs.

Plugs

Part #	Description	Thread	Material
PL-101X	PLUGS, 1/4" NPT, Polypropylene, 10/PK	1/4" NPT	Polypropylene
PL-102X	PLUG, 1/2" NPT, Polypropylene 10/PK	1/2" NPT	Polypropylene
PL-103X	PLUG, 1/4-28, black Delrin 10/PK	1/4-28	Delrin
PL-104X	PLUG, 1/4-28, PTFE 10/PK	1/4-28	PTFE
PL-105	PLUG, 1/4 NPT Male, PTFE	1/4"NPT	PTFE
PL-106X	PLUG, 3/8" NPT male, Polypropylene 10/PK	3/8" NPT	Polypropylene
PL-108X	PLUG, 1/8" NPT, Polypropylene 10/PK	1/8" NPT	Polypropylene
PL-113	PLUG, 5/16-24, PTFE	5/16-24	PTFE



DV-115 / DV-118



DV-136 / DV-137 / DV-138

VENTILATION CONTROL VALVES

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

Although VaporSafe 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 pressures 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.

Evaporation Control and Relief Valves

Part #	Description	Thread	Cracking Pressure	Seal Material
DV-115	AIR INLET VALVE, 1/4-28 male, PTFE with Viton check element	1/4-28	0.1 - 0.25 psi	Viton
DV-115E	AIR INLET VALVE, 1/4-28 male, PTFE with EPDM check element	1/4-28	0.1 - 0.25 psi	EPDM
DV-215	AIR INLET VALVE, 1/4-28 male, PTFE with FFKM check element	1/4-28	0.1 - 0.25 psi	FFKM
DV-116	RELIEF VALVE, 1/4-28 male, PTFE with Viton check element	1/4-28	0.1 - 0.25 psi	Viton
DV-116E	RELIEF VALVE, 1/4-28 male, PTFE with EPDM check element	1/4-28	0.1 - 0.25 psi	EPDM
DV-216	RELIEF VALVE, 1/4-28 male, PTFE with FFKM check element	1/4-28	0.1 - 0.25 psi	FFKM
DV-118	RELIEF VALVE, 1/4-28 male, PTFE with Viton check element	1/4-28	1 - 2.5 psi	Viton
DV-118E	RELIEF VALVE, 1/4-28 male, PTFE with EPDM check element	1/4-28	1 - 2.5 psi	EPDM
DV-218	RELIEF VALVE, 1/4-28 male, PTFE with FFKM check element	1/4-28	1 - 2.5 psi	FFKM
DV-137	REVERSIBLE CONTROL VALVE, 1/4" MNPT x 1/4" MNPT, Polypropylene with Viton check element	1/4" NPT	0.1 - 0.25 psi	Viton
DV-136	REVERSIBLE CONTROL VALVE, 1/4" MNPT x 1/4" MNPT, Polypropylene with EPDM check element	1/4" NPT	0.1 - 0.25 psi	EPDM
DV-138	REVERSIBLE CONTROL VALVE, 1/4" MNPT x 1/4" MNPT, Polypropylene with FFKM check element	1/4" NPT	0.1 - 0.25 psi	FFKM

- **CAPTURE WASTE**
and hazardous solvents securely
- **REDUCE FUMES**
and harmful vapor exhaust
- **QUICK CONNECT**
to Justrite® Centura safety containers

SF-003
SAFETY FUNNEL ON
JUSTRITE PP12752

Safety Funnel

Versatile Configurations

VaporSafe "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 VaporSafe products, such as a 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. SF-series funnels are constructed of high density Polyethylene (HDPE) and Polypropylene, with a Viton® sealing gasket. As with all solvent applications, chemical compatibility of the solvent and product should be noted prior to purchase.

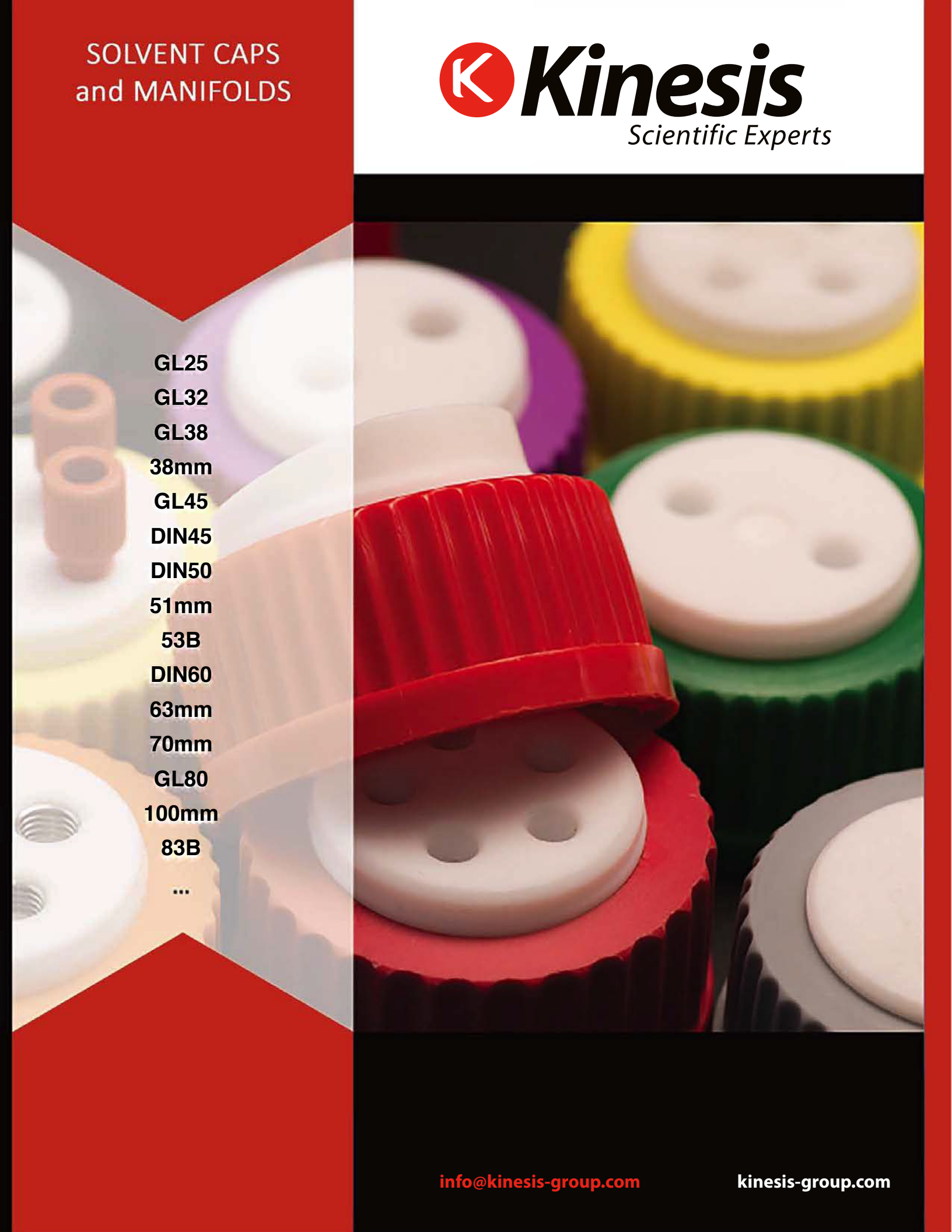
Safety Funnels

Part #	Safety Funnel Options
SF-003	WITH POLYPROPYLENE DISCONNECT AND EPDM O-RING
SF-005	WITH STAINLESS STEEL DISCONNECT AND PTFE O-RING
SF-010	NO QUICK DISCONNECT, WITH 1/2" NPT MALE THREAD



SOLVENT CAPS
and MANIFOLDS

 **Kinesis**
Scientific Experts



GL25
GL32
GL38
38mm
GL45
DIN45
DIN50
51mm
53B
DIN60
63mm
70mm
GL80
100mm
83B
...