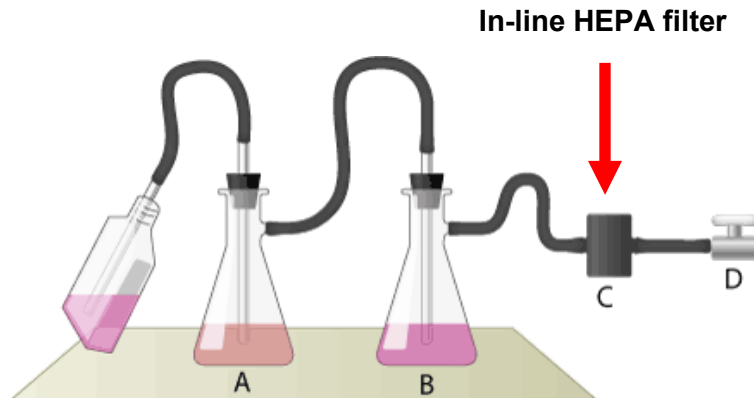


Protection of Vacuum Systems Used in Tissue Culture Work

CDC/NIH Guidelines for Biosafety Level 2 (BSL-2) now state that vacuum lines should be protected with High Efficiency Particulate Air (HEPA) filters, or their equivalent. Filters must be replaced as needed. Liquid disinfectant traps may be required.



CDC/NIH Primary Containment for Biohazards: Selection, Installation and Use of Biological Safety Cabinets, 2nd Edition

One method to protect a house vacuum system during aspiration of infectious fluids:

The left suction flask (A) is used to collect the contaminated fluids into a suitable decontamination solution; the right flask serves as a fluid overflow collection vessel. A glass splarger in flask B minimizes splatter. An in-line HEPA filter (C) is used to protect the vacuum system (D) from aerosolized microorganisms.

Filters available from Fisher Scientific and other manufacturers:

Whatman HEPA-Vent Filter

Assure sterile air for mixing, filling, storing, fermenting, and transporting



Description

- Glass fiber filter is treated to be mildly hydrophobic
- Repels moisture, prevents bacterial growth
- 0.3µm particle retention unaffected by autoclaving
- Bidirectional flow
- Filter area: 16cm²

Millipore Millex Vacuum Line Protection

Protect vacuum sources from contamination and moisture damage



Description

- With hydrophobic PTFE membranes
- Polypropylene housing (except for SLFG-025-LS and -50, which have PVC housing)
- Variety of inlet/outlet combinations, including stepped hose barb and 1/8 NPT
- Sterilize ambient air entering fermenters
- Filter incubator gas to protect against contamination
- Filter nitrogen and air used to dry liquid samples
- Non-sterile, autoclavable, bidirectional