

## Filter Vials

### What is a Filter Vial?

Thomson Filter Vials (patented) are a single system which replaces HPLC Vials, HPLC Caps, Syringes, & Syringe Filters for the filtration of samples. In 15 seconds, Thomson Filter Vials allow for sample preparation of unfiltered samples to filtered samples in an autosampler-ready vial.

The Filter Vial consists of two parts: an outer shell and a plunger which includes a filter on one end and a vial cap on the other end. Samples are filtered by pipetting the sample into the filter vial outer shell, inserting the plunger, and pushing the plunger into the shell.

### Same Size as HPLC Vial

Thomson Filter Vials are the same size as standard HPLC vials and will fit easily into any machine or tray available for standard HPLC vials.



### Key Features

- No more messy syringe/filters
- Simple to use, < 10 seconds/sample
- Prevents costly repairs
- Available in PTFE, PVDF, PES or Nylon on a 0.2µm or 0.45µm
- Snapp or screw cap options
- Split or non-split septum options

DEPOSIT SAMPLE



PUSH



COMPLETE FILTER VIAL

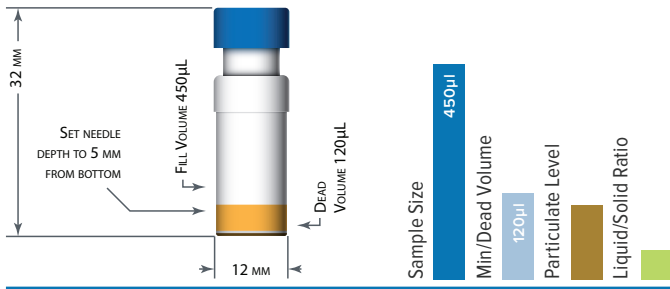
COMPLETED WITH  
FILTRATE REMOVED  
FROM SAMPLE



# Filter Vial Types

## Filter Vial 120µL Dead Volume

Max Fill Vol. 450µL  
Dead Vol. 120µL

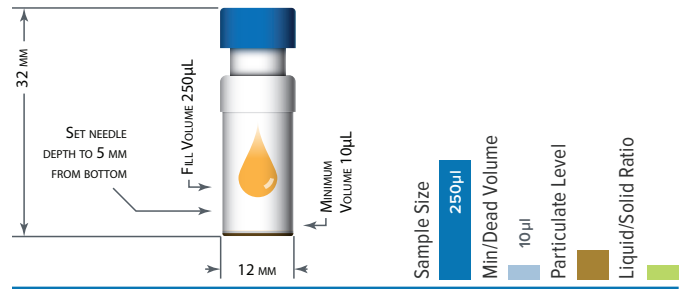


### Key Features

- General purpose filtration
- <10% solid particulates

## nano Filter Vial 10µL Minimum Volume

Max Fill Vol. 250µL  
Min Fill Vol. 10µL (for 2µL injection)



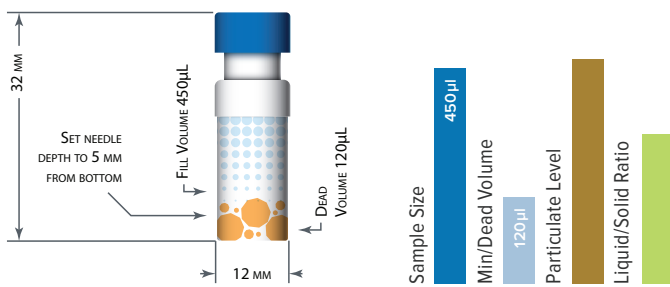
### Key Features

- 10µL sample for 2µL injection
- Available with pre-slit or non-slit caps



## EXTREME/FV Multi-Layered Filtration

Max Fill Vol. 450µL  
Dead Vol. 120µL

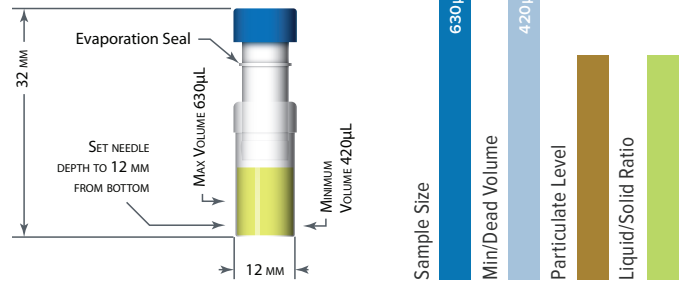


### Key Features

- Used for Particulate Laden Samples
- Contains a Depth Pre-Filter

## EXTRACTOR3D|FV Multi-Mode Filtration

Max Fill Vol. 630µL  
Dead Vol. 420µL



### Key Features

- Minimize Matrix Effects & Ion Suppression from direct injection
- High solid/liquid ratio
- Can Accept Solids or Large Particulates
- Allows for QuEChERS



## Optimum Growth™ Flasks

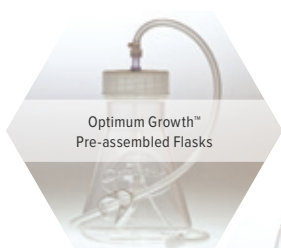
### Key Features

- Baffles designed for high aeration & low shear
- Same footprint as comparable Fernbach flask
- Less foaming than disposable Fernbach
- Transfer cap option connects directly to cell bags or bioreactors with quick connect, luer lock or tube fusing
- 0.2µm Vented Cap
- Scalable from 125mL to 5L
- Individually packaged and sterilized

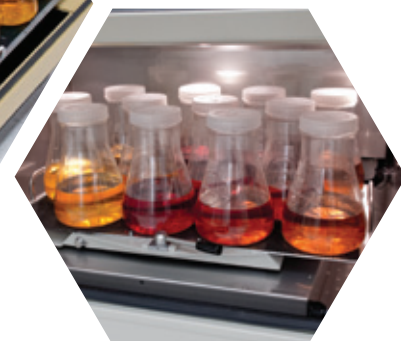
### Scalability

Thomson Optimum Growth™ Flasks are designed so that protein production will scale consistently across all sizes, unlike any other shake flasks on the market. Additionally, these flask features allow for consistent shake speeds from the 125mL flasks up to the 5L flasks.

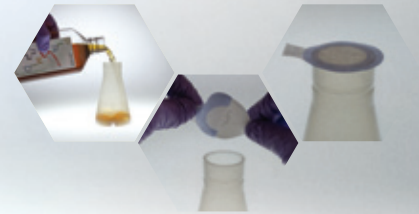
**The Optimum Growth™ Flasks come in multiple sizes of 125mL, 250mL, 500mL, 1.6L, 2.8L and our popular 5L.**



18 Optimum Growth™ 1.6L Flasks



12 Optimum Growth™ 2.8L Flasks



## Ultra Yield™ Solution

### Ultra Yield™ Flasks

Thomson's Ultra Yield™ Flasks (patented) have proven over the last decade to enhance the growth of *E.coli* & other microbial cells. The patented flask design makes them the work horse of protein and DNA labs worldwide. The Ultra Yield Flasks come in standard sizes of 125mL, 250mL, 500mL, 1.5L and 2.5L.

### Key Features

- 10x increased aeration over standard shake flasks
- Increased DNA & protein production
- Fully scalable results
- Replacement for glass flasks
- Fits all standard flask clamps
- Easily adaptable into microbial growth protocols
- Sterile, disposable, single-use flasks from 125mL – 2.5L

### Plasmid+® Media

PLASMID+® is an enriched liquid medium specifically designed for plasmid DNA production. PLASMID+® supports higher cell densities and plasmid yields than LB media. Maximum culture aeration is achieved using the Ultra Yield™ Flasks. *E.coli* DH5α is the preferred host strain for use with PLASMID+® liquid medium. *E.coli* XL1-Blue also produce high quality plasmid DNA and may improve plasmid DNA yields with plasmids smaller than 3Kb.

### Enhanced AirOtop™ Seals

Enhanced AirOtop™ Seals (patented) are disposable, high gas exchange, sterile, simple seals for all shake flasks. Properties of the seal include a 0.2µm sterile barrier with a resealable membrane for use with Ultra Yield™ Flasks as well as other brand flasks. Testing has been conducted at multiple customer sites with great results of up to 24 hours of growth. This testing resulted in improved growth and more aerobic growth yielding a more neutral pH of the cultures.

## Well Plates

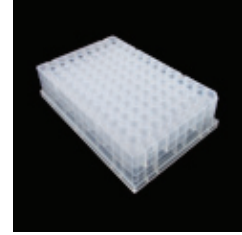
Thomson Instrument Company Well Plates represent a cross section of 24 and 96 well plates for many different needs. We carry plates for various types of assays, cell growth, storage, and other applications. Filter plates are available in 24 well and 96 well formats for all your filtering needs including sample preparation. Thomson Instrument Company offers a variety of sealing options for all types of applications.

### Well Plate Accessories

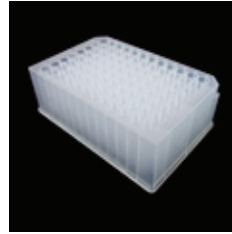
Thomson offers a variety of sealing solutions for the well plates. Foil seals come in both heat sealable and adhesive varieties. For growing cultures use the Airporous Plate Seal. Our closing mats are designed to make research easier for you. Cap Mats are piercible for autosampler applications for your convenience or solid for long term storage for protection.



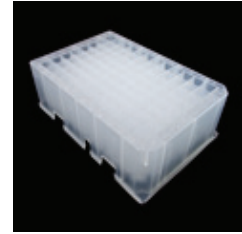
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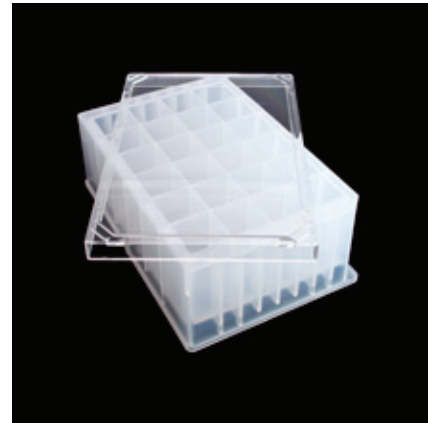
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931130



24 Well Filter Plate  
Part# 921550



24 Well Plate with lid  
Part# 931571

## Glassware

- Vials for reactions and compound storage in sizes ranging from 2mL to 60mL, clear and amber glass.
- Vials for LC/MS, HPLC, and other purification and analytical requirements. Our vials are universal and can be used on most autosamplers.
- High Temperature and Pierceable vial caps in sizes 2mL to 60mL
- Glass inserts to enhance aliquot accessibility for Autosampler needles

Thomson Glassware is an important component of any synthesis or analytical work. All of our products have been manufactured using the best quality available. Products include: Vials for reactions and HPLC Autosamplers, caps and lid solutions, plastic and metal blocks for storage and dry down, custom glassware, barcoding or laser etching is always available, and other products made for custom projects.



## SINGLE StEP® Empty Columns

### Key Features

- Acceptable for use with Gravity or FPLC/LPLC/MPLC
- Multiple sizes for scales from 10mL-650mL (4g - 300g)
- Durable design for pressures up to 200psi



### Easy to Use...

At Thomson, we are aware of the need to customize available apparatus to the individual experiments. Our SINGLE StEP® Empty Columns (patented) provide you the opportunity to fill different sized columns with a variety of sorbents and resins for purification applications. The wide range in which we offer these Columns means you are not limited by column size. SINGLE StEP® Empty Columns allow for a simple connection to FPLC/LPLC/MPLC systems.



**“To raise new questions,  
new possibilities, to regard  
old problems from a new angle,  
requires creative imagination and  
marks real advance in science.”**

– *Albert Einstein*