



LIQUID & SAMPLE HANDLING MEDIA AND FILTERS

Improve your scientific outcomes



POREX
Filtration Group®



CERTIFIED PURE POREX® MATERIALS

Redefining the industry standard for material excellence
& performance



POREX liquid handling materials are rigorously tested by third-party analytical, clinical and life science laboratories for media purity. This certification helps ensure performance, accuracy and reproducibility in the most demanding scientific applications.*

- **No** sealing additives
- **No** heavy metals
- **No** inorganic elements
- 7-day clinical laboratory methodology compatibility
- **No** molecular, polymerase chain reaction (PCR) or carboxymethyl cellulose (CMC) interference
- **No** cellulose gum contamination
- **No** leachables
- **No** extractables

**Data on file and available upon request.*

Program Overview

In light of recent technological advancements and market requirements, Porex initiated its CERTIFIED PURE POREX® program in 2009 to qualify porous polymeric materials via a stringent series of analytical, clinical and life science testing procedures.

As a result of this program, POREX® porous polymers and bonded fibers have been tested by renowned third-party national laboratories. The testing standards and methods include ISO 10993 Biocompatibility Standards – Hemolysis and Cytotoxicity, and ICP-MS (Inductively Coupled Plasma Mass Spectrometry).

Testing Results

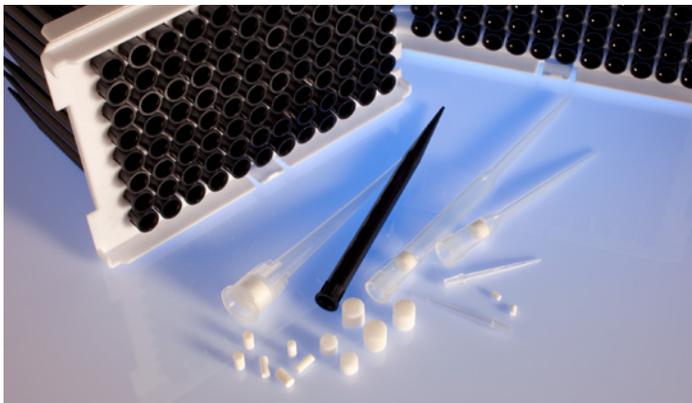
CERTIFIED PURE POREX® materials were found to have virtually no material additives, contaminants or heavy metals that cause interferences in clinical and laboratory testing. These materials were verified to be non-cytotoxic and non-hemolytic via independent testing laboratories, complying with ISO 10993 biocompatibility testing standards.

In addition, CERTIFIED PURE POREX® materials have over 99.99978% Bacterial Filtration Efficiency (BFE) as tested by the ASTM F21012 Standard.

CERTIFIED PURE POREX Pipette Tip Filters

Specifically designed to help prevent liquid bypass, cross contamination and airborne contaminants from being drawn into the tips, Certified Pure POREX® pipette tip filters protect the pipette body.

They are available in a variety of materials and performance characteristics and individually designed for optimized pore size, filter length, pipette tip fit, filter placement and liquid draw volume



FORTRESS® PIPETTE TIP FILTERS

The first certified pure liquid and aerosol pipette tip filter

Unparalleled aerosol and cross-contamination protection with pure and complete sample retrieval

FORTRESS pipette tip filters, representing the biggest advancement in liquid handling and pipetting in more than 40 years, offer improved scientific outcomes across a variety of laboratory settings and applications. As a result, analytical, research, pharmaceutical, medicine, diagnostic, and emerging pipetting technologies all benefit from unparalleled protection from sample cross-contamination and carry over that can alter test results and technical outcomes.

Through our CERTIFIED PURE POREX® independent testing program, the additive-free liquid barrier is certified to be free of leachables, extractables, heavy metals, and other contaminants that can interfere with PCR, molecular diagnostics, and other highly sensitive procedures.

How FORTRESS pipette tip filters work

Before FORTRESS, filtered pipettes relied on additives such as carboxymethyl cellulose (CMC) that can contaminate samples and cause sample lock-up and non sample retrieval.

FORTRESS pipette tip filters are manufactured with a proprietary PE matrix with optimized airflow that is 100% inert, hydrophobic and pure. This protects against aerosol bypass and sample carry over, eliminates the threat of leachables and extractables, and delivers maximum sample recovery.



Seals out aerosol & liquid contaminants

- Provides the highest bacterial filtration efficiency available (BFE)
- Prevents liquid contamination and also in over-pipetting scenarios
- Improves precision, accuracy and reproducibility
- Protects sample integrity, recovery, and inadvertent viral replication



View additional resources, including our demo video, CLP article and whitepaper by visiting: www.porex.com/fortress

FORTRESS LIQUID AND AEROSOL BARRIER FILTER

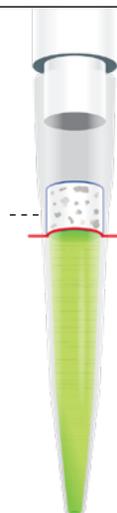
The only pipette tip filter to deliver complete aerosol and liquid protection AND pure sample retrieval.

Sample can be retrieved.



SELF-SEALING

Self-Sealing filter prevents sample bypass but can cause contamination from additives.



Sample CANNOT be retrieved.

AEROSOL ONLY BARRIER

Aerosol filters do not prevent sample bypass due to over-pipetting and can consist of materials known to contain heavy metals, leachables, and extractables.



UNFILTERED

Unfiltered tips offer no protection against over-pipetting, aerosol creation and contamination, sample carry over, and PCR interference.



POREX® SEROLOGICAL PIPET FILTERS

Eliminate aerosol contamination and sample carryover

Reduce risk of contamination

POREX® serological pipet filters eliminate aerosol bypass, sample carryover, cross contamination and the passage of aqueous-based liquid from sample to pipet. All POREX serological pipet filters meet ASTM E934 compatibility requirements stating that the top end of all serological pipets must be plugged with filtering material.

Safe for laboratory and environment

Through our CERTIFIED PURE POREX® independent testing program, the additive-free liquid barrier is certified to be free of leachables, extractables, heavy metals, and other contaminants that can interfere with PCR, molecular diagnostics and other highly sensitive procedures. By being antimony free, POREX serological pipet filters decrease exposure to hazardous substances and eliminate contamination caused by filter material residue shedding inside the pipet.

Increase efficiency and productivity

Designed for use in a wide variety of dispensing applications, POREX serological pipet filters are design optimized to fit securely in the upper end of the pipet and to allow for engineering and work practice control finished products. As a result, POREX filters eliminate the need for internal pipetter syringe filters, helping to lower product and use costs.

All POREX serological filters meet ASTM E934 compatibility requirements

Note that serological pipets that use cotton plugging material do not comply with the ASTM E934 requirements.

Protects against aerosol & liquid contaminants

- Protects against sample cross-contamination
- Protects pipetter aid
- Can slow fast-volume draw
- Prevents liquid contamination in over-pipetting
- Designed & certified for purity*

Lower product costs

- Reduces need for internal syringe filters
- Enables laboratory engineering and work practice controls
- Can be designed for automated assembly systems

**Third party test data on file and available upon request*



View additional resources, including our demo video, whitepaper, and additional articles by visiting: www.porex.com/serological

POREX® LIQUID SAFE LIQUID AND AEROSOL BARRIER FILTER

- The only serological pipet filter to deliver complete aerosol and liquid cross-contamination protection
- Allows slow/fast volume draw
- Protects pipetter or pipet aid
- No syringe filter required



POREX® AEROSOL BARRIER FILTER

- Consistent air flow
- Aerosol filters prevent cross-contamination and sample carryover
- Filters contaminants
- No material shedding



POREX® BARRIER FILTER

- Limited protection against aerosol or liquid cross-contamination
- Fits well between tubing walls
- High air flow



COTTON PLUG

- Risk of contamination due to liquid & aerosol bypass and no ability to stop fast-draw liquids
- Material residue sheds inside pipet
- Significant amounts of Antimony present
- No aerosol protection



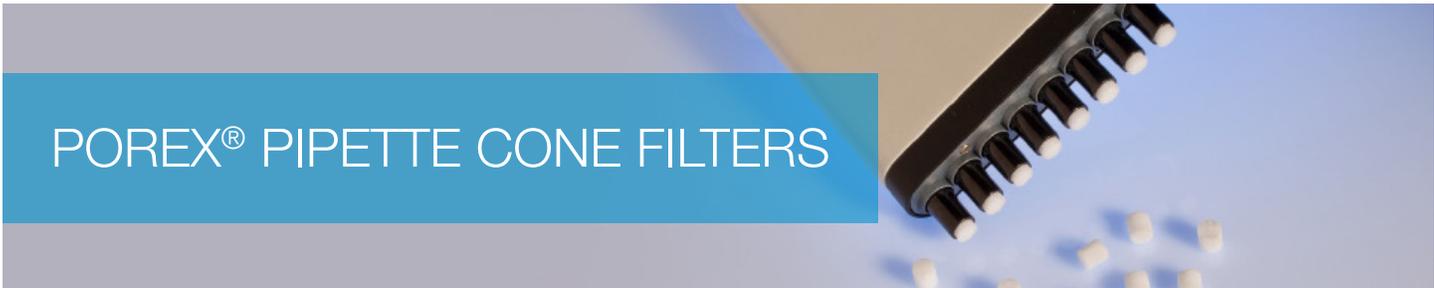


POREX® ESR FILTERS

ESR Filters

The Erythrocyte Sedimentation Rate (ESR) determination is a commonly performed laboratory test used to screen for the possible presence of bodily disease or abnormality. The test measures the distance red cells have fallen after separating from the plasma in a vertical ESR pipette and offers simple,

safe, economical and highly-accurate Westergren ESR determinations. POREX® ESR Tube Filter Media is designed to draw blood up to the zero mark and act as a protective barrier that stops hazardous substances from escaping through the top of the pipette.



POREX® PIPETTE CONE FILTERS

Pipette Cone Filters

POREX® Pipette Cone Filters are used at the pipetter shaft base to help prevent fluid and liquid vapor contamination of samples and the pipetter's internal mechanisms and components.





AMERICAS

Phone: + 1 770 964 1421
Email: Info.porex.amrs@filtrationgroup.com



EUROPE

Phone: + 49 241 9105250
Email: Info.porex.emea@filtrationgroup.com



ASIA PACIFIC

Phone: + 603 51913308
Email: Info.porex.apac@filtrationgroup.com



CHINA

Phone: + 86 574 2685 8761
Email: Info.porex.china@filtrationgroup.com