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## User Guide for

# VACUUM FILTRATION

Solutions that are initially clean preparations, in that they are free of particulate debris and are not proteinaceous, can be directly going through a 0.22um or 0.45um sterile filtration.

Certain culture media and reagents can be prepared by dissolving the powder in appropriate solvent (eg distilled water, PBS), followed by sterile filtration with disposable sterile filter unit.

**NOTE:** Perform all procedures using aseptic technique.

1. Prepare the media or reagents according to formulation given.
2. Unpack a disposable, sterile filtration unit, in the biological safety cabinet. The unit consists of a top funnel where non-sterile liquid is added, a filter in the middle and a bottom container which is used to collect the filtered liquid.
3. Attach barbed tubing adapter to the side vacuum port on the neck of the filter funnel. Attach the vacuum tubing to the adapter.
4. Set the filter upright and provide support to avoid tipping the unit when it is top-heavy with liquid in the funnel.
5. Remove the funnel cover and slowly add liquid to the funnel. Slowly apply a slight vacuum to prevent excessive foaming of proteinaceous solutions.
6. When filtration is complete, turn the vacuum source off. Carefully disconnect the filter unit from the vacuum tubing.
7. Bring the unit back into the biological safety cabinet. Using aseptic technique, carefully remove the filter funnel from the receiver bottle and seal the bottle with the sterile screw-cap closure provided with the filter unit.

