

Closed Waste Systems for Laboratory Instruments

Vaplock is designed to provide secure collection of waste solvents from analytical instruments, primarily HPLC's. The system reduces or eliminates spills or contact with waste organic solvents commonly used in the laboratory. And to minimize solvent vapor from entering the laboratory atmosphere.

Manifolds are available for almost any type of container from glass bottles, 55-Gallon drums and Justrite safety cans to Nalgene carboys and others. The choice is yours although there may be solvent compatibility issues to consider. Standardizing on one container throughout a site is very helpful.

The extent to which the system is implemented depends on your goals for the site or laboratory.

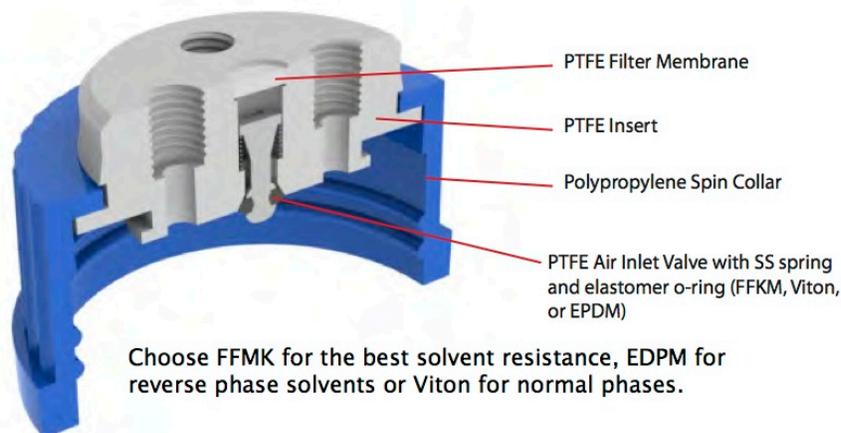
Some sites have chosen to close the entire system from the solvent reservoirs at the instrument inlet to the solvent vapor exiting the waste can to prevent its escape into the laboratory. Others have focused only on the choice of waste can and the manifold that connects it to the waste source.

Thomson Instruments can advise your choices at each potential point of concern.

Supply Side

To contain solvent vapors at the inlet to the instrument, we recommend bottle caps with built-in one way check valves that will let air in allowing pressure equilibration but restrict the escape of solvent vapors.

Bottle Caps with Integral Check Valves



Waste Side

Many different manifolds are available. Once a waste can has been chosen, there are several considerations in choosing a manifold. Pictured below are two different configurations of the same manifold. One is for Nalgene® carboys with 83B caps. The other is for Justrite cans with polypropylene (PP) quick disconnects.

Instrument specific fittings kits make connections at the manifolds easier and reasonably straight forward.



10-Port Manifold
Nalgene® carboy/83B cap



10-Port Manifold
Justrite can with PP quick disconnects

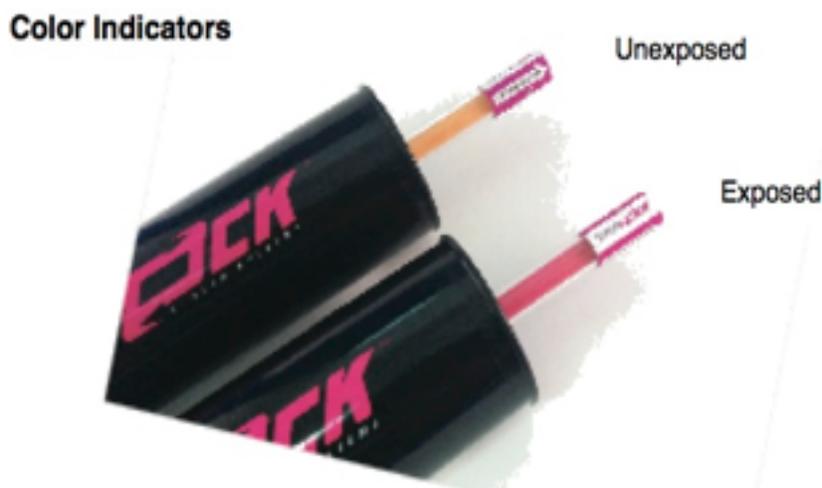


10-Port Manifold
Fittings Kit

Vapor Exit Point

On the exit side of the can, we recommend a charcoal filter and ours has the highest surface area, thus greater capacity. An optional color indicator or breakthrough data on common LC solvents allow estimates of the bed life.

The very precise color indicator exhibits good uniformity over a wide range of organic solvents.



Other Considerations

There are many other, usually small, details that come up when connecting an instrument. Thomson Instruments provides unlimited phone and email assistance to minimize the time and effort your personnel have to expend when making the initial connections.

Don't hesitate to call . . .

Thank You