

# POREX® Clinical Science Products, Media & Filters



Clinical science products, media and filters from Porex Corporation are design optimized to help ensure performance, purity, accuracy and reproducibility in demanding IVD, molecular and clinical diagnostic sample preparation, liquid handling and microfluidic applications.

The distinct range of innovative products and OEM advanced porous materials, micro porous PTFE, porous polymeric fiber, porous glass fiber membrane, porous composites and functionalized and bio-activated porous media, combine unique Porex manufacturing processes with proprietary and patented technologies to help deliver technologically advanced solutions for today's challenging clinical science applications.

POREX® Filters and Materials for the clinical sciences are third party tested by analytical, clinical, and life cycle microbiology laboratories. The Pure Porex™ certification substantiates POREX Filters and Materials for filter purity, no material additives or contaminants, no heavy metal interference or inorganic element interference, clinical laboratory methodology compatibility, 99.9% bacterial aerosol filtration efficiency. POREX Filters and Materials were further tested by independent laboratories and determined to be non-cytotoxic and non-hemolytic.¹

<sup>1</sup> Data on file and available on request



# **Sample Preparation Products**

## FILTER SAMPLER® Blood Serum Filters

A comprehensive system designed to reduce instrument downtime, eliminate gel separation particulates and fibrin in sample and allow direct access of sample versus secondary container pour-off.

Disposable devices separate serum or plasma from centrifuged whole blood specimens contained in standard 16, 13, or 10.25 mm ID collection tubes. All FILTER SAMPLER Blood Serum Filters are packaged 100 units to the package and 40 packages to the case.





### **Standard Model**

Use when the filtered serum or plasma can be immediately poured off for analysis. **Use with glass collection tubes.** 

Catalog No.	Diameter (mm)	Length (inches)	Length (mm)
6218	16	2¾	70
6212	16	4	102
6204	16	6	152
6228	13	4	102
6237	10.25	4	102
6242	10.25	2	51



### Instrument Specific™ Model

Permits direct sampling from primary collection tubes and helps eliminate specimen relabeling and add-on products as sample cups and tubes. **Use with glass or plastic collection tubes.** 

Catalog No.	Diameter (mm)	Length (inches)	Length (mm)
6222	16	2½	64
6410	16	10	47
6214	16	11/4	31
6414	13	10	35
6221	13	21/4	57

#### IB™ Model

Prevents ionic contamination and pH changes and contains a leak-resistant one-way valve to permit storage of capped specimens in primary collection tube for up to seven days.\*

\* One-way valve permits a physical gap to be created between the serum/ plasma and clot, which prevents backflow into the primary collection tube. **Use** with glass or plastic collection tubes.

Catalog No.	Diameter (mm)	Length (inches)	Length (mm)
40475	16	1½	38
6249	16	23/4	70
6251	16	4	102
6259	16	6	152
40537	13	10	42
6258	13	23/4	70
6241	13	4	102





### FILTER SAMPLER® Dispense Filter System

A convenient, three-in-one closed filtration system that filters, pipettes and stores samples. A restricted opening provides effective specimen closure and helps protect personnel from contamination due to aerosols and infectious fluids. The dispense filter maintains sample integrity and eliminates the use of transfer pipettes, add-on products and closures. **Use with glass collection tubes.** 

Catalog No.	Diameter (mm)	Length (inches)	Length (mm)
6436	16	4	120 50±4 drops approx 1 mL
6437	13	4	98 23±2 drops approx 1 mL



### FILTER SAMPLER® Dispense+ Filter System

Designed specifically for 13 mm plastic collection tubes, the Dispense+ Filter System is a one-step, self-contained filtration, dispensing and storage device used to deliver centrifuged serum or plasma. Eliminates the need for disposable pipettes, add-on products and capping materials.

Restricted opening acts as a cap closure.

Catalog No.	Diameter (mm)	Length (inches)	Ler	ngth (mm)
6439	13	4	98	23±2 drops approx 1 mL

U.S. Patent 5259959



#### POREX® SQ-EASY™ Prefilter

Disposable and efficient, POREX SQ-EASY PreFilters are self-contained filtration systems for off-line sample preparation applications. Use in stool, serum, diluted whole blood, urine and throat swab assays. Components sold separately allow for flexibility in tube size and filtration efficiencies. All POREX SQ-EASY PreFilter components are sold separately and packaged 100 or 1,000 to the package.

POREX® SQ-EASY™ Tube		POREX® SQ-EASY™ Tip		POREX® SQ-EASY™ Closure Cap		
Catalog No.	Volume	Packaging	Catalog No.	Packaging	Catalog No.	Packaging
7928	2 mL	1,000/Pk	7995	1,000/Pk	7376	1,000/Pk
7929	3.5 mL	1,000/Pk			(Swab Compatible	e)

### POREX® TRANS-IT SQ-EASY™ Sample Preparation System

POREX TRANS-IT SQ EASY is the self-contained, positive closure, sample preparation system that collects, filters, transfers and stores buffers, serum, plasma, urine, stool, blood, saliva, and other liquid and viscous bodily fluids and tissues for use in clinical and molecular diagnostic testing. Additional life science applications include use in PCR methodologies and other DNA/RNA extraction procedures.

All TRANS-IT SQ Easy components are liquid tight and interlocking with a screw cap positive closure that prevents sample leakage and allows for inter and intra laboratory transport. \*Filtration media available in porous glass fiber membrane, advanced porous UHMWPE, HDPE materials and custom material combinations. Components sold separately to allow for application flexibility.

\*Data on file and available on request

TRANS-IT SQ-EASY™ Tube			TRANS-IT SQ-EASY™ Cap Closure  Catalog No. Packaging	
Catalog No.	Volume	Packaging	Catalog No.	Packaging
100755	3.5 ml	1000/Pk	100754	1000/Pk



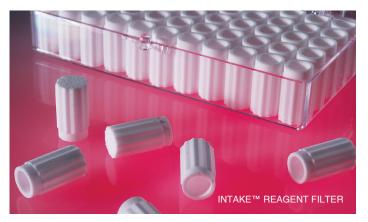
#### SQ-EASY™ & TRANS-IT SQ-EASY™ Filter Tip (Assembled With Filter Medium)

Catalog No.	Filtration Efficiency	Filtration Medium	Packaging
7986	1 <i>µ</i> m	Glass Fiber + UHMWPE	1000/Pk
7377	5 μm	UHMWPE	1000/Pk
7884	5 μm	Glass Fiber + UHMWPE	1000/Pk
7983	10 μm	UHMWPE	1000/Pk
7984	15 μm	HDPE	1000/Pk
7985	25 μm	HDPE	1000/Pk
42345	25 μm-PCR READY	UHMWPE	1000/Pk
42429	60 um	HDPE	1000/Pk
42430	95 μm	HDPE	1000/PK

# **Liquid Handling Products**

Porex Intake, Inline, ESR, Clinical Pipette Tip and Serological Filters are the porous design solutions chosen by a broad spectrum of pipette and instrument manufacturers to help eliminate aerosol by-pass, degassing, sample carryover and the passage of aqueous based liquid from sample to equipment and instrumentation.





# POREX® INTAKE™ Reagent Filter

Use with automated instrumentation, bench top dispensers or wherever sample is drawn from a master storage bottle. Disposable filter is manufactured of UHMWPE (ultra-high molecular weight polyethylene) and filters particulate matter down to 10 micron. Attaches to equipment line with glass weight (not provided). Packaged 55 filters per container and 10 containers to the case or 1,000 to the bulk package.

Catalog No.	Packaging
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6603 Container of 55 filters 6965 Package of 1,000 filters



### POREX® INLINE™ Reagent and Degassing Filter

Use to filter laboratory reagents, gas, air, fuel and a variety of other liquids. The tortuous path filter element contained in a solid polyethylene housing traps particles as small as 10 microns. Available in 10, 25 and 125 micron sizes with a length of 2.394 inches (60.81 mm). Retention efficiency as tested per ASTM F795-88 in water with particle sizes of 25–30 microns.\* Packaged 500 filters to the package and 5 packages to the case.

Catalog No.	Filtration Efficiency	Retention Efficiency*	Filtration Medium	Barbed Casing
6621	10 μm	99.3	UHMWPE	No
6618	25 μm	79.7	HDPE	No
6623	125 μm	99.9	HDPE	No
7438	10 μm	99.3	UHMWPE	Yes
7439	25 μm	79.7	HDPE	Yes
8020	25 μm	99.0	UHMWPE + carbon	Yes
9069	125 μm	99.9	HDPE	Yes

<sup>\*</sup>Data on file and available on request.

View our study on Factors Affecting Clinical and Life Science Test Results in Polymeric Consumables.



Scan the QR code to download a copy of our Study



# **Liquid Handling Products Continued...**



### **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.



### **Clinical Pipette Tip Filters**

Help prevent trace carryover and instrument contamination caused by aerosols generated during sample aspiration with POREX® Clinical Pipette Tip Filters.

Specifically designed for clinical and molecular applications, the inert, patented, hydrophobic POREX Clinical Pipette Tip Filters do not seal or trap samples and allow for sample recovery, even in the event of over-pipetting. Manual, multi-sample and robotic pipette tip filters deliver optimal dispensing and pipetting performance across a wide range of liquid volumes.



### POREX® Serological Pipette Filters

POREX® Serological Pipette Filters are the porous design solutions that help eliminate aerosol bypass, sample carryover, cross contamination and the passage of aqueous based liquid from sample to pipette. Designed for use in a wide variety of dispensing applications, POREX® Serological Pipette Filters are design optimized to fit securely in the upper end of the pipette and to allow for engineering and work practice control finished products.

A new dimension in serological pipette design, use and safety, is available with the POREX® Liquid Safe Filters†, the new liquid barrier + aerosol barrier serological filter that reduces fast draw sample uptake, stops sample from exiting the pipette and protects the pipette aid from sample contamination. POREX Liquid Safe serological filters also reduce possible accidental exposure to hazardous materials and the need for expensive, internal syringe filters.

### Serological Pipette Overview & Value Proposition



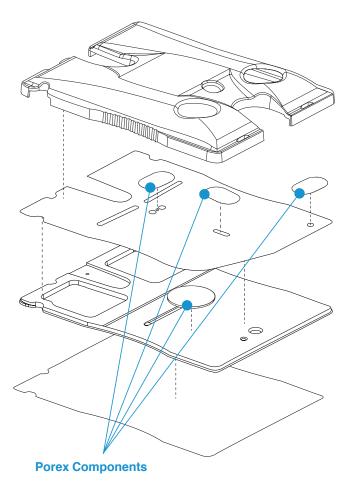
Scan the QR Code to watch a video and see for yourself why the POREX® Liquid Safe Filters exemplify the critical design and functional standards required for today's serological products versus cotton and

colored plug materials that allow liquid and aerosol bypass, that do not protect the pipette aid, and that have potential material residue, shed and methodology incompatibility.



# Micro Fluidic Media & Filters

Advances in micro fluidic systems have strong potential for detection of a wide range of analytes with reduced sample and reagent volume, lower costs and shorter analysis times. High–fidelity multiplex and multiclass assays that synergize components and achievements in nanotechnology, molecular diagnostics, micro fluidics and microelectronics, have the ability to create new and powerful measurement tools in a small device footprint that meet or exceed today's analytical performance requirements.



### **Material Applications**

- Sample Filter
- · Sample Absorption Pad
- Vent
- · Waste Chamber
- Debubbler
- · Binder (Functional Additives)
- · Particulate Capture
- · Others
  - · Fluid Check and Metering Valves
  - · Reagent Reservoirs (Solid and Liquid)
  - · Separation Column
  - Sensors

Critical to the function of lab-on-a-chip, molecular diagnostics and POC analysis solutions is the incorporation and use of highly specialized, pure materials and media in the areas of sample filtration and absorption, particulate capture, debubbling, venting, fluid metering, separation and more.

POREX Micro Fluidic Media and Filters are the smart enabling materials that provide critical functionality in micro device applications. Additionally, POREX Micro Fluidic Media and Filters are robust, certified non-leachable and extractable, easy to handle and can be device inserted using common techniques as press fitting, heat staking and ultrasonic welding.

POREX Micro Fluidic Media and Filters are available in sheet and complex three-dimensional structures, in a wide variety of advanced porous material configurations including porous plastics, microporous PTFE, porous polymeric fiber, porous glass fiber membrane, porous composites and functionalized and bioactivated porous media.



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