

**BioExcel**

YOUR PARTNER IN BIOPHARMACEUTICAL EXCELLENCE



## ABOUT BIOEXCEL PHARMA

### ■ Mission Statement

BioExcel Pharma is a trusted partner in biopharmaceutical consumables. We deliver high-performance, sterile, and single-use products that support end-to-end pharmaceutical manufacturing—from development to commercial scale. Our mission is to provide reliable, regulatory-compliant solutions that meet the exacting standards of the biopharmaceutical industry.

We are committed to continuous innovation, customer collaboration, and delivering quality products that move therapies forward.

### ■ Key Differentiators

- **Global Reach:** Operating in over 5 international markets
- **Reliable & Efficient Supply Chain:** Ensuring timely and consistent delivery
- **Competitive Pricing:** Offering attractive bulk order discounts

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## INDUSTRIES WE SERVE

We support leading organizations across the global biopharmaceutical supply chain, including:

-  Biopharmaceutical Manufacturing
-  CDMOs & CMOs
-  Medical Devices & Diagnostics

-  Clinical Research & Laboratories
-  Cosmetics & Personal Care
-  Hospitals, Dialysis Centers, IVF Clinics



## PRODUCT OVERVIEW

BioExcel Pharma's product portfolio is engineered for critical biopharmaceutical operations, including fluid transfer, purification, sample processing, and sterile containment. Explore our product categories below:

1. XyBio – Single-use bioprocess bags for upstream and downstream fluid handling.
2. XyPure – Sterile WFI-grade water solutions for pharmaceutical formulation and manufacturing.
3. XySpare – Critical process components including tubing, valves, connectors, and filling needles.
4. XyFilter – Filtration systems including capsule, syringe, and membrane filters for critical processing.
5. XyColumn – Chromatography columns and media solutions for purification and analytical prep.
6. XySPE – Solid phase extraction tools for regulated sample preparation workflows.
7. XyWare – Labware including pipettes, tubes, and cryogenic containers for cleanroom labs.
8. XyShield – Cleanroom protection including garments, blankets, and sterile PPE.

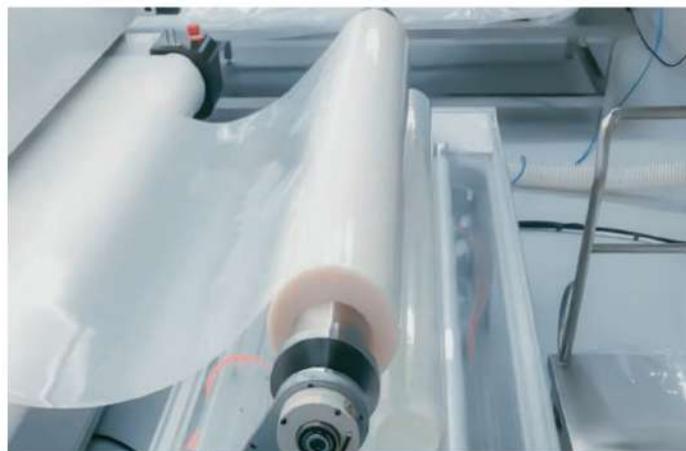
# XYBIO



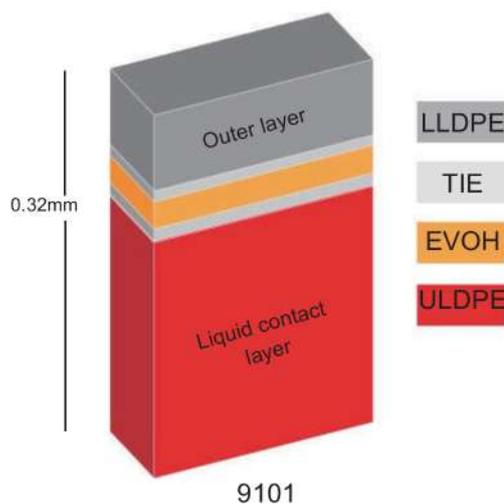
# BIOPHARMA MEMBRANE



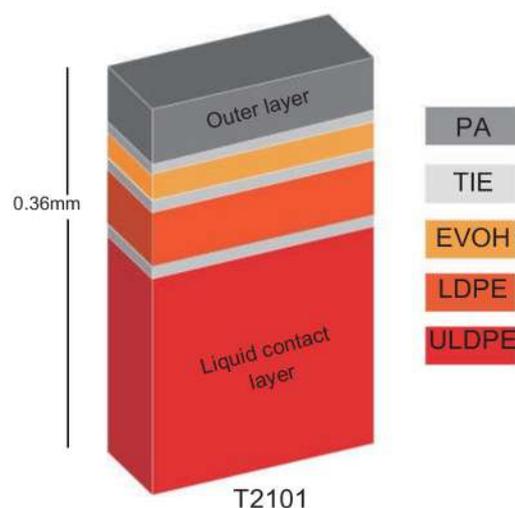
The main raw material of disposable aseptic bag is multilayer biopharmaceutical membrane. The thickness of the film material is 0.3-0.4mm, and the inner surface fluid contact layer is made of ultra-low density polyethylene (ULDPE), which has excellent chemical compatibility and biological safety, low dissolved precipitates, and no animal derived components (ADCF). The intermediate layer is made of ethylene - vinyl alcohol copolymer (EVOH), which can effectively block oxygen, carbon dioxide and water vapor. The outermost non-contact layer is made of linear low density polyethylene (LLDPE) or polyamide (PA), which provides high mechanical strength while also imbuing the material with biological inertness against fluid contact.



Physical characteristics		
Name	Test value (before radiation after radiation)	Reference standard
ASTM D-1249	7/7%	ASTM D-1003
Transparency ratio	97/97%	ASTM D-1003
Transmittance	93/93%	ASTM D-1003
Tensile strength	14/13MPa	ASTM D-882
Tensile ratio at break	280/300%	ASTM D-882
Elastic coefficient	370/350%	ASTM D-882
Low temperature tolerance	-45/-45°C	ISO8570
Density	0.9g	ASTM D-792
Water vapor penetration	0.35/0.32(g/M.day) (23°C,100%RH)	ASTM D-1249
Oxygen transmittance	<0.05L<(cm/M.day.bar) (23°C,0%RH)	ASTM D-3985
Carbon dioxide transmittance	<0.21<0.2(cm/M.day.bar) (23°C,0%RH)	ASTM D-2476



Pharmacopoeia compliance with biocompatibility evaluation items	
Evaluation item	Reference standard
Hemlysis	ISO 10993-4
Cytotoxicity	ISO 10993-5
Implantation	ISO 10993-6
Irritation and Sensitization tests	ISO 10993-10
Acute Systemic Toxicity tests	ISO 10993-11
Bacterial Endotoxins-KAK tests	USP<85>
Biological reactivity testing, in vivo, class VI	USP<88>
Plastic Containers European Pharmacopoeia tests, CH.3.1.5	USP<661>



## Single-use Cell Culture Bag

### PRODUCT DESCRIPTION

The XyBioCulture Single-Use Cell Culture Bag is engineered for advanced cell therapy, antibody drug expansion, and vaccine production. Designed for compatibility with CES, SUR, and bioprocessing equipment, it supports rapid cell expansion while ensuring a sterile, contamination-free environment with integrated gas exchange and ventilation features. These culture bags provide scalability while maintaining bioprocess control precision.



Suspension culture bag

### CHARACTERISTICS

- Constructed from multilayer biopharmaceutical-grade membranes with superior biocompatibility.
- Gamma-ray sterilized and 100% integrity tested, ensuring sterility and contamination-free processing.
- Customizable with integrated pH, DO sensors, and additional process control features.
- Available in suspension and carrier culture configurations, allowing optimized cell growth environments.
- Process-specific functional customization available based on application needs.



Disposable perfusion bag

### APPLICATIONS

- Cell Therapy: CAR T-cell therapy, primary T-cell expansion.
- Stem Cell Cultivation: Growth and maintenance of embryonic and cord blood-derived stem cells.
- Antibody Production: Supports PD-1, PDL-1, and other monoclonal antibody (mAb) development.
- Recombinant Protein Production: Facilitates expression of coagulation factors, EPO, TPO, and cytokines.
- Viral Vector & Vaccine Production: Adenovirus, oncolytic viruses, mRNA vaccine development (COVID-19, etc.).
- Laboratory Process Development: Optimization and testing of bioprocess strategies.



Carrier culture bag

## Single-use Cell Culture Bag

### Product Information

#### Suspension Culture Bag

Product No.	Specification	Working Volume	Basal Membrane Pocket	pH/DO	Perfusion Film
XyBioCulture-1LH	1L	0.1-0.5L	✓		
XyBioCulture-2LH	2L	0.2-1L	✓	✓	✓
XyBioCulture-5LH	5L	0.5-2.5L	✓	✓	✓
XyBioCulture-10LH	10L	1-5L	✓	✓	✓
XyBioCulture-20LH	20L	1-10L	✓	✓	✓
XyBioCulture-50LH	50L	5-30L	✓	✓	✓
XyBioCulture-100LH	100L	10-50L	✓	✓	✓
XyBioCulture-200LH	200L	20-100L	✓	✓	✓

Note: The pH/DO fiber optic film bag and perfusion film should be selected according to the customer's process. The default is the base membrane bag

#### Carrier Culture Bag

Product No.	Specification	Working Volume	Carrier Weight	Wall Area
XyBioCulture-2CH	2L	1L	30g	36,000 cm <sup>2</sup>
XyBioCulture-5CH	5L	2.5L	75g	90,000 cm <sup>2</sup>
XyBioCulture-10CH	10L	5L	150g	180,000 cm <sup>2</sup>
XyBioCulture-20CH	20L	10L	300g	720,000 cm <sup>2</sup>
XyBioCulture-50CH	50L	50L	1500g	1,260,000 cm <sup>2</sup>
XyBioCulture-100CH	100L	100L	3000g	1,800,000 cm <sup>2</sup>
XyBioCulture-200CH	200L	200L	6000g	3,600,000 cm <sup>2</sup>

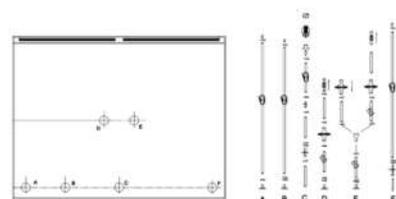
Description: Carrier quantity and surface area 30g/L Carrier surface area 1200-1500cm<sup>2</sup>

## Single-use Cell Culture Bag

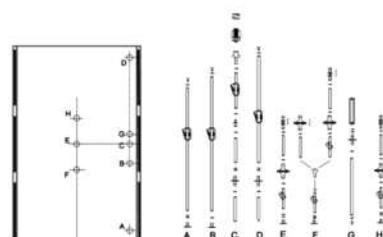
### Piping specification



Piping arrangement	Number	Model
	XPD -T-1-50LH1	1L-50L (basic)
(Refill) Pipe 1: 6.4 *9.6mm silicone pipe, reducer connector, 3.2*6.4mm C-FLEX pipe, Luer connector (Sampling) Pipe 2: (outside bag) 6.4*9.6mm silicone tube, 3.2*6.4mm C-FLEX tube, Luer connector, needle free sampler (Inside the bag) 6.4*9.6mm silicone tube (Harvest) Pipe 3: (outside bag) 9.6*16mm silicone pipe, 3.2*6.4mm C-FLEX pipe, Luer connector (Inside the bag) 9.6*16mm silicone tube (tail tip incision) (Intake) pipe 4: 8 *12.7mm silicone pipe, cut-off clip, 0.2µm filter, check valve 5: 8 *12.7mm silicone pipe, cut-off clip, Y-fitting, 0.2µm filter, check valve		



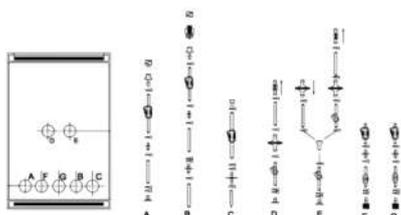
Piping arrangement	Number	Model
	XPD-T-100LH1	100L (basic)
(Refill) Pipe 1: 3.2 *6.4mm C-FLEX pipe with plug (Refill) Line 2: 6.4*11.1mm C-FLEX tube, plug (Sampling) Pipe 3: (outside bag) 6.4*9.6mm silicone tube, 3.2*6.4mm C-FLEX tube, Luer connector, needle free sampler (Inside the bag) 6.4*9.6mm silicone tube (Intake) pipe 4: 8 *12.7mm silicone pipe, cut-off clip, 0.2µm filter, check valve 5: 8 *12.7mm silicone pipe, cut-off clip, Y-fitting, 0.2µm filter, check valve (Exhaust/holding pressure) 5: 8 *12.7mm silicone tube, cut-off clamp, Y-connector, 0.2µm filter, one-way valve (Inside the bag) 6.4*9.6mm silicone tube (tail tip incision)		



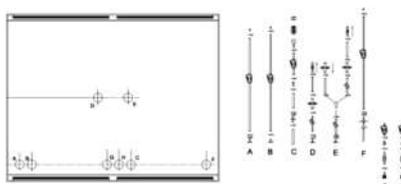
Piping arrangement	Number	Model
	XPD-T-200LH1	200L (basic)
(Replenishment) Pipe 1: 6.4 *11.1mm C-FLEX pipe with plug (Refill) Pipe 2: 3.2*6.4mm C-FLEX pipe, plug (Sampling) Pipe 3: (outside bag) 6.4*9.6mm silicone tube, 3.2*6.4mm C-FLEX tube, Luer connector, needle free sampler (Inside the bag) 6.4*9.6mm silicone tube (Harvest) Pipe 4: (outside bag) 9.6*16mm C-FLEX pipe, plug (Inside the bag) 6.4*9.6mm silicone tube (tail tip incision) (Intake) pipe 5: 8 *12.7mm silicone tube, cut-off clip, 0.2µm filter, check valve (Exhaust/pressure holding) Piping 6: 8 *12.7mm silicone pipe, cut-off clip, Y-fitting, 0.2µm filter, check valve (Temperature control) Pipe 7: (outside the bag) 6.4*9.6mm silicone pipe with plug (Inside the bag) 4.8*8mm silicone tube with plug (Exhaust) pipe 8: 8 *12.7mm silicone tube, cut-off clip, 0.2µm filter, check valve		

## Single-use Cell Culture Bag

### Piping specification



Piping arrangement	Number	Model
	XPD-T-1-50LH2	1-50L(pH/DO)
<p>(Refill) Pipe 1: 6.4 * 9.6mm silicone pipe, 3.2*6.4mm C-FLEX pipe, Luer connector (Sampling) Pipe 2: (outside bag) 6.4*9.6mm silicone pipe * 3.2*6.4mm C-FLEX pipe, Luer connector, no needle sampler (Inside the bag) 6.4*9.6mm silicone tube (Harvest) Pipe 3: (outside bag) 9.6*16mm C-FLEX pipe, plug (Inside the bag) 9.6*16mm silicone tube (tail tip incision) (Intake) pipe 4: 8 * 12.7mm silicone pipe, cut-off clip, 0.2µm filter, check valve 5: 8 * 12.7mm silicone pipe, cut-off clip, Y-fitting, 0.2µm filter, check valve (DO monitoring) Pipe 6: (outside the bag) 4.8*8mm silicone pipe (Inside bag) 4.8*8mm silicone tube, DO optical fiber sensor (black spot) (pH monitoring) Pipe 7: (outside the bag) 4.8*8mm silicone pipe (Inside bag) 4.8*8mm silicone tube, pH optical fiber sensor (white spot)</p>		



Piping arrangement	Number	Model
	XPD-T-100LH2	100L(pH/DO)
<p>1: 6.4*11.1mm C-FLEX tube with plug (Refill) Pipe 2: 3.2*6.4mm C-FLEX pipe, plug (Sampling) Pipe 3: (outside bag) 6.4*9.6mm silicone tube, 3.2*6.4mm C-FLEX tube, Luer connector, needle free sampler (Inside the bag) 6.4*9.6mm silicone tube (Intake) pipe 4: 8 * 12.7mm silicone pipe, cut-off clip, 0.2µm filter, check valve 5: 8 * 12.7mm silicone pipe, cut-off clip, Y-fitting, 0.2µm filter, check valve (Harvest) Pipe 6: (outside bag) 9.6*16mm C-FLEX pipe, plug (Inside the bag) 9.6*16mm silicone tube (tail tip incision) (DO monitoring) Pipe 7: (outside the bag) 4.8*8mm silicone pipe (Inside bag) 4.8*8mm silicone tube, DO optical fiber sensor (black spot) (pH monitoring) Pipe 8: (outside the bag) 4.8*8mm silicone pipe (Inside bag) 4.8*8mm silicone tube, pH optical fiber sensor (white spot)</p>		



Piping arrangement	Number	Model
	XPD-T-200LH2	200L(pH/DO)
<p>1: 6.4*11.1mm C-FLEX tube with plug (Refill) Pipe 2: 3.2*6.4mm C-FLEX pipe, plug (DO monitoring) Pipe 3: (outside the bag) 4.8*8mm silicone pipe (Inside bag) 4.8*8mm silicone tube, DO optical fiber sensor (black spot) (pH monitoring) Pipe 4: (outside the bag) 4.8*8mm silicone pipe (Inside bag) 4.8*8mm silicone tube, pH optical fiber sensor (white spot) (Sampling) Pipe 5: (outside bag) 6.4*9.6mm silicone pipe, 3.2* 6.4 C-Flex pipe, Luer connector, needle free sampler (Inside the bag) 6.4*9.6mm silicone tube (Temperature control) Pipe 6: (outside the bag) 6.4*9.6mm silicone pipe with plug (Inside the bag) 9.6*16mm silicone tube (Intake) pipeline 8: 8 * 12.7mm silicone tube, cut-off clip, 0.2µm filter, check valve 9: 8 * 12.7mm silicone pipe, Interceptor clamp, Y-fitting, 0.2µm filter, check Valve (Exhaust/pressure maintaining) pipeline 9: 8 * 12.7mm silicone tube, cut-off clip, Y-fitting, 0.2µm filter, check valve (exhaust/pressure maintaining) pipeline 10: 8 * 12.7mm silicone tube, cut-off clip, 0.2µm filter, check valve</p>		

## Disposable 2D Liquid Storage Bag

### PRODUCT DESCRIPTION

The XyBioStore 2D Liquid Storage Bag is designed for small-scale bioprocessing applications, including cell therapy, antibody drug expansion, vaccine development, and clinical manufacturing. These single-use bioprocess bags provide secure buffer storage, sample collection, product consolidation, and aseptic transport of biological fluids. The design minimizes contamination risks while ensuring a fully aseptic environment for fluid handling.

### CHARACTERISTICS

- Constructed from multilayer biopharmaceutical membranes ensuring high biocompatibility.
- 100% integrity tested and gamma-ray sterilized, ensuring complete sterility.
- Configurable with multiple connection types: TC joint, quick joint, plug, and sterile joint.
- One-piece design with minimal residual volume for efficient fluid transfer.
- Scalable and customizable solutions available per user specifications.

### APPLICATIONS

- Storage of sterile solutions, including small-volume media and buffers.
- Intermediary & final product storage for biopharmaceutical processes. Source fluid harvesting and transport in biologics production. Buffer zone stabilization during bioprocess workflows.



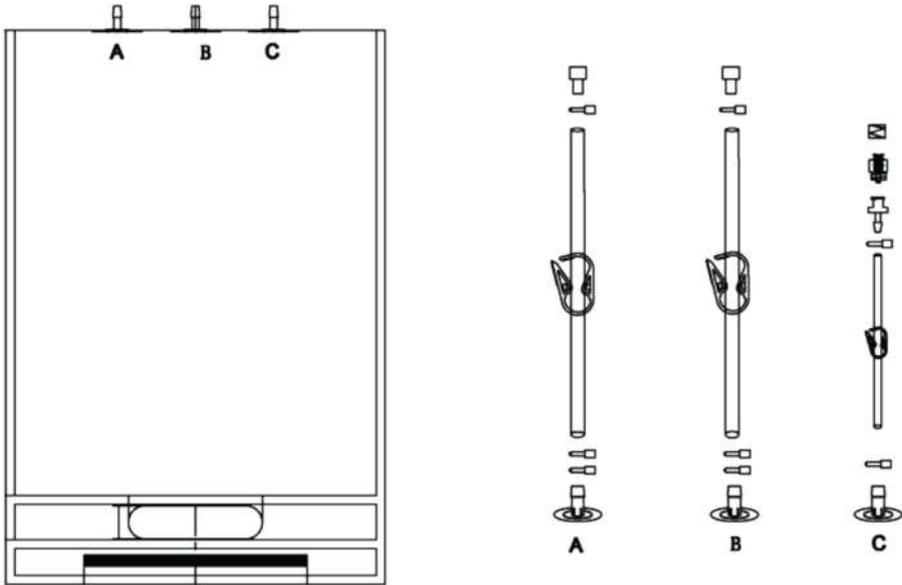
**Disposable 2D Liquid Storage Bag**

**Product Information**

Product No.	Specification	TC Joint	Quick Joint	Plug	Sterile Joint
XyBioStore-0.5LH	0.5L	✓	✓	✓	✓
XyBioStore-1LH	1L	✓	✓	✓	✓
XyBioStore-2LH	2L	✓	✓	✓	✓
XyBioStore-3LH	3L	✓	✓	✓	✓
XyBioStore-5LH	5L	✓	✓	✓	✓
XyBioStore-10LH	10L	✓	✓	✓	✓
XyBioStore-20LH	20L	✓	✓	✓	✓
XyBioStore-50LH	50L	✓	✓	✓	✓

**Piping Specification**

Number	Model	Piping arrangement
2DB-T-1-50LH1	1-50L(Customizable)	1:9.6*16mm C-FLEX tube with plug (Discharge) Line 2:9.6*16mm C-FLEX tube, plug (Sampling) Pipeline 3:3.2*6.4mm Silicone tube, Luer connector, no needle sampler



## Disposable 3D Liquid Storage Bag

### PRODUCT DESCRIPTION

The XyBioStore 3D Liquid Storage Bag is designed for high-capacity liquid storage and transport in biopharmaceutical processing. These single-use storage solutions support applications such as buffer and media storage, product collection, intermediate preservation, and final product transportation. Built to maintain a sterile, contamination-free environment, the bags ensure efficient fluid handling in a variety of workflows.



### CHARACTERISTICS

- High-strength membrane material with superior chemical compatibility and biocompatibility.
- Transparent film construction allows for clear visibility and process monitoring.
- Capable of handling diverse biopharmaceutical storage and transport requirements.
- Flexible size configurations with integrated piping for various process demands.

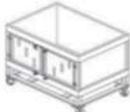
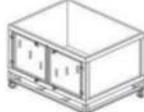


### APPLICATIONS

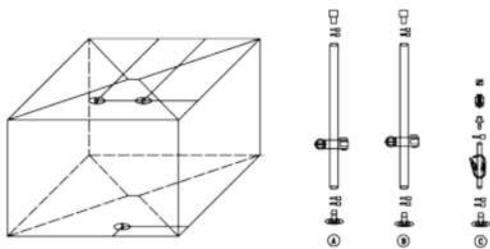
- Storage and transport of buffers and culture media.
- Cell receiving liquid transport.
- Collection of purification components.
- Handling of appropriate liquid volumes in mixing and transfer processes.
- Bulk stock storage and distribution.

# Disposable 3D Liquid Storage Bag

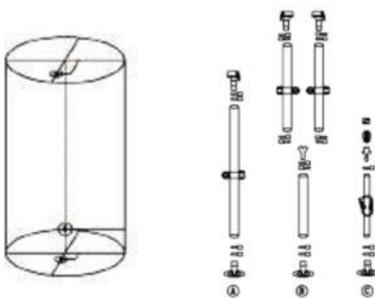
## Product Information

Disposable 3D liquid storage bag							
Product No.	XyBioStore-50LH	XyBioStore-100LH	XyBioStore-200LH	XyBioStore-500LH	XyBioStore-1000LH	XyBioStore-2000LH	XyBioStore-3000LH
Working volume	50L	100L	200L	500L	1000L	2000L	3000L
Effect drawing							

## Piping Specification



Piping arrangement	Number	Model
	3DB-T-50-3000LH1	50-3000L(3D square bag)
(liquid intake) line1:12.7 *19.1mm C-FLEX tube, large tube clamp, plug (Discharge) Line		
2:12.7*19.1mm C-FLEX tube, large clamp, plug		
(Sampling) Line 3:6.4*9.6mm Silicone tube, Luer connector, needle free sampler		



Piping arrangement	Number	Model
	3DB-T-50-200LH2	50-200L(3D round bag)
(liquid intake) line1:12.7 *19.1mm silicone tube, large tube clamp, sterile connector Pipe		
2:12.7*19.1mm silicone pipe,Y type equal diameter joint, large pipe clamp, sterile joint		
(Sampling) Line 3:6.4*9.6mm C-FLEX Tube, Robert Clip, Luer connector, needle free Sampler		

## Disposable Freeze-Thaw Bag

### PRODUCT DESCRIPTION

The XyBioThaw Freezing-Thaw Bag is designed for stable stock solution storage and controlled freeze-thaw cycles in biopharmaceutical processes. It enables repeatable freezing and thawing of intermediates for applications in clinical research, mass production, and drug formulation. These bags maintain sterility and ensure consistency, making them ideal for antibody drugs, vaccines, cytokines, insulin, growth hormones, and protein-based products. The integrated thermocouple sleeve allows for precise temperature monitoring, improving process control.



### CHARACTERISTICS

- Withstands temperatures from  $-80^{\circ}\text{C}$  to  $+40^{\circ}\text{C}$ , ensuring reliable freeze-thaw performance.
- Sterility maintained through gamma-ray sterilization and 100% integrity testing.
- Low dissolution precipitation, providing stable product consistency.
- Robust structure, resistant to mechanical stress and handling.
- Customizable connection options for fluid transfer and storage integration.

### APPLICATIONS

- Drug substance storage for freeze-thaw processing.
- Vaccine storage and transport, ensuring cold chain stability.
- Intermediate product processing in biopharmaceutical manufacturing.
- Clinical product storage and research applications.



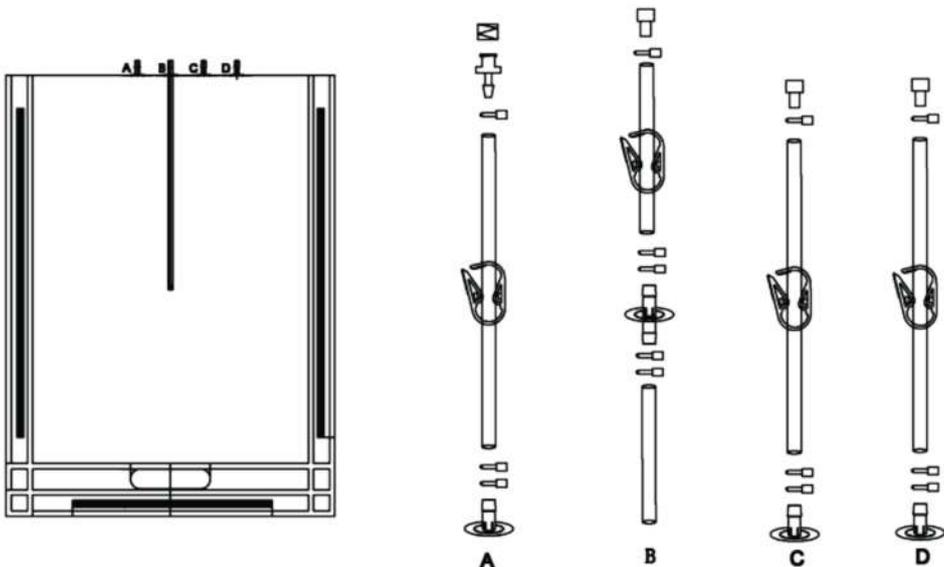
**Disposable Freeze-Thaw Bag**

**Product Information**

Product No.	Specification	Dimension	Quick Joint	Plug	Sterile Joint
XyBioThaw-5LH	5L	352x345mm	✓	✓	✓
XyBioThaw-10LH	10L	590x350mm	✓	✓	✓
XyBioThaw-20LH	20L	670x495mm	✓	✓	✓

**Piping Specification**

Number	Model	Piping Arrangement
DR-T-5-20LH1	5-20L(Customizable)	(Replenishing) Pipe 1:3.2 *6.4mm silicone pipe, Robert clip, Luer connector (Temperature control) Pipe 2: (in bag) 9.6*16mm C-FLEX tube, Robert clip, plug (outside bag) 9.5*12.7mm EVA Tube *25(heat seal at bottom) (Refill) Line 3:9.6*16mm C-FLEX tube, Robert Clip, plug Pipe 4:9.6*16mm C-FLEX tube, Robert Clamp, plug



## Disposable Sterile Sampling Bag

### PRODUCT DESCRIPTION

The XyBioSample Sterile Sampling Bag is a single-use solution for aseptic sampling in cell culture, media processing, and other biopharmaceutical applications. Designed for sterility assurance and low-reduction connection points, it enables secure fluid transfer and contamination-free sampling. These bags simplify the sampling workflow, ensuring minimal material loss while maintaining high sterility standards.

### CHARACTERISTICS

- Multi-channel system allows for efficient fluid transfer and sampling.
- Sterility maintained throughout the sampling and storage process.
- Customizable interface configurations based on process requirements.

### APPLICATIONS

- Secure fluid transfer from reactors through a closed system to the sampling bag.



## Product Information

Product No.	Specification	Plug	Quick Joint	Needle-Free Sampler
XyBioSample-50mLH	50ml	✓	✓	✓
XyBioSample-100mLH	100ml	✓	✓	✓
XyBioSample-125mLH	125ml	✓	✓	✓
XyBioSample-250mLH	250ml	✓	✓	✓
XyBioSample-500mLH	500ml	✓	✓	✓
XyBioSample-1LH	1L	✓	✓	✓

## Disposable Feeding Bag

### PRODUCT DESCRIPTION

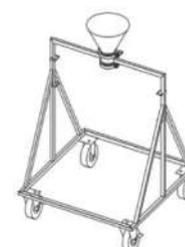
The XyBioFeed Feeding Bag is a single-use solution for aseptic feeding of upstream media, buffer solutions, and powdered materials in biopharmaceutical production. Designed to work seamlessly with disposable mixing bags, it prevents material splashing, contamination, and residue buildup. The bags are available in various feed port sizes, ensuring customizable and efficient integration with existing bioprocess systems.



### SUPPORTING EQUIPMENT

### CHARACTERISTICS

- Simplified single-use design eliminates the need for cleaning and sterilization.
- Prevents material residue and contamination, improving process efficiency.
- Customizable feed port sizes available for diverse bioprocess applications.
- Secure outlet connections minimize risk of leakage and ensure seamless feeding.



Feeding support

### APPLICATIONS

- Buffer configuration in bioprocessing workflows.
- Media configuration for upstream cell culture processes.
- Mass powder feeding, ensuring controlled and efficient material transfer

## Product Information

Product No.	Specification	Feed Port - 2 Inches	Feed Port - 3 Inches	Feed Port - 4 Inches	Feed Port - 6 Inches	Feed Port - 8 Inches
XyBioFeed-3LH	3L	✓	✓	✓	✓	✓
XyBioFeed-5LH	5L	✓	✓	✓	✓	✓
XyBioFeed-15LH	15L	✓	✓	✓	✓	✓
XyBioFeed-30LH	30L	✓	✓	✓	✓	✓
XyBioFeed-50LH	50L	✓	✓	✓	✓	✓
XyBioFeed-100LH	100L	✓	✓	✓	✓	✓

## Disposable Liner Bag

### PRODUCT DESCRIPTION

The XyBioLine Lining Bag is designed for plastic and stainless-steel container lining, providing a cost-effective solution for buffer preparation, culture liquid processing, and waste collection. The open-top design ensures efficient filling and extraction, reducing cleaning time and improving workflow efficiency.

### CHARACTERISTICS

- Economical alternative to closed-bag systems.
- Open-top design for fast filling and easy material extraction.
- Compatible with various outlet pipe configurations for customized processing.
- Mouth can be sealed to minimize contamination risks.



### APPLICATIONS

- Culture-medium preparation and buffer processing.
- Waste liquid collection in purification systems.
- Short-term storage and transport of process intermediate



Product No.	Available Sizes
XyBioLine-19LH	19L
XyBioLine-57LH	57L
XyBioLine-114LH	114L
XyBioLine-208LH	208L
XyBioLine-303LH	303L
XyBioLine-378LH	378L
XyBioLine-568LH	568L

## Single-Use Filling System

### PRODUCT DESCRIPTION

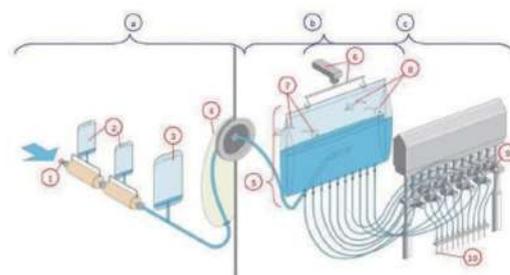
The XyBioFill Single-Use Filling System is a pre-assembled sterile filling solution designed for aseptic liquid handling in biopharmaceutical processes. With integrated connectors, filtration units, and tubing assemblies, it ensures sterile, contamination-free fluid transfer.



### FLOW

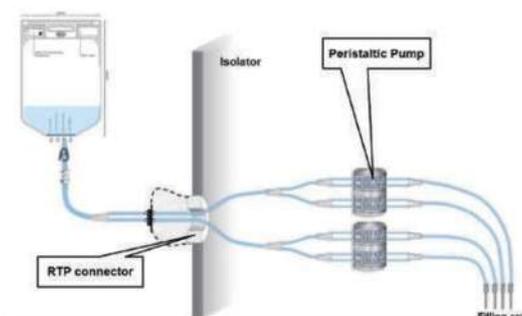
The XyBioFill system consists of multiple sterile components that work together for efficient and contamination-free liquid filling:

1. Sterile Connector – Ensures closed aseptic transfer of liquids.
2. Ventilation Bag – Regulates airflow to prevent pressure buildup.
3. Rinse Bag – Used for system cleaning before or after use.
4. Sterile Transmission System (RTP or SART) – Facilitates liquid transmission inside isolators.
5. Bracket & Weighing Unit – Supports precise weight monitoring during filling.
6. Gas Flush – Ensures air removal for contamination prevention.
7. Ventilation – Maintains controlled air exchange.
8. Peristaltic Pump – Enables consistent liquid flow without contamination.
9. Disposable Filling Needle – Ensures accurate and sterile dispensing of liquid.



### APPLICATIONS

- Aseptic filling and transfer in sterile drug manufacturing.
- Bioprocess liquid handling for upstream and downstream operations.
- Storage and dispensing for sterile fluid transfer.



## Disposable Mixing Bag

### PRODUCT DESCRIPTION

The XyBioMix Mixing Bag is a single-use solution for biopharmaceutical upstream and downstream processing, including buffer preparation, media mixing, and solution formulation. It features high-integrity membranes and a bottom-welding stirring mechanism for efficient solid-liquid and liquid-liquid mixing.



### CHARACTERISTICS

- Ensures stable supply chain through secure raw material sourcing.
- Compatible with all types of solid-liquid and liquid-liquid mixing.
- 100% integrity tested, guaranteeing high sterility and reliability.
- Biocompatible, chemically resistant membrane materials.
- Bottom-welding stirring system enables efficient, high-speed mixing.

### APPLICATIONS

- Buffer and media preparation.
- pH adjustment for optimized cell culture conditions.
- Chromatographic buffer formulation.
- Virus inactivation and product mixing.
- Stock solution storage and transfer.

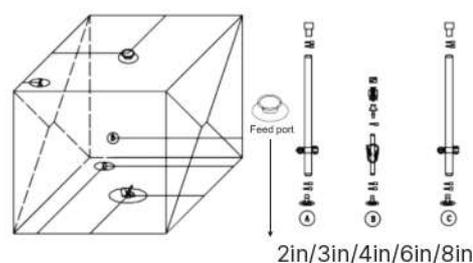


# Disposable Mixing Bag

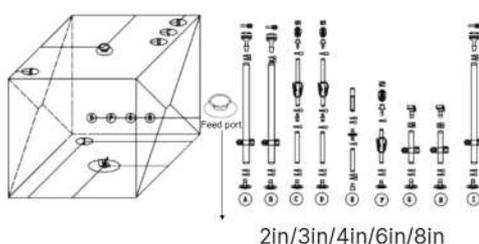
## Product Information

Catalog Number	Maximum Working Volume	Minimum Working Volume	Stirring Rate	Temperature Interface	pH	Electrical Conductivity Interface	Feed Port - 2/3/4/6/8 inches	Effect Drawing
XyBioMix-50LH	50L	17L	30-300rpm	✓	✓	✓	✓	
XyBioMix-100LH	100L	28L	30-300rpm	✓	✓	✓	✓	
XyBioMix-200LH	200L	44L	30-300rpm	✓	✓	✓	✓	
XyBioMix-500LH	500L	76L	30-300rpm	✓	✓	✓	✓	
XyBioMix-1000LH	1000L	119L	30-300rpm	✓	✓	✓	✓	
XyBioMix-2000LH	2000L	230L	30-300rpm	✓	✓	✓	✓	

## Piping Specification



Piping arrangement	Number	Model
	SUM-A-50-1000LH1	50-1000L (basic)
(liquid intake) line1:12.7 *19.1mm C-FLEX tube, large tube clamp, plug Line		
2:6.4*9.6mm C-FLEX tube, Luer connector, needle free Sampler (Sampling) Pipe		
3:12.7*19.1mm C-FLEX pipe, large pipe clamp, plug		



Piping arrangement	Number	Model
	SUM-A-50-2000LH2	50-2000L (pH/CT)
Pipe 1:12.7 *19.1mm C-FLEX pipe, large pipe clamp,TC50 flange joint, washer, clamp, cover/plug Pipe 2:12.7*19.1mm C-FLEX pipe, large pipe clamp,TC50 flange connector, washer, clamp, cover/plug		
6.4*9.6mm silicone tube, Reducer connector,3.2*6.4mm C-FLEX tube, Luer connector, needle free Sampler		
(Refill) Pipe 4:6.4*9.6mm Silicone pipe, reduced fitting,3.2*6.4mm C-FLEX pipe, Luer fitting, needle free Sampler		
(Temperature control) Pipe 5: (outside the bag)6.4*9.6mm silicone pipe (Inside the bag)4.8*8mm silicone tube with plug		
Line 6:6.4 *9.6mm C-FLEX, Luer connector, Needle free Sampler		
(CTmonitoring) Pipe 7:16ID *12.7ID reducer silicone tube, large pipe clamp, sterile joint,sensor (black spot)		
(pH monitoring) Pipeline 8:16ID *12.7ID reducer silicone tube, large pipe clamp, sterile joint,pH optical fiber sensor (white spot)		
Pipe 9:12.7 *19.1mm C-FLEX pipe, large pipe clamp,TC50 flange joint, washer, clamp, cover/plug		

## Disposable Bioreactor Bag

### PRODUCT DESCRIPTION

The XyBioReact Bioreactor Bag is designed for upstream biopharmaceutical processing, including cell culture expansion, antibody drug development, and vaccine production. The integrated immersion agitator system enhances mixing efficiency, ensuring optimal oxygen dissolution and aeration for high-performance cell growth. Product specifications: 50L / 200L / 500L / 1000L / 2000L (customizable)

### CHARACTERISTICS

- Single-use design eliminates cleaning requirements, reducing cross-contamination risks.
- Constructed with multiple layers of high-strength transparent membrane, ensuring tear resistance and biological fluid protection.
- Customizable configurations with multiple connector, tubing, and sensor integration options.
- Agitation and aeration system enables efficient oxygen dissolution for improved cell growth.
- Compatible with various upstream and downstream process fluids.

### APPLICATIONS

- Cell culture growth and expansion.
- Intermediate product storage.
- Upstream biopharmaceutical processing.

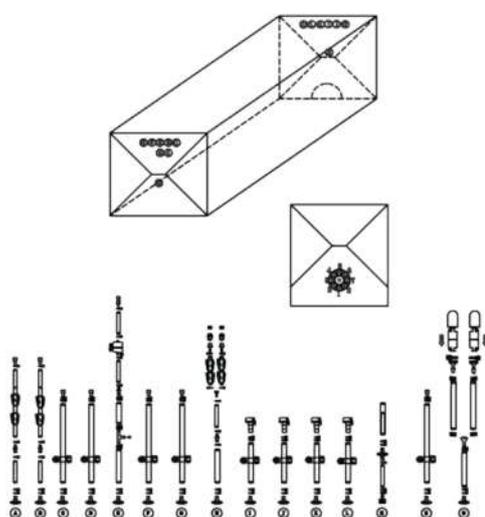


## Disposable Bioreactor Bag

### Product Information

Product No.	Max. Working Volume	Min. Working Volume	Agitator Diameter	Stirring Rate	Perfusion Line	pH Sensors	DO Sensors	Effect Drawing
XyBioReact-50LH	50L	10L	205mm	0-360rpm	✓	1	1	
XyBioReact-200LH	200L	40L	205mm	0-360rpm	✓	2	2	
XyBioReact-500LH	500L	100L	255mm	0-250rpm	✓	2	2	
XyBioReact-1000LH	1000L	200L	305mm	0-140rpm	✓	2	2	
XyBioReact-2000LH	2000L	400L	405mm	0-115rpm	✓	2	2	

### Piping Specification



Piping arrangement	Number	Model
	SUB-A-50-2000LH1	50-2000L(Customizable)

(Replenishing) Pipe 1:6.4 \*9.6mm C-FLEX pipe, reducer connector,3.2\*6.4mm C-FLEX pipe, plug (Refill) Pipe 2:6.4\*9.6mm C-FLEX tube, reducer connector,3.2\*6.4mm C-FLEX tube, plug (Inoculated) Line 3:12.7\*19.1mm C-FLEX tube, large tube clamp, plug (Refill) Pipe 4:12.7 \*19.1mm C-FLEX pipe, large pipe clamp, plug 5.7\*19.1mm C-FLEX pipe, pressure sensor, reducer connector, Air filter, pagoda connector, gas pipe connector 5.7\*19.1mm C-FLEX pipe, pressure sensor, reducer connector, Air filter, pagoda connector, gas pipe connector (Refill) Pipe 7:12.7 \*19.1mm C-FLEX pipe, large pipe clamp, plug (Sampling) Pipe 8:6.4\*9.6mm C-FLEX pipe, reduced fitting,Y fitting, Luer fitting, needle less sampler (pH/DO monitoring) Pipe 9:16 ID\*12.7ID Reducer silicone pipe, large pipe clamp, sterile joint (pH/DO) (pH/DO monitoring) Pipe 10:16 ID\*12.7ID Reducer silicone pipe, large pipe clamp, sterile joint (pH/DO) (pH/DO monitoring) Pipe 11:16ID \*12.7ID Reducer silicone pipe, large pipe clamp, sterile joint (pH/DO) (pH/DO monitoring) Pipe 12:16 ID\*12.7ID Reducer silicone pipe, large pipe clamp, sterile joint (pH/DO) (Temperature control) Pipe 13: (outside the bag)6.4\*9.6mm silicone pipe (Inside the bag)4.8\*8mm silicone tube optical fiber connector (Harvest) Pipe 14:12.7 \*19.1mm C-FLEX, large pipe clamp, plug 15:12.7 \*19.1mm C-FLEX Pipe, Y-fitting,TC50 fitting, clamp, Washer, Bag filter, Ziplock bag

## Disposable Filling System

### PRODUCT DESCRIPTION

The XyBioFill Single-Use Filling System is a modular, pre-assembled sterile filling solution designed to ensure aseptic liquid handling in biopharmaceutical manufacturing. Compatible with various connectors, tubing, and filters, it integrates seamlessly into upstream and downstream processing. The system adheres to ISO 9001 quality standards and supports customized configurations to meet specific process requirements.



### PIPES & ACCESSORIES

- Flexible component compatibility – Supports brand-agnostic assembly solutions.
- Customizable hose materials, including platinum-cured silicone tubing, C-Flex tubing, or user-specified options.
- Quick connectors, including MPX series (CPC) or user-defined alternatives.
- Sterile connectors, such as Kleenpak (Pall), AseptiQuik (CPC), or customized configurations.
- Integrated filtration, with options like Sepp filters, CUTV0.2-1N002 (MISSNER), or process-specific selections.
- Default accessory selection ensures comprehensive compatibility with standard workflow requirements.



### PIPELINE ASSEMBLY

- Sterile pre-assembled tubing systems, available in various configurations.
- Optimized for liquid transfer, storage, and distribution in controlled environments.
- Customizable tubing diameters, fittings, and connectors for tailored bioprocess integration.

# XyPURE



## Sterile Water for Injection (WFI)

XyPure Sterile Water for Injection (WFI) is a high-purity, endotoxin-controlled pharmaceutical-grade water, manufactured under strict Good Manufacturing Practice (GMP) conditions to meet USP, EP, and JP specifications. Designed for critical pharmaceutical, biotechnology, and laboratory applications, XyPure ensures compliance with global regulatory standards while offering cost-effective, ready-to-use solutions for sterile environments. Manufactured in a state-of-the-art, ISO-certified facility, XyPure undergoes multi-stage purification followed by final filtration and sterile packaging to deliver consistent quality and purity.

### KEY FEATURES & ADVANTAGES

- High-Purity & Low TOC: Advanced purification ensures ultra-low Total Organic Carbon (TOC) levels, minimizing contamination risks. Global
- Regulatory Compliance: Meets or exceeds USP, EP, JP standards for sterility, conductivity, endotoxin levels, and microbial limits. Sterile & Ready-to-Use: Pre-sterilized and endotoxin-controlled for immediate
- use in pharmaceutical, biotech, and research applications. Scalable Supply Chain: Available in a variety of packaging options, including
- vials, bottles, and large-scale bioprocessing bags.



### REGULATORY COMPLIANCE & QUALITY STANDARDS

XyPure WFI meets or exceeds stringent global pharmacopoeia standards, ensuring reliability for regulated industries.

Compliance Specifications:

Specification	USP (United States)	EP (Europe)	JP (Japan)
<b>Conductivity</b>	<1.1 $\mu\text{S}/\text{cm}$ at 20°C	<1.3 $\mu\text{S}/\text{cm}$ at 25°C	<2.1 $\mu\text{S}/\text{cm}$ at 25°C
<b>Endotoxin Level</b>	<0.25 I.U./mL	<0.25 I.U./mL	<0.25 I.U./mL
<b>Total Organic Carbon (TOC)</b>	<0.5 mg/L	<0.5 mg/L	<0.5 mg/L
<b>Microbial Limits</b>	<10 CFU/100mL	<10 CFU/100mL	<10 CFU/100mL
<b>Sterility</b>	Pass (USP <71>)	Pass (EP 2.6.1)	Pass (JP <4.06>)

## Sterile Water for Injection (WFI)

### APPLICATIONS

XyPure WFI is widely utilized in the following high-purity, aseptic applications:

- **Pharmaceutical & Biopharmaceutical Manufacturing**
  - Sterile drug formulation – Injectable drugs, IV solutions, and API (Active Pharmaceutical Ingredient) processing.
  - Biopharmaceutical development – Cell therapy, gene therapy, and monoclonal antibody (mAb) production.
  - Bioreactor rinsing & buffer preparation – Ensures ultra-low impurity levels in bioprocesses.
- **Medical & Healthcare Industry**
  - Dialysis & Hemofiltration – Medical-grade sterile water for renal treatments.
  - Wound irrigation & ophthalmic solutions – Ensures sterility for critical medical applications.
  - Inhalation therapy & parenteral applications – Used in respiratory care and injectable medications.
- **Laboratory & Research**
  - Analytical reagent preparation – Supports chromatography, mass spectrometry, and molecular biology research.
  - Glassware & equipment cleaning – Reduces endotoxin contamination in lab workflows.
  - Buffer & media preparation – Essential for cell culture, vaccine development, and gene sequencing.

### PACKAGING & VOLUME OPTIONS

XyPure WFI is available in multiple packaging formats tailored for Biopharmaceutical, and laboratory applications.



Products	Size	Product code
XyPure PET-G (Bottle)	250 mL	XP-SV250PB
	500 ml	XP-SV500PB
	250 mL	XP-SV250HB
	500 mL	XP-SV250HB
XyPure HDPE (Bottle)	1L	XP-SV1LHB
	2L	XP-SV2LHB
	5L	XP-MV5LHB
	10L	XP-MV10LHB
	20L	XP-MV20LHB
	1L	XP-MV1LLB
XyPure LDPE (Bottle)	2L	XP-MV2LLB
	5L	XP-MV5LLB
	10L	XP-MV10LLB
	20L	XP-MV20LLB
XyPure Flex (Single-use Gamma Sterile 2D Bag)	1L	XP-MV1L2D
	2L	XP-MV2L2D
	5L	XP-MV5L2D
	10L	XP-MV10L2D
	20L	XP-MV20L2D
	50L	XP-LV50L3D
XyPure Tote (Single-use Gamma Sterile 3D Bag in Tote)	100L	XP-LV100L3D
	200L	XP-LV200L3D
	50L	XP-BV50LDR
XyPure Drum (Single-use Gamma Sterile Liner Bag in HDPE Drum)	100L	XP-BV100LDR
	200L	XP-BV200LDR

# XY FILTER



Filtration Media	Main Features	Applications
NYLON	• Hydrophilic	• Chemical filtration
	• Robust design	• Beverage filtration
	• pH range: 3-12	• HPLC sample preparation
	• Broad chemical compatibility	
PES	• Hydrophilic	• Protein filtration
	• High flow rate	• Tissue culture media filtration
	• Low extractables	• Buffer preparation
	• Low protein binding	• HPLC sample preparation
	• pH range: 1-14	
PTFE	• Hydrophobic and hydrophilic options	• Organic solvents filtration
	• Broad chemical compatibility	• Strong acid & alkaline resistance
	• pH range: 1-14	• Gas filtration
	• Available with or without support	• Air sampling
PVDF	• High thermal resistance	• Gas filtration
	• Broad chemical compatibility	• Food industry applications
	• Hydrophobic & hydrophilic options	• Pharmaceutical filtration
	• Low protein binding	
MCE	• Hydrophilic	• Cell culture media filtration
	• High flow rate	• Microorganism enumeration & identification
	• Low protein binding	• Acid digestion
	• pH range: 4-8	• Heavy metal testing
CA	• Hydrophilic	• Protein, enzyme, and biological solution filtration
	• Low protein binding	• Tissue culture media filtration
	• pH range: 4-8	
GF	• Broad chemical compatibility	• Clarification & prefiltration
	• High dirt-holding capacity	• Tissue culture media filtration
	• pH range: 4-14	• DNA/RNA adsorption & purification
	• High resistance (up to 500°C)	• Sample qualifica
	• Available with or without binders	
PF Fiber	• Broad chemical compatibility	• Pre-filtration
	• pH range: 1-14	• Clarification

## Disposable Filtration Unit

### PRODUCT DESCRIPTION

XyFilter Syringe Filters are high-performance disposable filtration units designed for sample preparation, sterile filtration, and chromatographic analysis. These filters provide reliable and efficient filtration of particulates and contaminants, ensuring consistent results across various laboratory applications. Available in multiple membrane types, XyFilter Syringe Filters cater to a broad range of scientific and industrial applications.

### KEY FEATURES

- Superior Filtration Efficiency – High-purity membrane options provide excellent chemical compatibility and retention performance.
- Low Extractables & High Flow Rate – Designed to minimize interference in sensitive analytical techniques while ensuring rapid filtration.
- Wide Range of Pore Sizes & Membrane Types – Available in various pore sizes (0.1 µm to 10 µm) and membrane materials (PTFE, PES, Nylon, PVDF, MCE, CA, GF, PP Microfiber, and RC.).
- Sterile & Non-Sterile Options – Offered in gamma-irradiated sterile and non-sterile variants to suit various filtration environments.
- Universal Luer-Lock Compatibility – Fits most standard syringes with Luer-lock & Luer-slip connections, ensuring a leak-free and secure fit.
- High Chemical Resistance – Compatible with aqueous and organic solvents used in HPLC, GC, microbiology, and biological applications.
- Color-Coded for Easy Identification – Each membrane type is color-coded for quick recognition and workflow efficiency.

### APPLICATIONS

**XyFilter Syringe Filters are used in scientific, pharmaceutical, and industrial applications requiring precise and contamination-free filtration. Key applications include:**

- HPLC & GC Sample Preparation – Eliminates particulates to prevent clogging of analytical instruments.
- Sterile Filtration of Biological Fluids – Ensures removal of bacteria and microorganisms for cell culture and pharmaceutical use.
- Environmental Testing – Supports water, soil extract, and air sampling analysis.
- Dissolution Testing in Pharma – Facilitates accurate drug solubility and bioavailability testing.
- Protein & Enzyme Filtration – Provides low protein binding properties for enzyme and antibody studies.
- Food & Beverage Quality Control – Used in microbial and chemical analysis of consumables.

## Disposable Filtration Unit

### Specifications

Parameter	Specification
Membrane Materials	PTFE, PES, Nylon, PVDF, MCE, CA, GF, PP Microfiber, PF Fiber
Pore Sizes Available	0.1 µm, 0.2 µm, 0.45 µm, 0.8 µm, 1.0 µm, 3.0 µm, 5.0 µm, 10.0 µm
Diameter Options	13mm, 25mm, 30mm
Housing Material	Polypropylene (PP)
Sterility	Sterile & Non-Sterile Options Available
Max Operating Pressure	87 psi
Operating Temperature	Up to 120°C
Connections	Female Luer Lock Inlet & Male Luer Slip Outlet

## Disposable Filtration Unit

### Types of Syringe Filters

Filter Type	Membrane Properties	Key Features	Applications
XyFilter Chrompure	Color-coded, high-clarity filtration	Bonded outer ring for durability	HPLC, routine QC, dissolution testing, environmental testing
		Minimal sample holdup volume	
		Available sterile & nonsterile	
XyFilter Simplepure	Transparent housing, ultrasonically welded	Built-in PP prefilter	Routine QC, protein precipitation removal, biofuel analysis
		Designed for small-volume filtration	
		Presterilized options available	
XyFilter iPure	High chemical compatibility, built-in prefilter	Durable bonded housing	HPLC, food testing, biofuel analysis, environmental samples
		Presterilized & individually packaged	
		Minimal holdup volume	
XyFilter G-MP	Multi-layered prefilter for highly contaminated samples	Built-in 4-layer glass fiber prefilter	Protein precipitation removal, drug analysis, sterile filtration of biological fluids
		High throughput with minimal syringe force	
		Designed for difficult-to-filter samples	
XyFilter ICPure	Specialized for Ion Chromatography (IC) Sample Preparation	Factory flushed with ultrapure water	IC sample preparation, ion analysis, pharmaceutical solvent testing
		Low extractables	
		Individually packaged	
XyFilter Universal MSP	Modified hydrophilic PTFE membrane	Low protein binding	DMSO compatibility, HPLC, dissolution testing, food analysis
		Superior flow rate	
		Certified by HPLC Extractable Test	
XyFilter RSFH	Reusable Syringe Filter Holder	Compatible with multiple filter discs	Custom filtration solutions, peristaltic pump filtration, high-particle solutions
		Made from virgin polypropylene	
		Leakproof and autoclavable	

## XyFilter Chrompure

High-Performance Color-Coded Syringe Filter

### PRODUCT DESCRIPTION

XyFilter Chrompure Syringe Filters are color-coded, high-quality disposable units designed for HPLC, GC, and routine laboratory filtration. Their bonded outer ring enhances durability, while minimal hold-up volume ensures maximum sample recovery.



### KEY FEATURES

- Color-coded housing for quick membrane identification
- Bonded outer ring enhances durability under high pressure
- Low extractables and high flow rate for consistent performance
- Sterile & non-sterile options available
- Broad chemical compatibility for aqueous and organic solvents



### APPLICATIONS

- HPLC & GC Sample Prep – Prevents instrument clogging
- Routine QC Analysis – Ensures sample consistency
- Dissolution Testing – Supports pharmaceutical research
- Environmental Analysis – Water, soil, and air sample purification
- Food & Beverage Testing – Microbial and chemical screening



## Specifications

Parameter	13 MM	25 MM
Filtration Area (cm <sup>2</sup> )	0.92	2.98
Housing Material	PP	
Hold-Up Volume (µl)	<10	<100
Volume Throughput (ml)	<10	<50
Connections (Inlet/Outlet)	Female Luer Lock inlet & Male Luer Slip outlet	
Max Operating Pressure (psi)	87	
Max Operating Temperature (°C)	100	
Layers	1	

### PART MATRIX

XSF-C001 = Chrompure Hydrophobic PTFE Syringe Filter, 13mm, 0.22µm, glass fiber prefilter, non-sterile.

## XyFilter Simplepure

Transparent Housing, Ultrasonically Welded Syringe Filter

### PRODUCT DESCRIPTION

XyFilter Simplepure Syringe Filters are designed for routine laboratory filtration applications where cost-effective and efficient sample preparation is required. Featuring a transparent housing with ultrasonic welding, these filters offer precise and reliable performance with minimal sample hold-up.



### KEY FEATURES

- Transparent housing for clear visibility of filtration process.
- Ultrasonically welded for leak-proof operation.
- Built-in PP prefilter enhances particulate retention.
- Available in sterile and non-sterile versions.
- Suitable for routine QC, protein precipitation removal, and biofuel analysis.



### APPLICATIONS

- Routine QC sample filtration.
- Protein precipitation removal.
- Biofuel analysis.
- General laboratory sample purification.

## Specifications

Parameter	4 MM	13 MM	25 MM
Filtration Area (cm <sup>2</sup> )	0.125	1.09	4.08
Housing Material	PP		
Hold-Up Volume (µl)	<1	<100	120
Volume Throughput (ml)	5	20	100
Connections (Inlet/Outlet)	Female Luer Lock inlet & Male Luer Slip outlet		
Max Operating Pressure (psi)	87		
Max Operating Temperature (°C)	100		
Layers	2		

### PART MATRIX

XSF-S001=Simplepure hydrophilic PVDF syringe filter,25mm,0.45um, glass fiber prefilter, non-sterile.

# SYRINGE FILTER

# XyFILTER

## XyFilter Ipure

*Color-Coded Hydrophilic Syringe Filter with Built-in Prefilter*

### PRODUCT DESCRIPTION

XyFilter Ipure Syringe Filters are engineered for precise laboratory sample preparation. Designed with a color-coded housing for easy identification, these filters provide consistent filtration results across various applications.



### KEY FEATURES

- Color-coded housing for quick identification.
- Low extractables and high flow rate for sample integrity.
- Sterile and non-sterile options available.
- Broad chemical compatibility.



### APPLICATIONS

- Routine QC sample filtration.
- Protein precipitation removal.
- Biofuel analysis.
- General laboratory sample purification.



## Specifications

Parameter	13MM	25MM	30MM
Filtration Area (cm <sup>2</sup> )	0.92	2.98	4.9
Housing Material	PP		
Hold-Up Volume (μl)	<10	<100	120
Volume Throughput (ml)	<10	50	100
Connections (Inlet/Outlet)	Female Luer Lock inlet & Male Luer Slip outlet		
Max Operating Pressure (psi)	87		
Max Operating Temperature (°C)	100		
Layers	1		

### PART MATRIX

XSF-I001=Ipure Nylon Syringe Filter, 13mm, 0.45μm, glass fiber, non-sterile.

## XyFilter G-MP

Multi-Layered Prefilter for Highly Contaminated Samples

### PRODUCT DESCRIPTION

XyFilter G-MP Syringe Filters are specialized for filtering highly contaminated samples. They incorporate a multi-layered glass fiber prefilter that enhances sample throughput.



### KEY FEATURES

- Multi-layered prefilter for handling high particulate loads.
- Designed for difficult-to-filter samples.
- High chemical compatibility.

### APPLICATIONS

- Routine QC analysis.
- Protein precipitation removal.
- Food and environmental testing.



## Specifications

Parameter	25 MM
Filtration Area (cm <sup>2</sup> )	4.08
Housing Material	PP
Hold-Up Volume (µl)	<400
Volume Throughput (ml)	200
Connections (Inlet/Outlet)	Female Luer Lock inlet & Male Luer Slip outlet
Max Operating Pressure (psi)	87
Max Operating Temperature (°C)	100
Layers	4

### PART MATRIX

XSF-G001=G-MP Nylon Syringe Filter, 25mm, 0.45µm, non-sterile.

## XyFilter ICpure

*Specialized for Ion Chromatography Sample Preparation*

### PRODUCT DESCRIPTION

XyFilter ICpure Syringe Filters are designed to meet the rigorous demands of ion chromatography applications. They offer extremely low ion extractables for reliable analytical results.

### KEY FEATURES

- Low ion extractables.
- High flow rates for efficiency.
- Sterile and non-sterile options available.

### APPLICATIONS

- Ion chromatography sample prep.
- Environmental analysis.
- Pharmaceutical and biotech research.



## Ion Chromatography Certification

### IC Levels

Cl - < 50 ppb  
 NO3 - < 50 ppb  
 SO 4 2- < 50 ppb  
 PO 4 3- < 50 ppb

This is based on 2 mL of ultra-pure water filtrate being concentrated on-line and injected into an ion chromatograph with conductivity detection.

### PART MATRIX

XSF-IC001=ICpure PES Syringe Filter, 25mm, 0.22µm, non-sterile.

## XyFilter MSP

*Modified Hydrophilic PTFE Syringe Filter*

### PRODUCT DESCRIPTION

XyFilter MSP Syringe Filters use a specially modified hydrophilic PTFE membrane to enhance flow rates and reduce extractables.

### KEY FEATURES

- Superior flow rate.
- Low protein binding.
- Certified by HPLC Extractable Test.

### APPLICATIONS

- DMSO compatibility.
- HPLC & GC sample prep.
- Food and environmental testing.

### PART MATRIX

XSF-MSP001=MSP Hydrophilic PTFE Syringe Filter, 13mm, 0.22µm, non-sterile, PP prefilter.



## XyFilter RSFH

*Reusable Syringe Filter Holder*

### PRODUCT DESCRIPTION

XyFilter RSFH Syringe Filter Holders are designed for reusable applications where interchangeable filter discs are required. Ideal for filtering small volumes using a syringe filter or peristaltic pump, RSFH holders provide secure filtration with a leak-proof design.

### KEY FEATURES

- Leak-proof and autoclavable construction.
- Reusable with interchangeable filter discs.
- Compatible with multiple filter disc layers.
- Broad chemical compatibility.

### APPLICATIONS

- Custom filtration solutions.
- Peristaltic pump filtration applications.
- Laboratory and industrial liquid handling.

### PART MATRIX

XSF-R001=RSFH Polypropylene Syringe Filter Holder, 13mm.



## High-Performance Filtration

### PRODUCT DESCRIPTION

XyFilter Membrane Disc Filters are precision-manufactured for high-purity filtration in analytical, environmental, biopharmaceutical, and industrial applications. Designed with advanced materials, these membranes offer excellent chemical resistance, high flow rates, and minimal extractables, ensuring reliability across a wide range of applications.

### KEY FEATURES

- Superior Filtration Efficiency – High-purity membrane options provide excellent chemical compatibility and retention performance.
- Low Extractables & High Flow Rate – Designed to minimize interference in sensitive analytical techniques while ensuring rapid filtration.
- Wide Range of Pore Sizes & Membrane Types – Available in various pore sizes (0.1 µm to 10 µm) and membrane materials (PTFE, PES, Nylon, PVDF, MCE, CA, GF, PP Microfiber).
- Sterile & Non-Sterile Options – Offered in gamma-irradiated sterile and non-sterile variants to suit various filtration environments.
- High Chemical Resistance – Compatible with aqueous and organic solvents used in HPLC, GC, microbiology, and biological applications

### APPLICATIONS

XyFilter Membrane Disc Filters are used in scientific, pharmaceutical, and industrial applications requiring precise and contamination-free filtration. Key applications include:

- HPLC & GC Sample Preparation – Eliminates particulates to prevent clogging of analytical instruments.
- Sterile Filtration of Biological Fluids – Ensures removal of bacteria and microorganisms for cell culture and pharmaceutical use.
- Environmental Testing – Supports water, soil extract, and air sampling analysis.
- Dissolution Testing in Pharma – Facilitates accurate drug solubility and bioavailability testing.
- Protein & Enzyme Filtration – Provides low protein binding properties for enzyme and antibody studies.
- Food & Beverage Quality Control – Used in microbial and chemical analysis of consumables.

### WHY CHOOSE XYFILTER MEMBRANE DISCS?

- Manufactured in ISO 9001 & ISO 13485-certified cleanroom environments
- Hydrophilic & Hydrophobic variants available to match different filtration needs
- Sterile & Non-Sterile options for research and pharmaceutical applications
- Broad Chemical Compatibility with solvents, acids, and bases
- Precision-engineered membranes for high flow rates and consistent performance



## High-Performance Filtration

### Specifications

Parameter	Specification
Available Diameters (mm)	13, 25, 47, 90 (custom sizes available)
Pore Sizes (µm)	0.1, 0.22, 0.45, 0.8, 1.0, 3.0, 5.0, 10.0
Membrane Options	Hydrophilic & Hydrophobic
Pre-Sterilization	Gamma-irradiated (Sterile) or Non-Sterile
Operating Temperature	Up to 120°C
Max Operating Pressure	87 psi
Bubble Point (Water, psi)	Varies by membrane type (details available upon request)
Chemical Compatibility	Resistant to a wide range of solvents, acids, and bases
Filtration Efficiency	Up to 99.99% particle retention

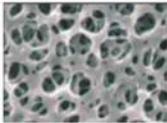
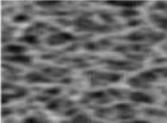
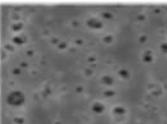
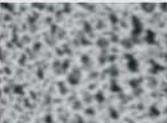
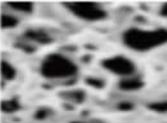
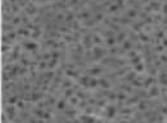
## High-Performance Filtration

### Membrane Type Selection Guide

Membrane Type	Material	Wettability	pH Compatibility	Key Applications
Nylon (NY)	Polyamide	Hydrophilic	pH 2-13	HPLC sample prep, general filtration, aqueous/organic solvents
PTFE	Polytetrafluoro-ethylene	Hydrophobic / Hydrophilic	pH 1-14	Gas/air filtration, aggressive solvents, venting
PVDF	Polyvinylidene Fluoride	Hydrophobic / Hydrophilic	pH 1-10	Protein filtration, pharmaceutical applications, bio-filtration
PES	Polyethersulfone	Hydrophilic	pH 1-14	High-flow sterile filtration, biopharmaceutical applications
MCE	Mixed Cellulose Ester	Hydrophilic	pH 4-8	Microbial analysis, sterility testing, particle collection
CA	Cellulose Acetate	Hydrophilic	pH 4-8	Protein/enzyme filtration, sterilization, cell culture media
Glass Fiber (GF)	Borosilicate Glass	Hydrophilic	pH 1-14	Prefiltration, high dirt-loading solutions
PP (Polypropylene)	Polypropylene Microfiber	Hydrophobic	pH 1-14	Chemical filtration, aggressive chemicals

## High-Performance Filtration

### Product Catalog

Type & Image	SKUs	Dimension (mm)	Pore Size (Åµm)	Packaging
CA 	XFMCA04702S	47	0.22	100 pcs/pk
	XFMCA04704S		0.45	100 pcs/pk
	XFMCA09002S	90	0.22	100 pcs/pk
	XFMCA09004S		0.45	100 pcs/pk
MCE 	XFMMCE04702S	47	0.22	100 pcs/pk
	XFMMCE04704S		0.45	100 pcs/pk
	XFMMCE09002S	90	0.22	100 pcs/pk
	XFMMCE09004S		0.45	100 pcs/pk
PES 	XFMPES04702S	47	0.22	100 pcs/pk
	XFMPES04704S		0.45	100 pcs/pk
	XFMPES09002S	90	0.22	100 pcs/pk
	XFMPES09004S		0.45	100 pcs/pk
Nylon 	XFMNYL04702S	47	0.22	100 pcs/pk
	XFMNYL04704S		0.45	100 pcs/pk
	XFMNYL09002S	90	0.22	100 pcs/pk
	XFMNYL09004S		0.45	100 pcs/pk
PVDF (Hydrophilic) 	XFMPVF04702S	47	0.22	100 pcs/pk
	XFMPVF04704S		0.45	100 pcs/pk
	XFMPVF09002S	90	0.22	100 pcs/pk
	XFMPVF09004S		0.45	100 pcs/pk
PVDF (Hydrophobic) 	XFMPVH04702S	47	0.22	100 pcs/pk
	XFMPVH04704S		0.45	100 pcs/pk
	XFMPVH09002S	90	0.22	100 pcs/pk
	XFMPVH09004S		0.45	100 pcs/pk
PTFE (Hydrophilic) 	XFMPTF04702S	47	0.22	100 pcs/pk
	XFMPTF04704S		0.45	100 pcs/pk
	XFMPTF09002S	90	0.22	100 pcs/pk
	XFMPTF09004S		0.45	100 pcs/pk
PTFE (Hydrophobic) 	XFMPTC04702S	47	0.22	100 pcs/pk
	XFMPTC04704S		0.45	100 pcs/pk
	XFMPTC09002S	90	0.22	100 pcs/pk
	XFMPTC09004S		0.45	100 pcs/pk

# XY COLUMN



# High-Performance Liquid Chromatography (HPLC) Columns

## PRODUCT OVERVIEW

XyColumn is a high-performance liquid chromatography (HPLC) column, engineered for superior separation efficiency, peak resolution, and analytical precision. Manufactured using ultra-high purity silica, XyColumn ensures exceptional reproducibility and robustness, making it an optimal choice for pharmaceutical, biopharmaceutical, environmental, and chemical industries. Each column undergoes rigorous quality control and validation testing, ensuring compliance with USP, EP, and ISO standards. With various stationary phase options, particle sizes, and column dimensions, XyColumn is designed to meet the diverse analytical demands of modern laboratories.

## KEY FEATURES & ADVANTAGES

- High Separation Efficiency – Optimized packing technology ensures minimal peak broadening.
- Ultra-Pure Silica Support – Low metal content for superior selectivity and reproducibility.
- Wide pH Stability Range – Compatible with various mobile phases for versatile applications.
- Robust & Durable – Designed for long-term performance and high sample throughput.
- Regulatory Compliance – Manufactured under ISO-certified conditions to meet global standards.
- Customizable Configurations – Available in multiple dimensions, pore sizes, and bonded phases.

## APPLICATIONS

**XyColumn is widely used across industries for analytical and preparative chromatography applications:**

- **Pharmaceutical & Biopharmaceutical Analysis**
  - API (Active Pharmaceutical Ingredient) Analysis – Ensures purity and stability of drug compounds.
  - Impurity Profiling – Identifies trace impurities in formulation development.
  - Peptide & Protein Characterization – Ideal for complex biomolecular separations.
- **Environmental Testing & Food Safety**
  - Pesticide & Contaminant Analysis – Detects trace levels in food and water samples.
  - Water Quality Testing – Monitors organic pollutants and residual contaminants.
  - Toxin & Mycotoxin Screening – Essential for food and beverage quality control.
- **Chemical & Industrial Applications**
  - Petrochemical & Specialty Chemicals – Analyzes hydrocarbons, polymers, and industrial solvents.
  - QC & Process Control – Ensures product consistency and regulatory compliance.
  - Forensic & Clinical Research – Detects metabolites, drugs, and biological markers.

## REGULATORY COMPLIANCE & QUALITY STANDARDS

**XyColumn meets stringent industry guidelines for HPLC analytical performance and reproducibility:**

- USP & EP Compliant – Meets pharmacopoeia standards for drug analysis.
- ISO 9001 & ISO 13485 Certified – Ensures manufacturing consistency and traceability.
- Batch-to-Batch Reproducibility – Stringent quality control for analytical reliability.
- Tested & Validated – Supplied with a Certificate of Analysis (CoA) and performance report.

PRECISION. RELIABILITY. PERFORMANCE.



## XyChrom

- Full range bonded silica packing provide high stability & efficiency
- Most versatile phase availability for the analysis of various type of samples
- High surface area for strong retention of hydrophobic and polar compounds
- Enhanced mechanical stability

Phase	Particle Size	Pore Size	Surface Area	Carbon Load	End Capping	pH
C18	1.7, 3, 3.5, 4, 5, 10	100	330	18	Yes	2-10
C18(2)	3, 4, 5, 10	100	450	20	Yes	2-8
C18-AQ	3, 3.5, 5, 10	100	330	12	Yes	2-10
C8	3, 5, 10	100	330	10	Yes	2-10
C4	3, 5, 10	100	330	7	Yes	2-10
Phenyl	3, 5, 10	100	330	11	Yes	2-10
Phenyl-Hexyl	3, 5, 10	100	330	14	Yes	2-10
Biphenyl	3, 5, 10	100	330	12	Yes	2-10
C30	3, 5, 10	100	330	18	Yes	2-10
NH <sub>2</sub>	3, 5, 10	100	330	4	No	2-8
CN	3, 5, 10	100	330	7	No	2-8
Si	3, 5, 10	100	330	0	No	2-8
SCX	3, 5, 10	100	330	0	No	2-8



## XySil

- The proprietary bonding
- Working pH range is 1-12
- Multiple bonded phase ensure more hydrophobic behaviour
- These columns can be used with 100% Aqueous mobile phase
- Separation can be happening via penetration and adsorption

Phase	Particle Size	Pore Size	Surface Area	Carbon Load	End Capping	pH
C18	1.7, 3, 3.5, 4, 5, 10	100	330	19	Yes	1-12
C18(2)	1.7, 3, 3.5, 4, 5, 10	150	185	14	Yes	1-12
C8	1.7, 3, 5, 10	100	330	11	Yes	1-12

## XySol

- General purpose routine column used for the wide type of application
- Columns are replacement for the well-known column available in market
- Column to column and batch to batch reproducibility

Phase	Particle Size	Pore Size	Surface Area	Carbon Load	End Capping	pH
ODS	3, 5, 10	130	170	10	Yes	2-8
BDS C18	3, 5, 10	130	170	11	Yes	2-8
BDS C8	3, 5, 10	130	170	7	Yes	2-8
Si	3, 5, 10	130	170	0	No	2-8

## XyHyper

- The Full coverage bonded silica packing provide exceptionally high stability and high efficiency
- These columns are suitable for the separation of acidic, neutral and basic organic compound as well as pharmaceuticals API, formulations and peptides.
- Proprietary surface modification to ensure uniform and inert surface
- High surface area for strong retention of hydrophobic and polar compounds

Phase	Particle Size	Pore Size	Surface Area	Carbon Load	End Capping	pH
C18	1, 8, 3, 5, 10 µm	120	320	17	Yes	2-10
C18-QA	3, 5, µm	120	320	12	Yes	2-10
C8	1, 8, 3, 5, 10 µm	120	320	10	Yes	2-10

## XySugar

- **XySugar** Columns contain low-linking sulfonated styrene- divinylbenzene spheres (PS/DVB) in 5,8 and 10% cross-link forms as well as various ionic forms, including calcium, hydrogen. These columns have been specifically designed for high resolution separation of carbohydrates, organic acids, ribavirin, peptides and nucleic acids.
- The separation mechanism for **XySugar** phases includes ion- exchange and hydrophilic interactions with the analytes. The separation mechanism could also be due to size exclusion, ion exclusion, and ligand exchange. These multiple modes of interaction enable a unique capability to separate a variety of water soluble compounds

Dimension	P/N
XySugar - H, 300 X 7.8mm, 8µm	XSG - H - 3008
XySugar - CA, 300 X 7.8mm, 8µm	XSG - CA - 300 - 9

## XyGhost

A ghost peak is a peak that looks at a location where we don't anticipate a peak specially in gradient elution". It's a component that shows up in the system and it could show up in the chromatogram. Occasionally it's a sharp peak, occasionally it is a broad peak or even a "hump" and sometimes it's an increasing baseline.

### ADVANTAGE OF USING XYGHOST

- Clean the Mobile phase.
- Give us true separation results.
- Reduce time of validation.
- Enhance the HPLC Column and Instrument life.

### ORDERING INFORMATION

Product Code: XG-F8-50 | Size: 50X4.6mm

Product Code: XG-F9-30 | Size: 30X4.6mm

## XyDeca

- High surface are and higher carbon load provide better separation for complexmixture and peptide analysis.
- Unique bonding technology
- Column to column and batch to batch reproducibility

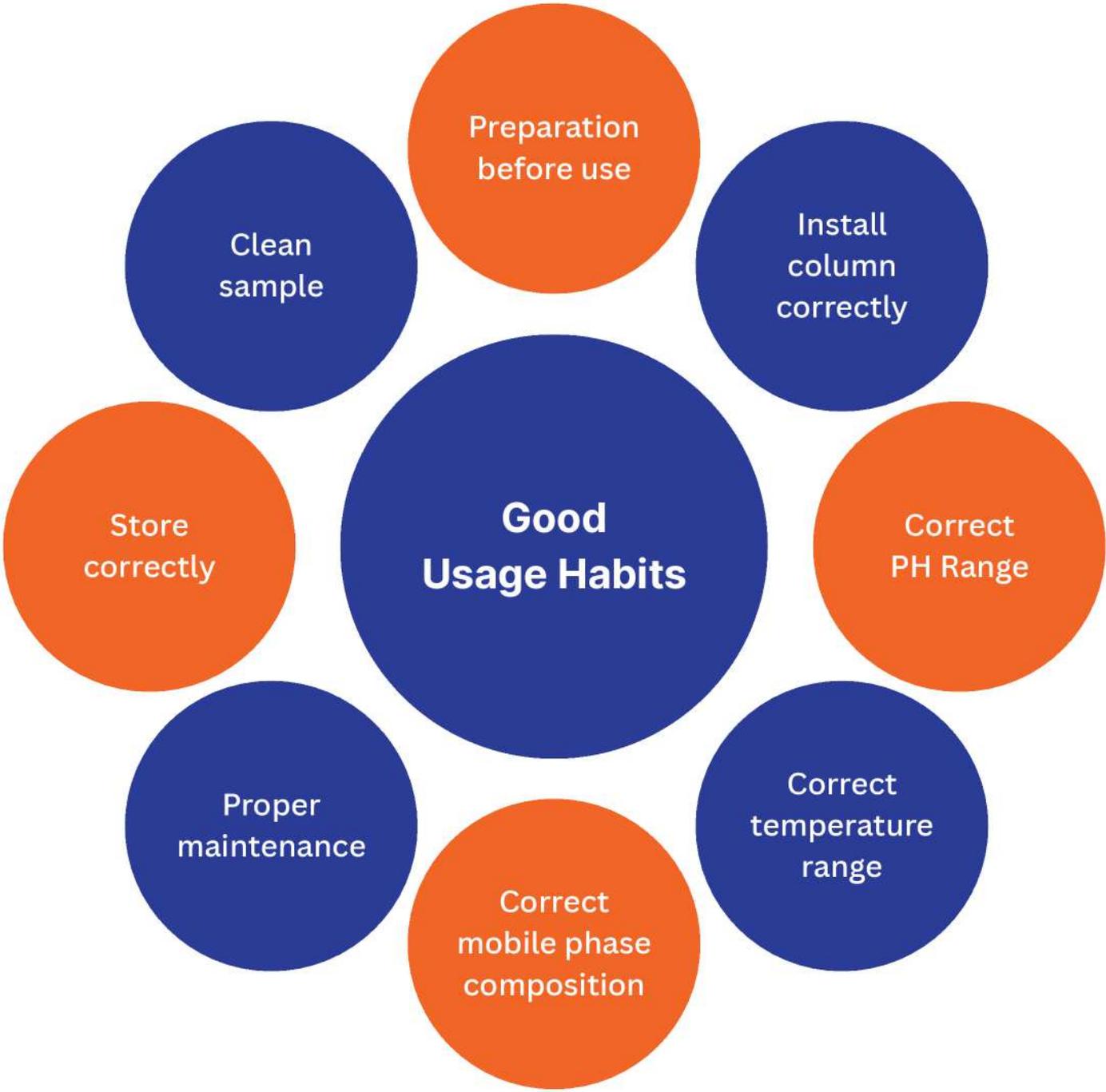
Phase	Particle Size	Pore Size	Surface Area	Carbon Load	End Capping	pH
C18	3, 5	80	500	22	Yes	2-10
C8	3, 5	80	500	14	Yes	2-8



## XySEC

Size-exclusion chromatography is a chromatographic technique which separates molecules in solution according to their size. With **organic mobile phases**, the technique is known as **gel-permeation chromatography** and with **aqueous mobile phases**, the term **gel-filtration chromatography** has been used. Size Exclusion Chromatography (SEC) is the dominant separation mode for protein, monoclonal antibodies, vaccine and polymers molecule.

	XySEC-150	XySEC-300	XySEC-500
Functional Group	Diol	Diol	Diol
Based	High Purity Silica	High Purity Silica	High Purity Silica
Pore Size	150 Å	300 Å	500 Å
Particle Size	3, 5 µm	3, 5 µm	3, 5 µm
pH	2-8	2-8	2-8
Linear Range (Globular Protein)	5,000 - 150,000	10,000 - 1,000,000	20,000 - 2,000,000
Linear Range (Glucan)	1,000 - 50,000	5,000 - 150,000	20,000 - 500,000
Linear Range (PEG)	200 - 15000	1,000 - 100,000	5,000 - 200,000



## Column Cleaning

Flush with stronger solvents than your mobile phase. Make sure detector is taken out of flow path.  
Reversed-Phase Solvent Choices in Order of Increasing Strength

### USE AT LEAST 10 X VM OF EACH SOLVENT FOR ANALYTICAL COLUMNS

1. Mobile phase without buffer salts (water/organic)
2. 100% Organic (MeOH or ACN)
3. Is pressure back in normal range?
4. If not, discard column or consider more drastic conditions: 75% Acetonitrile: 25% Isopropanol, then
5. 100% Isopropanol
6. 100% Methylene Chloride\*
7. 100% Hexane\*

When using either Hexane or Methylene Chloride the column must be flushed with IPA before returning to your reversed-phase mobile phase.

### PREVENTING COLUMN BACK PRESSURE PROBLEMS

1. Filter mobile phase:
  - Filter non-HPLC grade solvents
  - Filter buffer solutions
  - Install an in-line filter between auto-sampler and column (removes pump seal debris, ALS rotor debris, and sample particulates). Use 2 um frit for 3.5 um columns, use 0.5 um frit for 1.8 um columns.
2. Filter all samples and standards
3. Perform sample clean-up (i.e. SPE, LLE) on dirty samples.
3. Appropriate column flushing - flush buffers from entire system at end of day with water/organic mobile phase.

# XY SPE



## XySPE Product Brief

1

### Silica gel C18, C8, CN, NH<sub>2</sub>, PSA, SAX, SCX, Silica.

The most commonly used fillers in SPE are silica gel or bonded silica (bonding different functional groups on silanol groups on the surface of the silica gel) Its pH range is 2.0-8.0. There are many kinds of silica-based phases, which has the advantage of multiple selectivities.

2

### Polymer HLB, MAX, MCX, WAX, WCX;

The high molecular polymer is a polymer material obtained by copolymerisation of pyrrolidone and divinyl benzene. Due to the the polar functional group of pyrrolidone, **it has the following advantages:**

- Can be used at pH 0-12 without strict control of the activation process, and the column drying does not affect the use.
- Simultaneous adsorption of compounds of different polarities.
- Avoid low recovery rate caused by difficult elution resulting from Si-OH interaction for compound containing a basic group.

3

### Adsorption Florisil (Magnesium Silicate), GCB (Graphitized Carbon), Alumina (Neutral, Acidic, Basic)

4

### Specialized Column Series, GCB/NH<sub>2</sub> Column, BAP (for Benzopyrene), PAE (for Plasticizer), TRF (for Tea)

5

### QuEChERS Method: CleanX QuEChERS Series

CleanX QuEChERS series accomplish principle of dispersive solid-phase extraction to achieve rapid detection of pesticide residues and animal residues.

## XySPE - HLB

- Functionalized hyper-crosslinked DVB-NV polymer
- Bonding with hydrophilic & hydrophobic Chemical group.
- Well-balanced adsorption for all kinds of polar, non-polar compounds

### Application

The extraction of a wide range of acidic, neutral, and basic analytes from different matrices

### Ordering Information

Sorbent	Volume (ml)	Bed Mass (mg)	Pack	P/N
HLB	1ml	30mg	100/pk	XPSHLB130
	1ml	60mg	100/pk	XPSHLB160
	3ml	60mg	50/pk	XPSHLB360
	6ml	150mg	30/pk	XPSHLB6150
	6ml	200mg	30/pk	XPSHLB6200
	6ml	500mg	30/pk	XPSHLB6500

## XySPE - MCX

- Polymeric strong cation exchange mixed mode sorbent
- The wide range of pH (pH 0-14)
- The dual retention for RP and ion-exchange modes.

### Application

The excellent extraction and clean-up for basic analytes from Bio-fluids (plasma, urine, bile)

### Ordering Information

Sorbent	Volume (ml)	Bed Mass (mg)	Pack	P/N
MCX	1ml	30mg	100/pk	XPSMCX130
	1ml	60mg	100/pk	XPSMCX160
	3ml	60mg	50/pk	XPSMCX360
	6ml	150mg	30/pk	XPSMCX6150
	6ml	200mg	30/pk	XPSMCX6200
	6ml	500mg	30/pk	XPSMCX6500

## XySPE - MAX

- Polymeric strong anion exchange and mixed mode
- Polymeric strong anion exchange and mixed mode
- The wide range of pH (pH 0-14)

### Application

The excellent extraction and clean-up for acidic analytes from Bio-samples.

### Ordering Information

Sorbent	Volume (ml)	Bed Mass (mg)	Pack	P/N
MAX	1ml	30mg	100/pk	XPSMAX130
	1ml	60mg	100/pk	XPSMAX160
	3ml	60mg	50/pk	XPSMAX360
	6ml	150mg	30/pk	XPSMAX6150
	6ml	200mg	30/pk	XPSMAX6200
	6ml	500mg	30/pk	XPSMAX6500

## XySPE - WAX

- Polymeric weak anion exchange mixed mode SPE
- The wide range of pH (pH 0-14)

### Application

Improving retention for strong acidic compounds.

### Ordering Information

Sorbent	Volume (ml)	Bed Mass (mg)	Pack	P/N
WAX	1ml	30mg	100/pk	XPSWAX130
	1ml	60mg	100/pk	XPSWAX160
	3ml	60mg	50/pk	XPSWAX360
	6ml	150mg	30/pk	XPSWAX6150
	6ml	200mg	30/pk	XPSWAX6200
	6ml	500mg	30/pk	XPSWAX6500

## XySPE - WCX

- Polymeric weak cation exchange mixed mode SPE
- The wide range of pH (pH 0-14)

### Application

Improving retention for all types of basic analytes, especially strong bases.

### Ordering Information

Sorbent	Volume (ml)	Bed Mass (mg)	Pack	P/N
WCX	1ml	30mg	100/pk	XPSWCX130
	1ml	60mg	100/pk	XPSWCX160
	3ml	60mg	50/pk	XPSWCX360
	6ml	150mg	30/pk	XPSWCX6150
	6ml	200mg	30/pk	XPSWCX6200
	6ml	500mg	30/pk	XPSWCX6500

## XySPE - C8

- High uniformity of spherical material, stable flow rate
- Similar to C18 bonding, non-polar carbon bond interactions
- Weaker retention for non-polar compounds than C18
- Weaker retention for non-polar compounds than C18

### Application

Mainly used for simultaneously extracting of fat- soluble and water-soluble vitamins from plasma, commonly used for desalting biological macromolecular samples.

### Ordering Information

Sorbent	Volume (ml)	Bed Mass (mg)	Pack	P/N
C8	1ml	100mg	100/pk	XPSC81100
	3ml	200mg	50/pk	XPSC83200
	3ml	500mg	50/pk	XPSC83500
	6ml	500mg	30/pk	XPSC86500
	6ml	1000mg	30/pk	XPSC861000

## XySPE - C18

- Reversed phase C18 based on high purity spherical silica gel
- High uniformity of spherical material and stable flow rate
- High bonding density, low loss, high recovery

### Application

Mainly used for desalting of macromolecular samples, such as blood, plasma, urine, drugs and their metabolites, proteins, DNA and enrichment of organic molecules in environmental water samples

### Ordering Information

Sorbent	Volume (ml)	Bed Mass (mg)	Pack	P/N
C18	1ml	100mg	100/pk	XPSC181100
	3ml	200mg	50/pk	XPSC183200
	3ml	500mg	50/pk	XPSC183500
	6ml	500mg	30/pk	XPSC186500
	6ml	1000mg	30/pk	XPSC1861000
	12ml	2000mg	20/pk	XPSC18122000

## XySPE - PS

- Unfunctionalized hyper-crosslinked PS-DVB polymer
- Large particle size increasing flow rate of extraction
- High surface area and capacity for polar analytes

### Application

Designed for extracting polar analytes from water samples

### Ordering Information

Sorbent	Volume (ml)	Bed Mass (mg)	Pack	P/N
PS	1ml	30mg	100/pk	XPSPS130
	1ml	60mg	100/pk	XPSPS160
	3ml	60mg	50/pk	XPSPS360
	6ml	150mg	30/pk	XPSPS6150
	6ml	200mg	30/pk	XPSPS6200
	6ml	500mg	30/pk	XPSPS6500

## XySPE - NH2

- Silica-based aminopropyl extraction column
- Dual action of polar stationary phase and weak anion exchanger
- Can be used for both reversed phase or normal phase extraction

### Application

Mainly used to remove strong anions such as sulfonate residues in samples.

### Ordering Information

Sorbent	Volume (ml)	Bed Mass (mg)	Pack	P/N
NH2	1ml	100mg	100/pk	XPSNH21100
	3ml	200mg	100/pk	XPSNH23200
	3ml	500mg	50/pk	XPSNH23500
	6ml	500mg	30/pk	XPSNH26500
	6ml	1000mg	30/pk	XPSNH261000

## XySPE - SAX

- Strong anion exchange sorbent based on high purity spherical silica
- Silica surface is bonded with quaternary amine functional groups

### Application

Mainly used for extracting of weak anionic compounds, like carboxylic acids. Mostly suited for the extraction of weak acids. Frequently used to remove strong anions (organic Nucleic acids, nucleotides, sulfonates, inorganic ions, etc.), and desalting of biological macromolecule, etc.

### Ordering Information

Sorbent	Volume (ml)	Bed Mass (mg)	Pack	P/N
SAX	1ml	100mg	100/pk	XPSSAX1100
	3ml	200mg	100/pk	XPSSAX3200
	3ml	500mg	50/pk	XPSSAX3500
	6ml	500mg	30/pk	XPSSAX6500
	6ml	1000mg	30/pk	XPSSAX61000

## XySPE - PSA

- Ethylenediamine-N-propyl with two different amino functional groups
- Higher pKa and ionic capacity compared with Nh2
- Can be used for extraction of metal ions through chelation reaction

### Application

Mainly used for pretreatment of samples in pesticide residue analysis to remove organic acids, pigments, metal ions and phenols, etc.

### Ordering Information

Sorbent	Volume (ml)	Bed Mass (mg)	Pack	P/N
PSA	1ml	100mg	100/pk	XPSPSA1100
	3ml	200mg	50/pk	XPSPSA3200
	3ml	500mg	50/pk	XPSPSA3500
	6ml	500mg	30/pk	XPSPSA6500
	6ml	1000mg	30/pk	XPSPSA61000

## XySPE - SCX

- Strong cation exchange sorbent based on high purity spherical silica gel
- Silica surface is bonded with benzene sulfonic acid functional groups

### Application

Mainly used for the extracting of organic base compounds or the desalting of biological macromolecules, mixed with C18 for extract the organic base, such as antibiotics, Amino acids, catecholamines, herbicides, nucleic acid bases, nucleosides, surfactants, etc.

### Ordering Information

Sorbent	Volume (ml)	Bed Mass (mg)	Pack	P/N
SCX	1ml	100mg	100/pk	XPSSCX1100
	3ml	200mg	50/pk	XPSSCX3200
	3ml	500mg	50/pk	XPSSCX3500
	6ml	500mg	30/pk	XPSSCX6500
	6ml	1000mg	30/pk	XPSSCX61000

## XySPE - CN

- A cyanopropyl SPE column based on high purity spherical silica
- Preferred choice for Separation of intermediate compounds
- Can be used for extraction for both RP or NP

### Application

Mainly used for simultaneously extracting of fat-soluble and water-soluble vitamins from plasma, commonly used for desalting biological macromolecular samples

### Ordering Information

Sorbent	Volume (ml)	Bed Mass (mg)	Pack	P/N
CN	1ml	100mg	100/pk	XPSCN1100
	3ml	200mg	100/pk	XPSCN3200
	3ml	500mg	50/pk	XPSCN3500
	6ml	500mg	30/pk	XPSCN6500
	6ml	1000mg	30/pk	XPSCN61000

## XySPE - Silica

- Unbonded activated silica as adsorbent
- Be of weakly acidic and exhibiting high polar interaction

### Application

Mainly used to extract non-polar, weak-polar compounds, as greasy sample, Especially for substance has similarity in structure.

### Ordering Information

Sorbent	Volume (ml)	Bed Mass (mg)	Pack	P/N
Silica	1ml	100mg	100/pk	XPSSIL1100
	3ml	200mg	100/pk	XPSSIL3200
	3ml	500mg	50/pk	XPSSIL3500
	6ml	500mg	30/pk	XPSSIL6500
	6ml	1000mg	30/pk	XPSSIL61000

## XySPE - Florisil

- Highly selective adsorbent
- Composed by silica, magnesium oxide and sodium sulfate
- Specially used for AOAC, EPA method, etc

### Application

Mainly used for the separation & clean-up of pesticide residues, endocrine and fat, Separation of PCBs, PAHs, nitrogen compounds in hydrocarbons and antibiotics, commonly used to remove pigments in pesticide residue analysis, necessary for Ny761 analysis method

### Ordering Information

Sorbent	Volume (ml)	Bed Mass (mg)	Pack	P/N
Florisil	1ml	100mg	100/pk	XPSFLO1100
	3ml	200mg	50/pk	XPSFLO3200
	3ml	500mg	50/pk	XPSFLO3500
	6ml	500mg	30/pk	XPSFLO6500
	6ml	1000mg	30/pk	XPSFLO61000

## XySPE - GCB

- New recoveries-increasing graphitized carbon • Excellent purification, and high reproducibility

### Application

Mainly used in the analysis of pesticide residues, especially for removing pigments from sample pretreatment, of highly pigmented vegetables and fruits.

### Ordering Information

Sorbent	Volume (ml)	Bed Mass (mg)	Pack	P/N
SCX	1ml	100mg	100/pk	XPSGCB1100
	3ml	200mg	50/pk	XPSGCB3200
	3ml	500mg	50/pk	XPSGCB3500
	6ml	500mg	30/pk	XPSGCB6500
	6ml	1000mg	30/pk	XPSGCB61000

## XySPE - AI-N

- Strong polar adsorbent with pH 7.5, neutral surface
- Specialized deactivation treatment, so as not to interfere with sample preparation

### Application

Mainly used in sample pretreatment for vitamins, antibiotics, aromatic oils, enzymes, glycosides, hormones, Widely used in sample pretreatment of Sudan red and malachite green, Exhibit interaction with heterocyclics (nitrogen, phosphorus, sulfur), and  $\pi$ - electrons of aromatic hydrocarbons and organic amines

### Ordering Information

Sorbent	Volume (ml)	Bed Mass (mg)	Pack	P/N
AI-N	1ml	100mg	100/pk	XPSAIN1100
	3ml	200mg	100/pk	XPSAIN3200
	3ml	500mg	50/pk	XPSAIN3500
	6ml	500mg	30/pk	XPSAIN6500
	6ml	1000mg	30/pk	XPSAIN61000

## XySPE - AI-B

- Strong polar adsorbent with pH=8.5
- Specialized deactivation to ensure analytes recovery

### Application

Mainly used to remove organic acids, phenols and soon.

### Ordering Information

Sorbent	Volume (ml)	Bed Mass (mg)	Pack	P/N
AI-B	1ml	100mg	100/pk	XPSAIB1100
	3ml	200mg	100/pk	XPSAIB3200
	3ml	500mg	50/pk	XPSAIB3500
	6ml	500mg	30/pk	XPSAIB6500
	6ml	1000mg	30/pk	XPSAIB61000

## XySPE - AI-A

- Medium cation exchange and strong polar adsorbents with pH=4.5
- Specialized deactivation treatment, so as not to interfere with sample preparation

### Application

Mainly used as medium cation exchanger.

### Ordering Information

Sorbent	Volume (ml)	Bed Mass (mg)	Pack	P/N
AI-A	1ml	100mg	100/pk	XPSAIA1100
	3ml	200mg	50/pk	XPSAIA3200
	3ml	500mg	50/pk	XPSAIA3500
	6ml	500mg	30/pk	XPSAIA6500
	6ml	1000mg	30/pk	XPSAIA61000

## XySPE - SLE

- Specially processed diatomaceous earth
- Be of the largest surface area and balanced surface activity
- Perfect Solid (supported) liquid-liquid extraction alternative to Biotage or Agilent SLE

### Application

Mainly used in drug metabolism analysis, biochemical analysis, textile industry, food, Environment and other fields, of which 20ml/60ml SLE column can be applied to Detection, of 24 banned azo dyes in textiles mentioned on GB/T17592-2011

### Ordering Information

Sorbent	Volume (ml)	Bed Mass (mg)	Pack	P/N
SLE	1ml	100mg	100/pk	XPSSLE1100
	3ml	200mg	50/pk	XPSSLE3200
	3ml	500mg	50/pk	XPSSLE3500
	6ml	500mg	30/pk	XPSSLE6500
	6ml	1000mg	30/pk	XPSSLE61000

## XySPE - TRF

TRF is filled with 3 kinds of adsorbent, exhibiting different interactions for removing impurities, optimized ratio for packing materials, suited for the removal of complex matrix, avoid irreversible adsorption with pesticides. The method has good applicability and can be used for simultaneous detection of multiple pesticide residues in complex tea matrices

Analysis for pesticide residues in Tea leaves.

### Ordering Information

Sorbent	Volume (ml)	Bed Mass (mg)	Pack	P/N
TRF	6ml	1000mg	30/pk	XPSTRF61K
	12ml	2000mg	20/pk	XPSTRF122K

## XySPE - PAE

Used with glass SPE column, for the detection of plasticizers in foods and health products. be of good purifying effect and higher sample recovery rate, widely used for analyzing phthalates in different matrices like food containing fats and oil, and water- soluble samples.

### Ordering Information

Sorbent	Volume (ml)	Bed Mass (mg)	Pack	P/N
PAE	6ml	1000mg	30/pk	XPSPAE61000



## XySPE - BAP

Extraction of benzopyrene in edible oil with using SPE column, and then eluted by dichloromethane

The method is better for fat removal, recovery rate is much more stable, lower background and less solvent consumption.

### Ordering Information

Sorbent	Volume (ml)	Bed Mass (mg)	Pack	P/N
BAP	6ml	500mg	30/pk	XPSBAP6500

## XySPE - GCB/NH2

- Graphitized carbon has a special surface treatment and exhibit strong interaction with planar molecules. such as chlorophyll and carotene in fruits and vegetables.
- NH2 is silica gel bonded with an aminopropyl, used to remove fatty acids, organic acids, or other interfering substance

### Application

Mainly used for analysis of pesticide residue, applied to the corresponding detection of various pesticide, residues involved in the Japanese positive list system, Applied to 500 kinds of pesticide residues in fruits and vegetables, mentioned on the national standard GB/T 19648-2006

### Ordering Information

Sorbent	Volume (ml)	Bed Mass (mg)	Pack	P/N
GCB/NH2	6ml	800mg	30/pk	XPSGCNH68H
	6ml	1000mg	30/pk	XPSGCNH61K
	12ml	2000mg	20/pk	XPSGCNH122K



## Supported Liquid Extraction (SLE) Cartridges

### Revolutionary Liquid-Liquid Extraction Solution

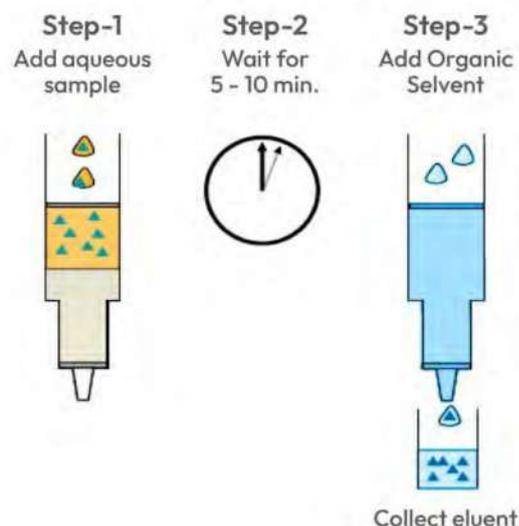
SLE (Solid Supported Liquid/Liquid Extraction) is a highly efficient and economical type of extraction method. Just two steps for the extraction of target compound from aqueous phase, loading and elution. SLE is mainly used in the fields of food safety, environmental monitoring, clinical samples and forensic science for research and testing.

### FEATURES

- High recovery and repeatability
- Easy operation steps and less processing time
- Less consumption of organic solvent

### APPLICATIONS

- Extraction of drugs/chemical compound from biological fluids
- Detection of parabens in cosmetics, pharmaceuticals and foods

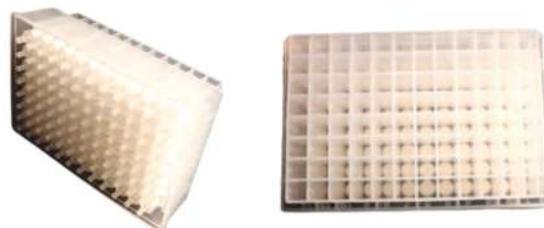


### ORDERING INFORMATION

Cat.#	Description	Qty.
XySPESLE001	SLE Cartridges, 1ml	100 Pcs/Box
XySPESLE003	SLE Cartridges, 3ml	50 Pcs/Box
XySPESLE006	SLE Cartridges, 6ml	30 Pcs/Box
XySPESLE012	SLE Cartridges, 12ml	20 Pcs/Box

## XySPE-96

A 96-well plate option is available for rapid processing of multiple samples



### ORDERING INFORMATION

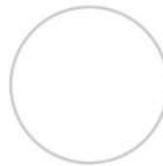
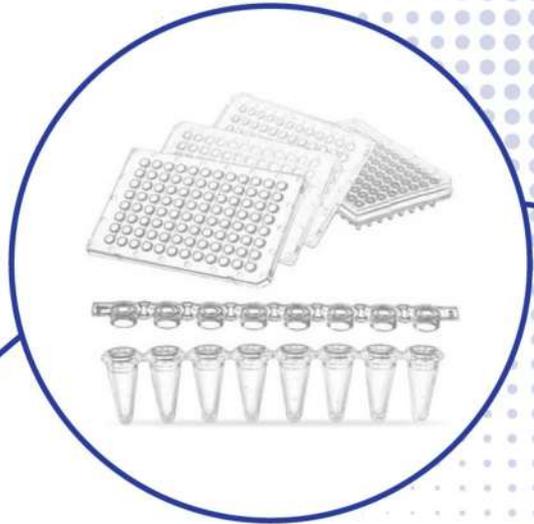
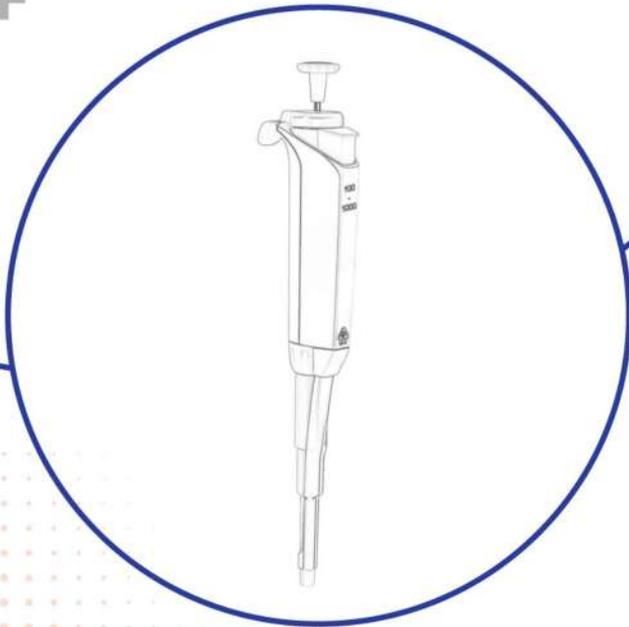
Sorbent	Volume (ml)	Bed Mass (mg)	P/N
HLB	1ml	10mg	CTW02-0101
			XySPE96-H10
HLB	1ml	30mg	XySPE96-H30
HLB	2ml	30mg	XySPE96-H230
MCX	1ml	30mg	XySPE96-M30
MCX	2ml	30mg	XySPE96-M130
C18	1ml	30mg	XySPE96-C30
MCX	2ml	60mg	XySPE96-M260

Other bed size and sorbent also available on request

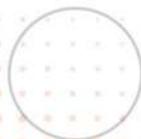
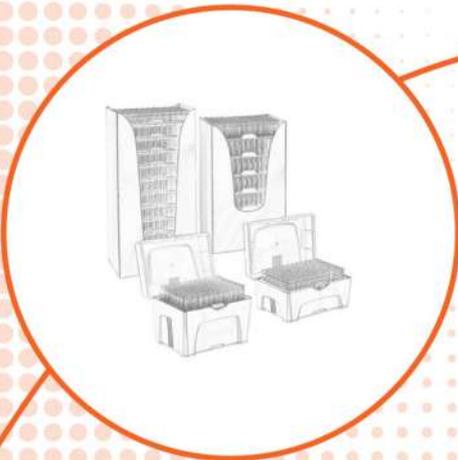
# XYWARE VIALS



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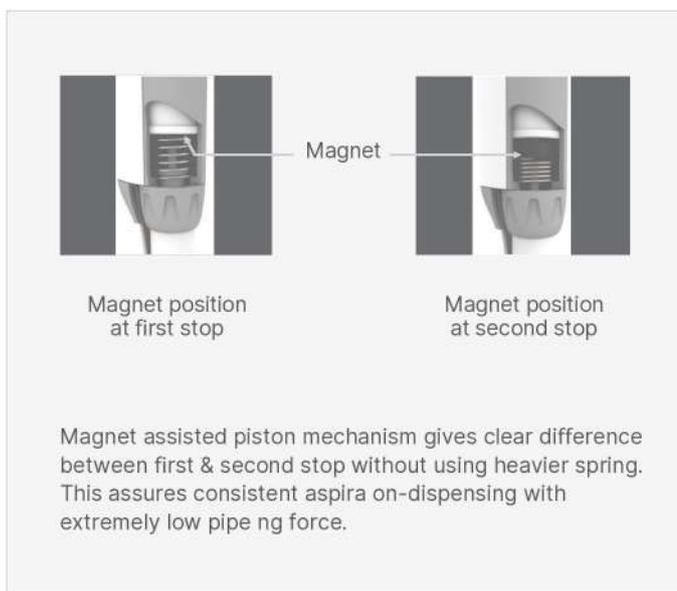


## XyWare Precision Pipette

(Variable & Fixed, Single & Multi-Channel)

- Advanced ergonomic design for precise and effortless pipetting.
- Magnet-assisted piston mechanism for consistent aspiration and dispensing.
- Fully autoclavable and UV-resistant materials.
- 4-digit volume counter for precise settings.
- Tip ejector with built-in shock absorber to reduce thumb strain.
- ISO 8655-6 calibrated in an ISO 17025 accredited lab.
- Volume Range: 0.1  $\mu\text{l}$  – 10,000  $\mu\text{l}$
- Warranty: 3 Years

Available in Variable & Fixed volumes for single channel & in 8/12 channel variants



Volume lock for prevention against accidental volume drift and consistent results



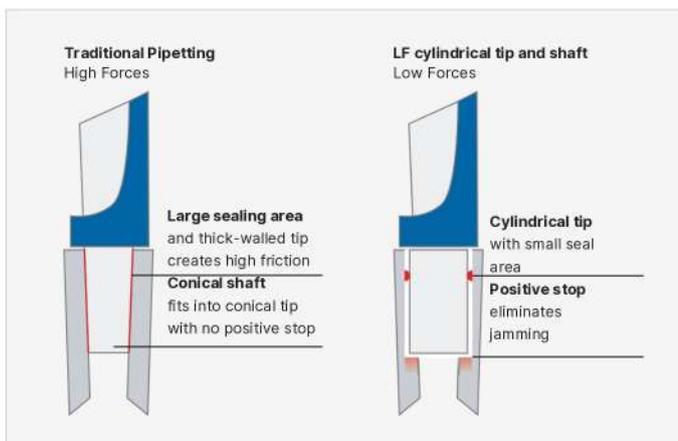
Tip ejector with built-in shock absorber for reduced thumb impact



## XyWare Comfort Pipette

(Low-Force Pipetting System)

- Light sealing mechanism reduces pipetting force for fatigue-free operation.
- Magnet-assisted piston ensures accurate and consistent liquid handling.
- Designed with a cylindrical shaft for an effortless tip ejection.
- Fully autoclavable with UV resistance.
- Secure volume lock to prevent accidental adjustments.
- ISO 8655-6 calibrated in ISO 17025 accredited lab.
- Volume Range: 0.1  $\mu\text{l}$  – 1000  $\mu\text{l}$
- Warranty: 3 Years



The Accumax low-force pipette forms a light, perfect seal between the pipette and tips, making tips virtually effortless to eject.



Effortless low-force pipette ejection and total hand comfort with lower spring forces.



## XyWare IntelliPipette

*(Electronic Pipette, Single & Multi-Channel)*

- Light sealing mechanism reduces pipetting force for fatigue-free operation.
- Multi-Mode Pipetting for Versatility: Equipped with five advanced pipetting modes—Forward Pipetting, Reverse Pipetting, Multi-Dispensing, Mixing, and Dilution—catering to a wide range of laboratory applications.
- Optimized Battery Performance: High-efficiency rechargeable battery enables 5 hours of continuous operation, with an intelligent sleep mode to minimize power consumption when idle.
- Precision Auto-Calibration: Three-point auto-calibration ensures exceptional accuracy and consistency across the entire volume range, guaranteeing precise liquid handling.
- Magnet-assisted piston ensures accurate and consistent liquid handling.
- Designed with a cylindrical shaft for an effortless tip ejection.
- Fully autoclavable with UV resistance.
- Secure volume lock to prevent accidental adjustments.
- ISO 8655-6 calibrated in ISO 17025 accredited lab.
- Volume Range: 0.1  $\mu\text{l}$  – 1000  $\mu\text{l}$
- Warranty: 3 Years



Available in Variable volume for single channel & in 8/12 channel variants



Available in Variable & Fixed volumes for single channel & in 8/12 channel variants.

## XyWare Smart Pipette

*(High-Precision Mechanical Pipette)*

- Thermoplastic elastomer-coated handle prevents heat transfer for accuracy.
- PVDF tip cone offers excellent chemical and shock resistance.
- Ergonomic One-Hand Operation: Designed for seamless single-hand use, featuring an integrated volume lock and adjustment mechanism for effortless precision and control.
- Click-stop counter system for precise volume setting.
- Fully autoclavable and UV resistance
- ISO 8655-6 calibrated.
- Volume Range: 0.1  $\mu\text{l}$  – 10,000  $\mu\text{l}$

## XyWare ProPipette

(High-Performance Mechanical Pipette)

- Precision-engineered for professional applications, delivering highly accurate liquid handling.
- Thermoplastic elastomer-coated handle prevents body heat transfer, maintaining consistent pipetting accuracy during extended use.
- PVDF tip cone offers maximum resistance to chemical corrosion and physical impact, ensuring durability and compatibility with various tips.
- Click-stop volume adjustment system allows easy and precise volume setting.
- Ergonomic design ensures lightweight handling and soft plunger movement, reducing hand strain.
- Calibrated as per ISO 8655-6 standards in an ISO 17025 accredited lab for certified accuracy.
- Fully autoclavable lower assembly for contamination-free operation.
- Volume Range: 0.1  $\mu$ l – 10,000  $\mu$ l



Available in Variable & Fixed volumes for single channel & in 8/12 channel variants



Available in Variable & Fixed volumes for single channel & in 8/12 channel variants

## XyWare ErgoPipette

(Ergonomic Mechanical Pipette)

- Designed for fatigue-free operation with a lightweight and soft-plunger mechanism.
- Click-stop volume adjustment system ensures convenient volume setting with high precision.
- PVDF tip cone provides superior chemical resistance and mechanical durability, ensuring longevity.
- Ergonomic handle grip enhances user comfort, making it ideal for long-duration pipetting.
- Calibrated as per ISO 8655-6 standards in an ISO 17025 accredited lab for compliance and reliability.
- Fully autoclavable for sterilization and cleanroom compatibility.
- Volume Range: 0.1  $\mu$ l – 10,000  $\mu$ l

## XyWare VersaPipette

*(Versatile Multi-Channel Pipette)*

- Designed for high-throughput applications, ideal for multi-channel pipetting in microplates.
- Lightweight ergonomic design minimizes hand fatigue, allowing for extended usage without strain.
- PVDF tip cone ensures maximum resistance to corrosion and mechanical wear, compatible with various tip types.
- Click-stop counter system enables precise volume adjustment and easy calibration.
- Autoclavable lower assembly, ensuring sterile operation and preventing contamination.
- Calibrated as per ISO 8655-6 standards in an ISO 17025 accredited lab for high precision.
- Volume Range: 0.1  $\mu\text{l}$  – 10,000  $\mu\text{l}$



Available in Variable & Fixed volumes for single channel & in 8/12 channel variants



Customize any volume between 2  $\mu\text{l}$  to 200  $\mu\text{l}$

## XyWare MiniPipette

*(Compact & Pre-Calibrated Pipette)*

- Ultra-compact design for minimal space usage.
- Optimized 130mm Design: Engineered for a comfortable and secure grip, ensuring precise and effortless pipetting.
- Two-Step Plunger Mechanism: Allows controlled aspiration and dispensing, enhancing accuracy and ease of use.
- Factory-calibrated for high-precision applications.
- Compatible with 10  $\mu\text{l}$  and 200  $\mu\text{l}$  tips.
- Standard preset volumes: 5, 10, 20, 25, 50, 100, 200  $\mu\text{l}$

## XyWare Transfer Pipette

*(Disposable LDPE Pipette)*

- Soft, elastic bulb enables effortless and controlled liquid transfer.
- Clear external graduations ensure precise and accurate dispensing.
- Smooth orifice design allows for uniform and controlled fluid flow.
- Manufactured from medical-grade LDPE, ensuring chemical compatibility and durability.
- Produced in a sterile cleanroom environment to maintain contamination-free standards.
- Available in 1ml & 3ml capacities to suit various laboratory applications.
- Offered in multiple variants: Non-sterile bulk, sterile bulk, and individually wrapped sterile options.



## XyWare Bottle Dispenser

*(High-Precision Bottle Top Dispenser)*

- Optional re-circulation valve minimizes reagent waste and reduces costs.
- Springless valve mechanism ensures high chemical resistance, durability, and zero maintenance.
- Tool-free servicing design allows easy cleaning without affecting calibration.
- 360° rotating discharge tube enables multi-directional dispensing for convenience.
- Single-tool calibration ensures precise volume settings and quick recalibration.
- ISO 8655-5 calibrated in an ISO 17025 accredited lab for certified accuracy.
- Safety lock and volume lock mechanisms prevent accidental flow and ensure consistent dispensing.
- Dual graduation markings provide clear volume visibility from multiple angles.
- Snap-fit discharge tube mounting and adjustable telescoping filling tube support various reagent bottles.
- Volume Range: 0.25 ml – 100 ml, Adapters Included: 28mm, 32mm, 38mm, 40mm, 45mm.



## XyWare Pipette Controller

*(Electronic Pipette Filling System)*

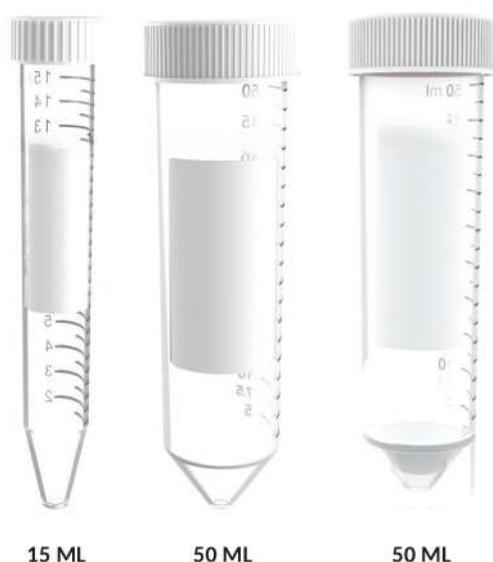
- High-efficiency pump can fill a 25 ml pipette in under 4 seconds for rapid liquid handling.
- Ergonomic design provides effortless and fatigue-free operation.
- Double safety valve and hydrophobic filters offer enhanced protection against fluid penetration.
- Autoclavable pipette cone prevents contamination and ensures sterility.
- Two operational speed modes – High, Low, and Gravity Drain for flexible liquid control.
- Rechargeable NiMH battery provides 8 hours of continuous operation on a full charge.
- User-replaceable battery for long-term convenience and uninterrupted use.
- Low battery indicator ensures timely recharging to prevent workflow disruptions.
- Supplied with dual mounting stands – Wall-mount & Table-top for space-efficient storage.
- Includes three hydrophobic filters as standard accessories for added protection.



## XyWare Centrifuge Tubes

*(High-Purity, Laboratory-Grade Tubes)*

- Manufactured in a fully automated Class 100K cleanroom facility using US FDA-approved resins to ensure contamination-free production.
- Certified DNase, RNase, Endotoxin, and Pyrogen-free, preventing sample degradation.
- Lubricant-free and heavy metal-free composition eliminates leaching risks.
- Leak-proof cap design supports secure long-term storage, with tamper-proof printed markings for traceability.
- Withstands extreme temperatures (-80°C to +121°C) and is compatible with all standard and high-capacity centrifuge rotors.
- Amber-colored variants available for light-sensitive samples, with tamper-proof graduations ensuring precise volume readability.
- Available Sizes: 15ml (17,000g), 50ml Self-Standing, 50ml (20,000g).



## XyWare Heavy Metal-Free Centrifuge Tubes

*(Ultra-Pure, Trace Metal-Free Tubes)*

- Certified <1ppm heavy metal content, ensuring minimal trace contamination for sensitive applications.
- Made from 100% virgin, medical-grade resins, with additive-free, natural color caps for uncontaminated sample storage.
- Large writing area allows easy sample identification and labeling.
- ICP-MS tested for ultra-low metal content, including Boron, Aluminum, Phosphorous, Arsenic, Selenium, Cadmium, Lead, Chromium, Manganese, Iron, Nickel, Copper, and Zinc.

## XyWare Microcentrifuge Tubes

*(High-Performance Small-Volume Tubes)*

- Manufactured in a fully automated Class 100K cleanroom facility using US FDA-approved resins for contamination-free production.
- Certified DNase, RNase, Endotoxin, and Pyrogen-free to prevent sample degradation.
- Leak-proof seal cap design allows one-hand operation and ensures secure sample containment.
- Durable construction withstands up to 20,000 g-force in centrifugation.
- Thin cap membrane enables easy needle piercing without risking sample loss.
- Ultra-smooth surface prevents material adhesion and minimizes sample retention.



## XyWare Large Volume Centrifuge Tubes

*(High-Capacity Centrifugation Tubes)*

- Made from high-purity PP (bottle) and HDPE (cap), ensuring chemical resistance and sample integrity.
- Manufactured in a Class 100K cleanroom facility with USP Class VI-certified raw materials.
- Certified DNase, RNase, and Pyrogen-free, ensuring contamination-free applications.
- Optimized for large-volume centrifugation, withstanding up to 7,500 RCF (250ml) and 6,000 RCF (500ml).

## XyWare PCR Consumables

*(Precision-Engineered PCR & qPCR Tubes and Plates)*

- Ultra-thin walls provide maximum heat transfer for efficient PCR amplification.
- Certified DNase, RNase, and Human DNA-free, ensuring accurate and contamination-free results.
- Free from PCR inhibitors and endotoxins, preventing reaction interference.
- Specially designed small-batch packaging minimizes contamination risk between researchers.
- Non-reactive internal surface and uniform wall thickness ensure consistent and reliable results.
- Available in multiple formats, including PCR strips and plates compatible with standard PCR and qPCR workflows.



## XyWare Deepwell Plate

*(High-Capacity Multi-Well Plate for Nucleic Acid Isolation)*

- Raised well rims minimize cross-contamination and ensure sample integrity.
- Manufactured in a Class 100K cleanroom facility using fully automated processes.
- Made from US FDA-approved virgin polypropylene, ensuring high chemical resistance.
- Certified DNase, RNase, Human DNA, and Endotoxin-free for contamination-free workflows.
- 8 × 12 well format with alphanumeric coding for easy sample tracking.
- ANSI standard microplate design, compatible with various laboratory automation systems.
- Compatible with nucleic acid isolation platforms, with available silicon mats and dilution strips for extended applications.

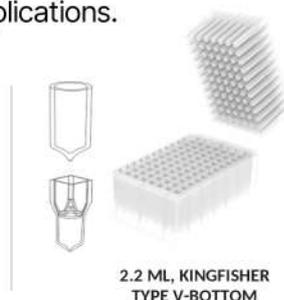


1 ML U-Bo om

1 ML ROUND  
BOTTOM

2 ML V-BOTTOM

\*KINGFISHER KINGFISHER IS REGISTERED TRADEMARK OWNED BY THERMO SCIENTIFIC, USA & OTHER COUNTRIES \*ZYBIO ZYBIO IS REGISTERED OWNED BY ZYBIO INC., CHINA & OTHER COUNTRIES

2.2 ML, KINGFISHER  
TYPE V-BOTTOM2 ML ROUND  
BOTTOM2.2 ML, ZYBIO  
TYPE U-BOTTOM

## XyWare Reservoirs

*(Precision-Designed Liquid Handling Reservoirs)*

- Made from high-purity PP (bottle) and HDPE (cap), ensuring chemical resistance and sample integrity.
- Manufactured in a Class 100K cleanroom facility with USP Class VI-certified raw materials.
- Certified DNase, RNase, and Pyrogen-free, ensuring contamination-free applications.
- Optimized for large-volume centrifugation, withstanding up to 7,500 RCF (250ml) and 6,000 RCF (500ml).



## XyWare HPLC Safety Caps

*(Advanced Safety System for HPLC Solvent Bottles)*

- Vapor-sealing valve prevents hazardous solvent vapors from escaping, ensuring a safer lab environment.
- Integrated PTFE filter eliminates contaminants and noise in HPLC analysis.
- Chemical-resistant construction ensures compatibility with aggressive organic solvents.
- Specially designed O-ring provides a secure, airtight seal with reagent bottles.
- Compatible with GL45 thread size for broad laboratory compatibility.

## CONSUMABLES

# XyWARE

### XyWare Pipette Tips

*(High-Purity, Precision Pipetting Tips)*

- Certified DNase, RNase, Pyrogen, Endotoxin, Human DNA & PCR Inhibitor-free, ensuring contamination-free liquid handling.
- Manufactured in a fully automated Class 100K cleanroom facility, guaranteeing purity and consistency.
- Swiss-made diamond-finish molds provide a super-smooth internal surface for optimal liquid flow.
- Produced from US FDA-approved virgin raw materials, free of lubricants and heavy metals to prevent leaching.
- Universal compatibility with a wide range of pipettes.
- Graduation marks serve as visual checks to reduce pipetting errors.
- Clear and transparent for easy sample visibility.



### XyWare Low Retention Tips

*(Hydrophobic, High-Recovery Pipette Tips)*

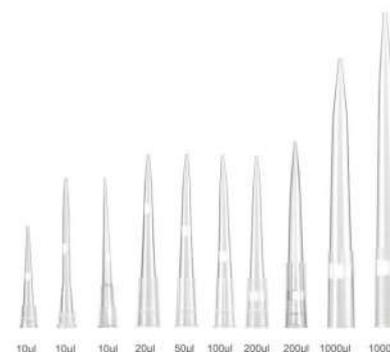
- Specialized resin formulation and diamond-finish molds create a super-hydrophobic surface, minimizing liquid retention.
- Ensures maximum sample recovery, preventing loss of valuable reagents and samples.



### XyWare Filter Tips

*(Aerosol-Barrier Tips for Contamination Control)*

- Integrated PE filters serve as a barrier against aerosols, preventing contamination of pipette shafts.
- Reduces cross-contamination risks and ensures high accuracy in sensitive applications.



### XyWare Pipette Tip Packaging Options

- Fully autoclavable and stackable for efficient storage.
- Hinge rack design allows for single-hand operation.
- Color-coded trays facilitate easy tip volume identification.
- Pre-arranged in an 8 × 12 format for convenience in multi-channel pipetting.
- Minimal waste and cost-saving eco-friendly reloading options.
- Secure packaging with self-standing polyethylene bags for easy access.
- Perforation and double-sealed zip-lock prevent contamination and spillage.

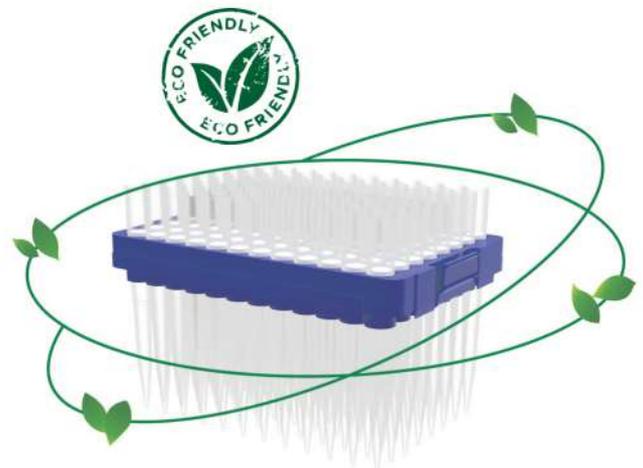


\*WE ALSO EXECUTE OEM PROJECTS. SPECIFICATIONS CAN BE CHANGED WITHOUT NOTICE FOR QUALITY IMPROVEMENT.

## XyWare GreenMax Tip Racks

*(Eco-Friendly Pipette Tip Storage)*

- Lightweight, compact design minimizes plastic usage while ensuring durability.
- Available for: 10 $\mu$ l, 200 $\mu$ l, 1000 $\mu$ l, and 1250 $\mu$ l tips.
- Compatible with both single-channel and multi-channel pipettes, allowing seamless tip loading.
- Constructed from 100% biodegradable materials, reducing plastic consumption by 60% compared to traditional tip racks.
- Pre-sterilized and non-autoclavable, designed for immediate use.
- Facilitates easy and guilt-free disposal, eliminating the environmental impact of standard pipette tip boxes.



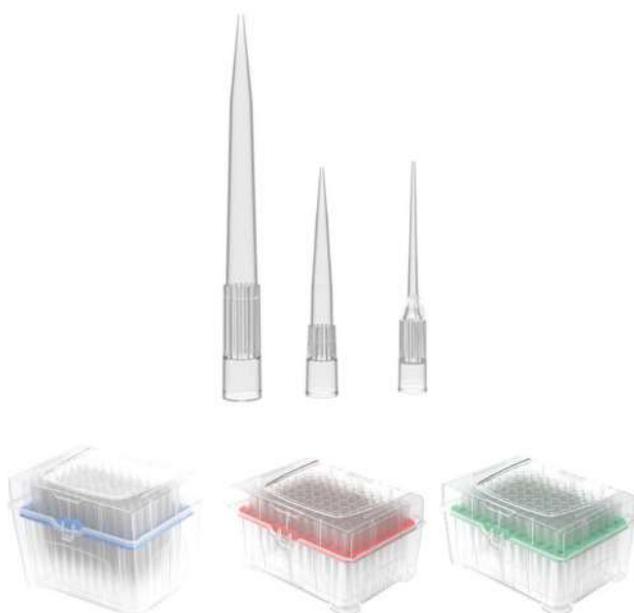
Reduces your plastic consumption up to 60%



Guilt-free disposal



Works seamlessly with single and multi-channel pipettes



## XyWare LF Tips

*(Leak-Free Precision Tips for LTS Pipettes)*

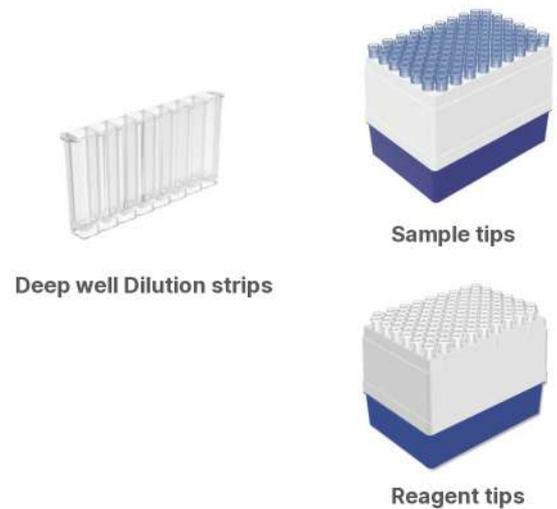
- Engineered for seamless compatibility with XyWare LF Pipettes and Rainin LTS Pipettes, ensuring a secure, leak-free fit.
- Optional low-retention variant enhances sample recovery by preventing liquid adhesion.
- Available with an optional aerosol barrier filter, protecting against cross-contamination.
- Color-coded rack inserts simplify tip and pipette volume matching.
- Cylindrical collar with a positive-stop mechanism enables easy attachment and precise ejection.
- Available Volumes: 20 $\mu$ l, 200 $\mu$ l, 1000 $\mu$ l.

LTS is a registered trademark of Rainin Instrument Rainin  
is a registered trademark of Mettler Toledo Rainin LLC

## XyWare Robotic Tips (Dynex Type)

*(Precision Tips for Automated Liquid Handling)*

- Designed for use with DSX and DS2 instruments.
- Certified Endotoxin, Heavy Metals, RNase, DNase, and DNA-free, ensuring contamination-free operation.
- Manufactured under stringent cleanroom conditions to meet high-precision standards.
- Packaging: 4 × 108 tips per unit.
- Available Volumes:
  - Sample Tips: 5 – 300µl
  - Reagent Tips: 100 – 1300µl
- Deep well reservoirs (Dilution Strips) available, featuring 8-well strips made of PP material.



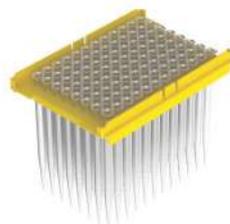
## XyWare Robotic Tips (Tecan Type)

*(High-Precision Conductive and Clear Tips)*

- Constructed from premium-grade virgin polypropylene, ensuring durability and chemical compatibility.
- Available in carbon-embedded conductive tips and clear tips for enhanced versatility.
- Manufactured in an ISO 9001 and ISO 13485-certified facility, using USP Class VI resins.
- Certified Endotoxin, Heavy Metals, RNase, DNase, and DNA-free, ensuring compliance with laboratory standards.
- Low percentage coefficient of variation (%CV) guarantees high accuracy and reproducibility.
- Validated on actual Tecan Evo systems, including LiHa arms and Genesis Freedom platforms.
- Polyethylene filter option available, preventing aerosol contamination.
- Sterilization Options: Available in Non-Sterile, Sterile, and Filtered Sterile variants.
- Packaging Formats: Blister packs, ANSI Racks, and Eco Flip Boxes.
- Available Volumes: 10µl, 50µl, 200µl, 1000µl.



10 µl conductive tips  
in ANSI Rack



1000 µl clear tips



200 µl conductive tips  
in flip box



50 µl clear tips  
in blister pack

## XyWare Cryovials

*(High-Security Sample Storage Vials)*

- V-bottom design ensures maximum sample recovery.
- Autoclavable at 121°C for 15 minutes for sterilization.
- Hepta-foot base provides enhanced stability for self-standing storage.
- Easy sample identification with large, clear label patch.
- Quick-closure, leak-proof tube seal ensures secure containment.
- Externally threaded design eliminates O-ring requirements, reducing contamination risks.
- Certified DNase and RNase-free for molecular biology applications.
- Volume Range: 1ml, 1.8ml, 3.5ml, 4.5ml.



## XyWare Column & Filter Plate

*(High-Efficiency Nucleic Acid and Protein Purification System)*

- Includes: 0.8ml round-bottom filter tube and 2ml receiver tube.
- Constructed from premium virgin polypropylene, ensuring autoclavability and non-wettability.
- Withstands centrifugal forces up to 25,000 × g (fixed-angle rotor) and 30,000 × g (swing rotor).
- Multiple filter media available: Fiberglass, polyethylene, cellulose acetate, regenerated cellulose, nylon, PVDF.
- Certified RNase, DNase, Human DNA, Pyrogen, and PCR inhibitor-free with SAL (Sterility Assurance Level) of 10<sup>-6</sup>.
- 1ml sample filtration capacity, compatible with high-throughput automation.
- Manufactured in an ISO 9001 & ISO 13485 certified Class 100K cleanroom facility.

## XyWare Petri Plates

*(Sterile Culture Dishes for Microbiological Applications)*

- Manufactured in a fully automated Class 100K cleanroom facility.
- Constructed from US FDA 21 CFR-compliant polystyrene for high transparency and durability.
- 90mm diameter, available in vented and non-vented variants.
- Endotoxin/Pyrogen-free, sterilized via gamma irradiation per ISO 11137-2 guidelines (SAL 10<sup>-6</sup>).
- Tamper-evident locking system for sterility assurance and traceability.
- Stackable design with raised ridges for optimized airflow.
- Compatible with carousel-based media preparation systems for automation.
- Packaging Options: 10 plates/bag & 20 plates/bag.



# CONSUMABLES

# XyWARE

## XyWare Serological Pipette

*(Disposable Polystyrene Pipettes for Accurate Liquid Handling)*

- Manufactured from virgin polystyrene in a Class 100K cleanroom for contamination-free applications.
- Negative graduation marks provide extra capacity and precise volume measurement.
- Certified DNase, RNase, Cytotoxin, and Pyrogen-free to maintain sample integrity.
- Highly transparent and clear, ensuring easy visual confirmation of liquid levels.
- Available Volumes: 1ml, 2ml, 5ml, 10ml, 25ml, 50ml, 100ml.



## XyWare Screw Cap Tubes

*(Secure and Durable Sample Storage Tubes)*

- Material: USP Class VI medical-grade polypropylene (PP) for high chemical resistance.
- Available in conical and self-standing designs, including amber and low-retention variants.
- Designed for high-speed centrifugation, withstanding up to 20,000 × g RCF.
- Freeze/thaw compatible, maintaining integrity at -80°C and room temperature cycles.
- Integrated O-ring design enhances sealability and prevents leaks.
- Available Volumes: 0.5ml, 1.5ml, 2ml.



## XyWare Single-Use Assemblies

*(Pre-Sterilized, Customizable Bioprocessing Solutions)*

- Designed for aseptic fluid transfer in biopharmaceutical and laboratory applications.
- Available in multiple formats: Tubes, Bottles, Flasks, and Carboys.
- Customizable solutions with assured lead time, ensuring process efficiency.
- Comprehensive technical documentation available for regulatory compliance.
- Manufactured in a dedicated Class 7 cleanroom facility for sterile production.
- Gamma-irradiated for sterility assurance with full lot traceability.



## XyWare Aseptic Closures

*(Secure Multi-Port Closures for Bioprocessing Containers)*

- Designed for glass laboratory bottles and single-use plastics, ensuring aseptic fluid management.
- Ideal for biopharmaceuticals, vaccines, cell, and gene therapy applications.
- Available in multiple port configurations:
  - 2-port closures for GL25, GL35, and GL45 bottles.
  - 3-port closures for extended compatibility.
- 1/4" and 1/8" port variants for 38mm, 45mm, and 70mm rigid containers.



## XyWare Reagent Bottles (PP/HDPE/LDPE)

*(High-Purity Chemical Storage Bottles)*

- Manufactured in a Class 100K cleanroom facility, ensuring contamination-free storage.
- Tested for heavy metals and leachables, maintaining chemical integrity.
- Leak-proof construction offers secure containment for reagents and chemicals.
- Made from US FDA-approved virgin polypropylene (USP Class VI) for high durability and chemical resistance.
- Translucent visibility and amber-colored options available for light-sensitive samples.
- Available Variants:
  - Narrow Mouth: 4ml – 4000ml
  - Wide Mouth: 30ml – 4000ml
  - Heavy-Duty Bottles: 1L, 2L, 4L
  - Round Bottles with Handle: 4L
  - Square Bottles with Handle: 2L, 4L



## XyWare Carboys & Jerricans

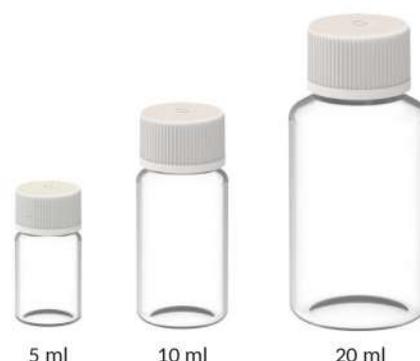
*(Large-Capacity Liquid Storage and Transport Solutions)*

- Unique serial numbering for traceability and batch identification.
- Individually laser-printed graduations with lot numbers for accurate volume tracking.
- Made from US FDA 21 CFR-compliant raw materials (PP/HDPE/LDPE) for chemical resistance and durability.
- Leakproof PP closure system with integrated silicone gasket.
- Optional EZ-L (Extractable & Leachable) profile available for specialized applications.
- Sterility assurance level (SAL  $10^{-6}$ ) per ISO 11137-2 guidelines.
- TSE/BSE compliant and BPA-free, ensuring biological safety.
- Available Capacities:
  - Carboys: 10L, 15L, 20L, 25L, 50L (with and without stopcock)
  - Jerricans: 10L, 20L (with and without anti-wobbling mouth)

## XyWare Diagnostic PETG Vials

*(Sterile, Low-Leachable Sample Storage Vials)*

- Material: PETG, ensuring non-pyrogenic and non-cytotoxic properties.
- Manufactured in an ISO-approved cleanroom facility, using USP Class VI raw materials with low leachables and extractables.
- Gamma-sterilized to provide maximum sterility assurance.
- Closure Options:
  - Screw cap made of HDPE for secure sealing.
  - HDPE cap with polyethylene liner for additional leak protection.
- Available Volumes: 5ml, 10ml, 20ml.



## XyWare Erlenmeyer Flask

*(Graduated Lab Flasks for Mixing & Culturing)*



- Material: PETG and PC, with low leachables and extractables.
- Vented and non-vented cap options for controlled airflow.
- Graduated markings ensure quick and accurate volume readings.
- Available in flat and baffled bottom designs, optimizing mixing efficiency.
- RNase/DNase-free, noncytotoxic, and nonpyrogenic, ensuring sample integrity.
- Gamma-sterilized per ISO 11137-2 (SAL  $10^{-6}$ ) for contamination-free applications.
- Also available in individually packaged EZ-Tear bags, pre-sterilized for immediate use.
- Available Volumes: 125ml, 250ml, 500ml, 1000ml, 2000ml, 3000ml.

## XyWare Media Bottles

*(Sterile, Leak-Proof Bottles for Reagent & Sample Storage)*

- Manufactured from USP Class VI plastic resins, ensuring low extractable levels.
- Leak-proof sealing allows for safe transportation and long-term storage.
- Break-resistant and easy to handle, minimizing risks in lab environments.
- Tamper-evident heat-shrink band closure for enhanced security.
- Non-pyrogenic and non-cytotoxic, ensuring safe usage with sensitive materials.
- Temperature Range: Designed for storage between  $-70^{\circ}\text{C}$  to  $60^{\circ}\text{C}$ .
- Gamma-sterilized for ready-to-use applications.
- Available Volumes:
  - PETG: 30ml, 60ml, 125ml, 250ml, 500ml, 1000ml, 2000ml
  - PC: 30ml, 60ml, 125ml, 250ml, 500ml, 1000ml, 2000ml



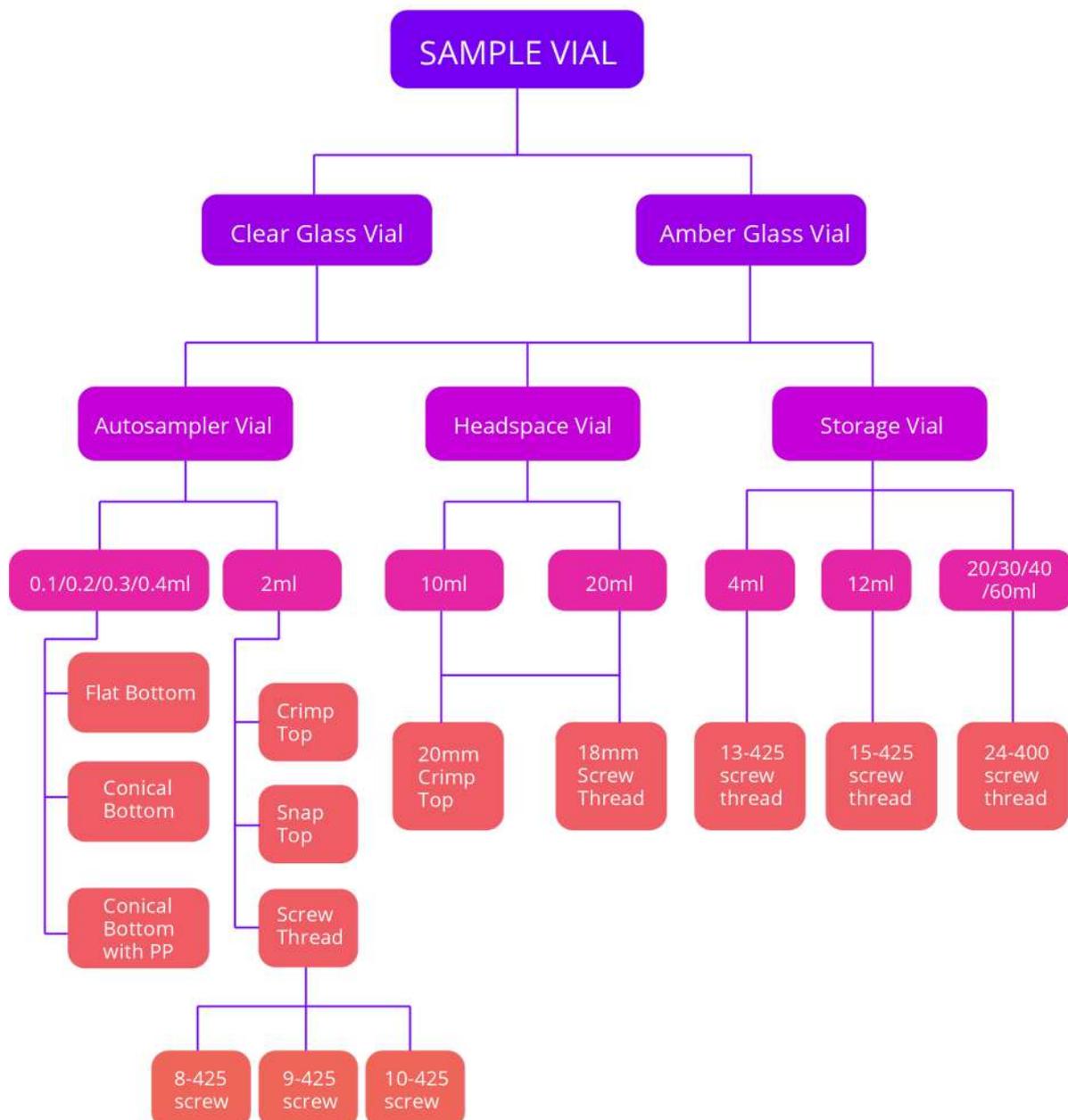
## High-Performance Sample Containment & Storage

### PRODUCT DESCRIPTION

XyFilter Vials are precision-engineered containers designed for sample containment and analytical applications in chromatography, pharmaceuticals, environmental testing, and biological research. Manufactured under stringent ISO-certified cleanroom environments, our vials ensure sample integrity, chemical resistance, and compatibility with all major laboratory instruments.

### KEY FEATURES

- High-Purity Borosilicate Glass & PP Options – Offers superior chemical resistance, preventing contamination.
- Ultra-Low Extractables – Ensures sample purity for high-sensitivity analytical techniques.
- Optimized for Analytical Workflows – Designed for HPLC, GC, LC-MS, TOC, and environmental analysis.
- Varied Neck & Closure Options – Screw, crimp, and snap closures accommodate different sealing needs.



## Certified Vials & Closures

### CERTIFIED VIALS & CLOSURES

- Resealable box helps to prevent contamination during use.
- Constructed with PTFE/ Silicone septa for contamination free sampling.
- UltraClean PTFE/ Silicone septa is optimized for gas chromatography and mass spectrometry.

### > CERTIFIED 2ML VIALS & CLOSURES

Product	XyFilter SKU	Technical Description	Package
Certified - 2mL Vials & Closures	XFV002SK	2mL Clear Glass 12x32mm Flat Base 9-425 Screw Thread Vial with Label. Blue 9-425 Open Top Ribbed Screw Cap with 9mm Red PTFE/White Silicone Septa 1mm Thick (Ultra Clean).	
	XFV002CK	2mL Clear Glass 12x32mm Flat Base 9-425 Screw Thread Vial with Label. Blue 9-425 Open Top Ribbed Screw Cap with 9mm Red PTFE/White Silicone Septa 1mm Thick PRE-SLIT (Ultra Clean).	
	XFV002AML	2mL Amber Glass 12x32mm Flat Base 9-425 Screw Thread Vial with Label. Blue 9-425 Open Top Ribbed Screw Cap with 9mm Red PTFE/White Silicone Septa 1mm Thick (Ultra Clean).	
	XFV002CL	Black 8-425 Open Top Screw Cap with 8mm Red PTFE/White Silicone Septa 1.5mm Thick (Ultra Clean).	
	XFV002AMV	Black 8-425 Open Top Screw Cap with 8mm Blue PTFE/White Silicone Septa 1.5mm Thick (Ultra Clean).	
	XFV002CWP	BLUE 11mm Open Top Snap Cap with Red PTFE/White Silicone Septa 1mm Thick (Ultra Clean).	
	XFV002AWP	Red 9-425 Open Top Smooth Screw Cap with 9mm Red PTFE/White Silicone Septa 1mm Thick (Ultra Clean).	
	XFV002CMP	Blue 9-425 Open Top Ribbed Screw Cap with 9mm Red PTFE/White Silicone Septa 1mm Thick (Ultra Clean).	
	XFV002AMP	Blue 9-425 Open Top Ribbed Screw Cap with 9mm Red PTFE/White Silicone Septa 1mm Thick PRE-SLIT (UltraClean).	
	XFV002CMB	Blue 9-425 Open Top Ribbed Screw Cap with 9mm White PTFE/Red Silicone Septa 1mm Thick (Ultra Clean).	
	XFV002AMB	Blue 9-425 Open Top Ribbed Screw Cap with 9mm Blue PTFE/White Silicone Septa 1mm Thick PRE-SLIT (UltraClean).	
Package: 100 Pcs/pk			

## Certified Vials & Closures

Product	XyFilter SKU	Technical Description	
Certified - ND18 Closures	XFC18WH	18mm Silver Color Open Top Metal Cap (8mm hole) with 17.5mm White PTFE/Blue Transparent Silicone Septa 1.5mm Thick (Ultra Clean).	
	XFC18BL	18mm Silver Color Open Top Metal Cap (8mm hole) with 17.5mm Natural PTFE/Blue Transparent Silicone Septa 1.5mm Thick (Ultra Clean).	
	XFC18RD	Natural PTFE/Blue Transparent Silicone 1.5mm thick Septa (Ultra Clean) [used for 18mm magnetic screw cap].	
Package: 100 Pcs/pk			

Product	XyFilter SKU	Technical Description	
Certified - ND20 Closures	XFC20BLK	20mm Open Top Aluminum Crimp Cap (10mm hole) with 20mm White PTFE/Blue Silicone Septa 3mm Thick (Ultra Clean).	
	XFC20WH	20mm Open Top Aluminum Crimp Cap (10mm hole) with 20mm White PTFE/Blue Transparent Silicone Septa 3mm Thick (Ultra Clean).	
	XFC20RD	20mm Open Top Aluminum Crimp Cap (10mm hole) with 20mm Natural PTFE/Blue Transparent Silicone Septa 3mm Thick (Ultra Clean).	
Package: 100 Pcs/pk			

Product	XyFilter SKU	Technical Description	
Certified - ND24 Closures	XF24BC15	22mm Blue PTFE/White Silicone Septa 3.0mm thick (Ultra Clean).	
	XFV20CLR	22mm Natural PTFE/White Silicone Septa 3.0mm thick (Ultra Clean).	
	XFV20AMB	24-414 White Open Top PP Screw Cap with 22mm Natural PTFE/White Silicone 3.0mm Thick Septa (EPA Quality).	
Package: 100 Pcs/pk			

## EPA/TOC Vials & Closures

### EPA/TOC VIALS & CLOSURES

- If you are doing any sampling, testing, or validation, you need to make sure the results were not skewed by a contaminant that may have come from the container.
- ALWSCL offers a range of certified EPA Screw Vial Convenience Kits which are suitable for all TOC manufacturer's instruments, including Sievers, Shimadzu, OI Analytical, and Teledyne-Tekmar.
- All Certified to contain <10ppb Carbon, giving you confidence in the quality of your TOC measurements.
- Teflon lined caps and protective dust covers.
- Superior vial-to-vial consistency.
- Capped with teflon lined silicone septa and dust cover.
- Widely apply to air, water, soil analysis test, also pesticide residue.



Product	XyFilter SKU	Technical Description	Package
<b>20 mL EPA/TOC Vials &amp; Closures</b>	XFEP20C1	20mL 27.5x57mm Clear Glass EPA/TOC Vial 24-414 White Open Top PP Screw Cap with 27mm Natural PTFE/White Silicone 3.0mm thick Septa (EPA Quality).	100 pcs/pk
	XFEP20A1	20mL 27.5x57mm Amber Glass EPA/TOC Vial 24-414 White Open Top PP Screw Cap with 27mm Natural PTFE/White Silicone 3.0mm thick Septa (EPA Quality).	
	XFEP20C2	20mL 27.5x57mm Clear Glass EPA/TOC Vial 24-414 White Open Top PP Screw Cap with 27mm Natural PTFE/White Silicone 3.0mm thick Septa (EPA Quality) and Dust Cover.	
	XFEP20A2	20mL 27.5x95mm Amber Glass EPA/TOC Vial 24-414 White Open Top PP Screw Cap with 27mm Natural PTFE/White Silicone 3.0mm thick Septa (EPA Quality) and Dust Cover.	

## EPA/TOC Vials & Closures

Product	XyFilter SKU	Technical Description	Package	
<b>40mL EPA/TOC Vials &amp; Closures</b>	XFEP40C1	40mL 27.5x95mm Clear Glass EPA/TOC Vial 24-414 White Open Top PP Screw Cap with 27mm Natural PTFE/White Silicone 3.0mm thick Septa (EPA Quality).	100 pcs/pk	
	XFEP40A1	40mL 27.5x95mm Amber Glass EPA/TOC Vial 24-414 White Open Top PP Screw Cap with 27mm Natural PTFE/White Silicone 3.0mm thick Septa (EPA Quality).		
	XFEP40C2	40mL 27.5x95mm Clear Glass EPA/TOC Vial 24-414 White Open Top PP Screw Cap with 27mm Natural PTFE/White Silicone 3.0mm thick Septa (EPA Quality) and Dust Cover.		
	XFEP40A2	40mL 27.5x95mm Amber Glass EPA/TOC Vial 24-414 White Open Top PP Screw Cap with 27mm Natural PTFE/White Silicone 3.0mm thick Septa (EPA Quality) and Dust Cover.		

Product	XyFilter SKU	Technical Description	Package	
<b>60mL EPA/TOC Vials &amp; Closures</b>	XFEP60C1	60mL 27.5x140mm Clear Glass EPA/TOC Vial 24-414 White Open Top PP Screw Cap with 22mm Natural PTFE/White Silicone 3.0mm thick Septa (EPA Quality).	72 pcs/pk	
	XFEP60A1	60mL 27.5x140mm Amber Glass EPA/TOC Vial 24-414 White Open Top PP Screw Cap with 22mm Natural PTFE/White Silicone 3.0mm thick Septa (EPA Quality).		

Product	XyFilter SKU	Technical Description	Package	
<b>40mL Pre- cleaned and Certified Vials</b>	XF40CPC1	Pre-cleaned and certified (<10 ppb TOC) 40mL 27.5x95mm clear glass vial 24-414 Purple Open Top PP Screw Cap with 27mm Natural PTFE/White Silicone 3.0mm thick Septa and Dust Cover.	72 pcs/pk	
	XF40CPC2	Pre-cleaned and certified (<10 ppb TOC) 40mL 27.5x95mm amber glass vial 24-414 Purple Open Top PP Screw Cap with 27mm Natural PTFE/White Silicone 3.0mm thick Septa and Dust Cover.		

## Autosampler Vials & Closures

### SCREW NECK ND9 VIALS & CLOSURES

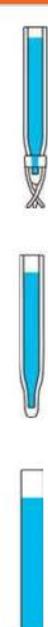
*Reliable. Versatile. High-Performance.*

XYFilter's Screw Neck ND9 vials are engineered for seamless integration with all major autosamplers, ensuring flawless compatibility with Agilent, Thermo Scientific, Waters, and more.

- Wide-opening 9-425 thread design enhances sample accessibility for efficient liquid handling.
- Available in clear and amber glass, with integrated micro-insert options for precise sample control.
- Polypropylene vials (12x32mm) provide excellent chemical resistance, ideal for atomic absorption, water analysis, capillary electrophoresis, and ion chromatography.
- PTFE/Silicone septa come in Pre-slit, Y-shape, and Cross-shape variants for optimal performance.
- Kit packaging options available to minimize contamination risks, streamlining lab operations.

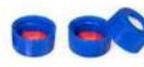
Product	XyFilter SKU	Technical Description	Package	
<b>Screw Neck ND9</b>	XF9SC001	2mL Clear Glass 12x32mm Flat Base 9-425 Screw Thread Vial	100 pcs/pk	     
	XF9SC002	2mL Amber Glass 12x32mm Flat Base 9-425 Screw Thread Vial		
	XF9CL003	2mL Clear Glass 12x32mm Flat Base 9-425 Screw Thread Vial with Label		
	XF9AM004	2mL Amber Glass 12x32mm Flat Base 9-425 Screw Thread Vial with Label		
	XF9SC005	0.2mL Clear Glass 12x32mm Micro-Vial, Screw Thread		
	XF9AM006	0.2mL Amber Glass 12x32mm Micro-Vial, Screw Thread		
	XF9SC007	0.2mL Clear Glass 12x32mm Micro-Vial with White-on Patch		
	XF9AM008	0.2mL Amber Glass 12x32mm Micro-Vial with White-on Patch		
	XF9AMK09	2mL Amber Glass Flat Base 9-425 Screw Thread Vial with Label, Blue Ribbed Screw Cap & 9mm White PTFE/Red Silicone Septa, Kit Pack		
	XF9CLK10	2mL Clear Glass Flat Base 9-425 Screw Thread Vial with Label, Blue Ribbed Screw Cap & 9mm White PTFE/Red Silicone Septa, Kit Pack		

## Autosampler Vials & Closures

Product	XyFilter SKU	Technical Description	Package	
<b>6mm Micro Inserts</b>	XF6M1001	6x29mm Clear Glass Micro Insert, Conical Base with Polyspring	100 pcs/pk	
	XF6M1002	6x31mm Insert Clear Glass Conical Base		
	XF6M1003	6x31mm Insert Clear Glass Flat Base		
	XF6M1004	6x29mm Insert Clear Glass Conical Base with Polyspring and Label		
	XF6M1005	6x29mm PP Insert Clear, Conical Base		

Product	XyFilter SKU	Technical Description	Package	
<b>9mm Septa</b>	XF9SEP01	9-425 Red PTFE/White Silicone Septa 1mm Thick	100 pcs/pk	
	XF9SEP02	9-425 White PTFE/Red Silicone Septa 1mm Thick		
	XF9SEP03	9-425 Blue PTFE/White Silicone Septa 1mm Thick		
	XF9SEP04	9-425 Red PTFE/White Silicone Septa 1mm Thick, PRE-SLIT		
	XF9SEP05	9-425 Blue PTFE/White Silicone Septa 1mm Thick, PRE-SLIT		
	XF9SEP06	9-425 Red PTFE/White Silicone Septa 1mm Thick, PRE-SLIT [Mercedes Shape]		
	XF9SEP07	9-425 Red PTFE/White Silicone Septa 1mm Thick, PRE-SLIT [Cross shape]		
	XF9SEP08	9-425 Natural PTFE/White Silicone Septa 1mm Thick		

## Autosampler Vials & Closures

Product	XyFilter SKU	Technical Description	Package	
<b>ND9 Closures</b>	XF9CL01	Blue 9-425 Open Top Ribbed Screw Cap with Red PTFE/White Silicone Septa 1mm Thick	100 pcs/pk	   
	XF9CL02	Blue 9-425 Open Top Ribbed Screw Cap with Red PTFE/White Silicone Septa 1mm Thick, PRE-SLIT		
	XF9CL03	Blue 9-425 Open Top Ribbed Screw Cap with Blue PTFE/White Silicone Septa 1mm Thick, PRE-SLIT		
	XF9CL04	Blue 9-425 Closed PP Top Cap with White PTFE/Red Silicone Septa 1mm Thick		
	XF9CL05	Clear 9-425 Open Top Smooth Screw Cap with Red PTFE/White Silicone Septa 1mm Thick		
	XF9CL06	Red 9-425 Open Top Ribbed Screw Cap with Blue PTFE/White Silicone Septa 1mm Thick, PRE-SLIT		
	XF9CL07	Yellow 9-425 Open Top Ribbed Screw Cap with Blue PTFE/White Silicone Septa 1mm Thick, PRE-SLIT		
	XF9CL08	Green 9-425 Open Top Ribbed Screw Cap with Blue PTFE/White Silicone Septa 1mm Thick, PRE-SLIT		

## Autosampler Vials & Closures

### SCREW NECK ND8 VIALS & CLOSURES

*Precision Sampling for GC & HPLC Applications*

XYFilter's Screw Neck ND8 vials are designed for GC and HPLC analysis, delivering superior performance for demanding laboratory environments.

- Trusted by leading labs using Shimadzu, Varian, and Gilson instruments.
- Micro volume inserts transform full-capacity vials into limited-volume options for optimized sample usage.
- 5mm micro-insert compatibility ensures maximum precision in analysis.
- Diverse insert designs available, including flat bottom, conical base, and plastic spring inserts.
- Effortless sample retrieval with a conical design, enhancing workflow efficiency.

With XYFilter ND8 vials, your lab gains unmatched accuracy and reliability for all chromatography applications.

Product	SKUs	Technical Description	Package	
ND8 Vials	XFND8001	2mL Clear Glass 12×32mm Flat Base 8-425 Screw Thread Vial	100 pcs/pk	
	XFND8002	2mL Clear Glass 12×32mm Flat Base 8-425 Screw Thread Vial with Label		
	XFND8003	2mL Amber Glass 12×32mm Flat Base 8-425 Screw Thread Vial		
	XFND8004	2mL Amber Glass 12×32mm Flat Base 8-425 Screw Thread Vial with Label		

Product	SKUs	Technical Description	Package	
8mm Septa	XF8SPT001	8-425 Red PTFE/White Silicone Septa 1mm Thick	100 pcs/pk	
	XF8SPT002	8-425 Red PTFE/White Silicone Septa 1.5mm Thick		
	XF8SPT003	8-425 Red PTFE/White Silicone Septa 1.5mm Thick PRE-SLIT		
	XF8SPT004	8-425 White PTFE/Red Silicone Septa 1.5mm Thick		
	XF8SPT005	8-425 Blue PTFE/White Silicone Septa 1.5mm Thick		

## Autosampler Vials & Closures

Product	SKUs	Technical Description	Package	
<b>ND8 Closures</b>	XFND8CLS001	Black 8-425 Open Top Screw Cap	100 pcs/pk	
	XFND8CLS002	White 8-425 Open Top Screw Cap		
	XFND8CLS003	Black 8-425 Open Top Screw Cap with 8mm Red PTFE/White Silicone Septa 1.5mm Thick		
	XFND8CLS004	White 8-425 Open Top PP Cap with 8mm White PTFE/Red Silicone Septa 1.5mm Thick		

Product	SKUs	Technical Description	Package	
<b>5MM Micro Inserts</b>	XFMI8001	5×29mm Insert Clear Glass Conical Base with Polyspring	100 pcs/pk	
	XFMI8002	5×31mm Insert Clear Glass Conical Base		
	XFMI8003	5×31mm Insert Clear Glass Flat Base		

## Autosampler Vials & Closures

### CRIMP NECK ND11 VIALS & CLOSURES

*Precision Sealing. Reliable Performance.*

XYFilter's Crimp Neck ND11 vials offer secure sealing and enhanced sample protection, making them ideal for GC, HPLC, and mass spectrometry applications.

- Designed for Agilent, PerkinElmer, and Varian instruments.
- Wide crimp cap opening ensures improved autosampler needle accuracy.
- Available in clear and amber glass, with integrated micro-insert options.
- Septa choices include PTFE/Silicone, Natural Rubber, and Butyl/Red PTFE septa for optimized sealing performance.
- 3-layer septa technology balances physical durability and chemical resistance.

Product	SKUs	Technical Description	Package	
<b>ND11 Crimp Vials</b>	XFND11001	2mL Clear Glass Flat Base 11mm Crimp Vial Wide Opening	100 pcs/pk	
	XFND11002	2mL Clear Glass Flat Base 11mm Crimp Vial Wide Opening with Label		
	XFND11003	2mL Amber Glass Flat Base 11mm Crimp Vial Wide Opening		
	XFND11004	2mL Amber Glass Flat Base 11mm Crimp Vial Wide Opening with Label		
	XFND11005	0.2mL 11mm Crimp Top Clear Micro-insert, 12x32mm		
	XFND11006	0.2mL 11mm Crimp Top Clear Glass Micro-Vial with Write-on Patch, 12x32mm		
	XFND11007	0.2mL 11mm Crimp Top Amber Glass Micro-insert, 12x32mm		
	XFND11008	0.2mL 11mm Crimp Top Amber Glass Micro-Vial with Write-on Patch, 12x32mm		

Product	SKUs	Technical Description	Package	
<b>ND11 Closures</b>	XFND11CLS001	Silver 11mm Open Top Crimp Cap with Transparent PTFE/Natural Rubber Red-orange Septa 1mm Thick	100 pcs/pk	
	XFND11CLS002	Silver 11mm Open Top Crimp Cap with Red PTFE/White Silicone Septa 1mm Thick		
	XFND11CLS003	Silver 11mm Open Top Crimp Cap with Red PTFE/White Silicone Septa 1mm Thick PRE-SLIT		
	XFND11CLS004	Silver 11mm Open Top Crimp Cap with Red PTFE/White Silicone/Red PTFE Septa 1mm Thick		

## Autosampler Vials & Closures

### SNAP NECK ND11 VIALS & CLOSURES

*Convenient Handling. Effortless Sealing.*

XYFilter's Snap Neck ND11 vials provide fast and secure closure without the need for crimping tools, enhancing efficiency for high-throughput laboratories.

- Compatible with Agilent, CTC, Thermo Scientific, and Waters instruments.
- Snap ring design eliminates the need for crimping or decapping.
- Available in clear and amber glass, with pre-assembled micro-insert options.
- Soft snap caps in blue or transparent variants for easy handling.
- Pre-slit and snow-shape septa options for optimal sealing performance.

Product	SKUs	Technical Description	Package	
<b>ND11 Snap Vials</b>	XFND11009	2mL Clear Glass Flat Base 11mm Snap Vial Wide Opening	100 pcs/pk	
	XFND11010	2mL Clear Glass Flat Base 11mm Snap Vial Wide Opening with Label		
	XFND11011	2mL Amber Glass Flat Base 11mm Snap Vial Wide Opening		
	XFND11012	2mL Amber Glass Flat Base 11mm Snap Vial Wide Opening with Label		
	XFND11013	0.2mL 11mm Snap Top Clear Micro-insert, 12x32mm		
	XFND11014	0.2mL 11mm Snap Top Amber Micro-insert, 12x32mm		

## Autosampler Vials & Closures

Product	SKUs	Technical Description	Package	
ND11 Closures	XFND11CLS005	Clear 11mm Open Top Snap Cap with Red PTFE/White Silicone Septa 1mm Thick	100 pcs/pk	
	XFND11CLS006	Blue 11mm Open Top Snap Cap with Red PTFE/White Silicone Septa 1mm Thick		
	XFND11CLS007	Red 11mm Open Top Snap Cap with Red PTFE/White Silicone Septa 1mm Thick		
	XFND11CLS008	Clear 11mm Open Top Snap Cap with PTFE/Red Silicone/Natural Rubber Red-orange Septa 1mm Thick		
	XFND11CLS009	Clear 11mm Open Top Snap Cap with Red PTFE/White Silicone Septa 1mm Thick PRE-SLIT		
	XFND11CLS010	Clear 11mm Open Top Snap Cap with PTFE/Red Silicone Septa 1mm Thick PRE-SLIT		
	XFND11CLS011	Clear 11mm Open Top Snap Cap with Transparent PTFE/Natural Rubber Red-orange Septa 1mm Thick		
	XFND11CLS012	Clear 11mm Open Top Snap Cap with White PTFE/Red Silicone Septa 1mm Thick		

## Autosampler Vials & Closures

### SCREW NECK ND13 VIALS & CLOSURES

*Reliable Sealing for Secure Sample Storage*

XYFilter's ND13 vials provide a secure 13-425 thread design, ensuring compatibility with Dionex, Shimadzu, WVR, and Waters instruments. These vials are widely used for chromatography and compound storage applications.

- Available in clear and amber glass, with flat base construction for stability.
- Compatible with automated systems for high-efficiency workflows.
- Wide range of PTFE/Silicone septa options for optimal sealing.
- Open-top screw caps available for direct sample access.

Product	SKUs	Technical Description	Package	
ND13 SN Vials	XFND13001	4mL Clear Glass 15×45mm Flat Base 13-425 Screw Thread Vial	100 pcs/pk	
	XFND13002	4mL Clear Glass 15×45mm Flat Base 13-425 Screw Thread Vial with Label		
	XFND13003	4mL Amber Glass 15×45mm Flat Base 13-425 Screw Thread Vial		
	XFND13004	4mL Amber Glass 15×45mm Flat Base 13-425 Screw Thread Vial		

Product	SKUs	Technical Description	Package	
ND13 Septa	XFND13SPT001	13-425 Red PTFE/White Silicone Septa 1mm Thick	100 pcs/pk	
	XFND13SPT002	13-425 Red PTFE/White Silicone Septa 1mm Thick PRE-SLIT		
	XFND13SPT003	13-425 Natural PTFE/White Silicone Septa 1mm Thick		
	XFND13SPT004	13-425 Pure PTFE Septa 1.0mm Thick		

## Autosampler Vials & Closures

Product	SKUs	Technical Description	Package	
<b>ND13 Closures</b>	XFND13CLS00 1	Black PP 13-425 Open Top Screw Cap with Red PTFE/White Silicone Septa 1mm Thick	100 pcs/pk	
	XFND13CLS00 2	Black PP 13-425 Open Top Screw Cap with Red PTFE/White Silicone Septa 1mm Thick PRE-SLIT		
	XFND13CLS00 3	Black PP 13-425 Open Top Screw Cap with Red PTFE/White Silicone Septa 1mm Thick		
	XFND13CLS00 4	Black PP 13-425 Open Top Screw Cap with Natural PTFE/White Silicone Septa 1mm Thick		

Product	SKUs	Technical Description	Package	
<b>Shell Vials</b>	XFND13SHV001	1mL Bottom/Flat Base Clear Glass Shell Vial	100 pcs/pk	
	XFND13SHV002	White Plug fused for 1mL Shell Vial		

## Autosampler Vials & Closures

### HIGH RECOVERY VIALS & CLOSURES

Maximize Sample Recovery, Minimize Waste

XYFilter's High Recovery Vials ensure efficient sample extraction with minimal residual waste. Designed for compound storage and precision chromatography, these vials feature a conical inner surface to enhance solid-liquid recovery.

- Optimized for autosamplers and high-throughput labs.
- Conical well design for maximum sample retrieval.
- Reduces product waste by up to 99%.
- Available in solid or open-top caps for syringe access.

Product	SKUs	Technical Description	Package	
High Recovery Vials	XFHRV001	1.5mL High Recovery Vial Clear Glass 12×32mm Flat Base 9-425 Screw Thread	100 pcs/pk	
	XFHRV002	1.5mL High Recovery Vial Amber Glass 12×32mm Flat Base 9-425 Screw Thread		
	XFHRV003	1.5mL High Recovery Vial Clear Glass 12×32mm Flat Base 9-425 Screw Thread with Write-on Patch		
	XFHRV004	1.5mL High Recovery Vial Amber Glass 12×32mm Flat Base 9-425 Screw Thread with Write-on Patch		
	XFHRV005	2mL Crimp High Recovery Vial Clear Glass Flat Base Wide Opening		
	XFHRV006	2mL Crimp High Recovery Vial Clear Glass Flat Base Wide Opening with Write-on Patch		
	XFHRV008	0.2mL High Recovery Vial Amber Glass 15×32mm Flat Base 13-425 Screw Thread		
	XFHRV009	0.4mL High Recovery Vial Amber Glass 15×32mm Flat Base 13-425 Screw Thread		
	XFHRV010	4mL High Recovery Vial Clear Glass 15×45mm Flat Base 13-425 Screw Thread		12 pcs/pk
	XFHRV007	3.5mL Clear Glass 20×40mm High Recovery Vial with Graduations & 20-400 Screw Thread		

# XY SHIELD



## Coveralls

### PRODUCT DESCRIPTION

XyShield Coveralls are engineered to provide full-body protection against particulate contamination in clean and controlled environments. Crafted from low-linting, breathable materials, these coveralls ensure maximum protection, durability, and comfort for personnel. They are available in multiple fabric options, each designed for specific levels of protection, from fluid resistance to anti-static control.

### KEY FEATURES

- Particle & Fluid Resistance – Shields against airborne particulates, liquid splashes, and biological contaminants.
- Low-Linting & Non-Shedding Fabric – Made from non-woven polymers to prevent fiber release and maintain cleanroom integrity.
- Ergonomic Design – Allows unrestricted movement, ensuring comfort during long work shifts.
- Elastic Cuffs & Ankles – Provides a secure fit to minimize contamination risks.
- Compliance with Industry Standards – Meets ISO 14644-1 cleanroom standards and ASTM F1671 fluid penetration requirements.

### APPLICATIONS

- Pharmaceutical Manufacturing
- Biotech Laboratories
- Aseptic Processing Facilities
- Clinical Research & Testing Labs



Product Code	Material Type	Sterile Option	Sizes Available	Color
XYS-CVR-100	Microporous Film	Yes	S, M, L, XL, XXL	White
XYS-CVR-200	SMS Fabric	Yes	S, M, L, XL, XXL	Blue
XYS-CVR-300	Polypropylene	No	S, M, L, XL, XXL	White

## Lab Coats

### PRODUCT DESCRIPTION

XyShield Lab Coats are designed to provide professionals with both protection and comfort in controlled environments. Made from low-linting materials, these lab coats ensure cleanliness while allowing ease of movement during extended wear.

### KEY FEATURES

- Low-Linting Fabric: Minimizes particle shedding to maintain cleanroom integrity.
- Snap Front Closure: Allows for easy donning and doffing.
- Knit Cuffs: Provides a secure fit at the wrists to prevent contamination.
- Multiple Pockets: Enhances functionality for carrying essential tools.

### APPLICATIONS

- Pharmaceutical Laboratories: Ensures aseptic conditions during research and development.
- Biotechnology Research: Protects against biological contaminants.
- Quality Control Labs: Maintains cleanliness during product testing.
- Clinical Settings: Provides a professional appearance while ensuring safety.



Product Code	Material Type	Sizes Available	Color
XYS-LBC-100	Polyester/Cotton Blend	S, M, L, XL, XXL	White
XYS-LBC-200	ESD-Safe Fabric	S, M, L, XL, XXL	White
XYS-LBC-300	Polypropylene	S, M, L, XL, XXL	Blue

## Aprons and Gowns

### PRODUCT DESCRIPTION

XyShield Aprons and Gowns offer an additional layer of protection against spills and contaminants. Designed for flexibility, they are suitable for various cleanroom applications, ensuring both safety and comfort for the user.

### KEY FEATURES

- Fluid-Resistant Materials: Provides protection against liquid splashes.
- Lightweight Design: Ensures comfort during extended use.
- Easy to Don and Doff: Simplifies the gowning process.
- Available in Disposable and Reusable Options: Caters to different operational needs.

### APPLICATIONS

- Pharmaceutical Compounding: Protects against chemical spills.
- Laboratory Work: Ensures cleanliness during experiments.
- Medical Procedures: Provides a sterile barrier.
- Food Processing: Maintains hygiene standards.



Product Code	Material Type	Sterile Option	Sizes Available	Color
XYS-APG-100	Apron	Polyethylene	One Size	White
XYS-APG-200	Gown with Thumb Loops	SMS Fabric	S, M, L, XL, XXL	Blue
XYS-APG-300	Isolation Gown	Polypropylene	S, M, L, XL, XXL	Yellow

## Caps & Beard Covers

### PRODUCT DESCRIPTION

XyShield Caps & Beard Covers are designed to prevent contamination by containing hair in controlled environments. Made from low-linting, breathable materials, they provide maximum coverage while ensuring user comfort during extended wear. Available in various sizes and styles, they help maintain hygiene compliance in pharmaceutical, biotech, and cleanroom settings.

### KEY FEATURES

- Non-Woven, Low-Linting Fabric – Reduces particle shedding for cleanroom integrity.
- Elastic Closure for Secure Fit – Ensures full hair containment and prevents slippage.
- Breathable & Lightweight – Allows airflow while maintaining contamination control.
- Universal Sizing & Multiple Colors – Meets different cleanroom classifications.

### APPLICATIONS

- Pharmaceutical Manufacturing – Prevents hair contamination in drug production.
- Biotechnology Labs – Maintains sterile environments for vaccine and biologics research.
- Food Processing Facilities – Ensures hygiene compliance in handling sensitive products.
- Medical & Clinical Settings – Provides a barrier against contaminants during procedures.



Product Code	Product	Material type	Sizes Available	Color
XYS-BFC-100	Bouffant Cap	Polypropylene	18", 21", 24"	White, Blue
XYS-BFC-200	Bouffant Cap	Nylon	18", 21", 24"	White
XYS-BFC-300	Bouffant Cap	Polyester	18", 21", 24"	Blue
XYS-HBC-300	Beard Cover	Polypropylene	Universal Fit	White
XYS-HBC-400	Beard Cover	Spunbond Fabric	Universal Fit	Blue

## Face Masks

### PRODUCT DESCRIPTION

XyShield Face Masks provide superior filtration against airborne particles and contaminants, ensuring cleanroom compliance. Available in sterile and non-sterile options, these masks offer secure fitment with ear-loop or tie-on styles, making them ideal for highly controlled environments.



### KEY FEATURES

- High Filtration Efficiency – Captures particulates and airborne contaminants.
- Soft, Breathable Fabric – Reduces moisture buildup for long-term wear.
- Elastic Earloop & Tie-On Options – Provides adjustable fit for user comfort.
- Available in Sterile & Non-Sterile Variants – Meets cleanroom and medical standards.



### APPLICATIONS

- Pharmaceutical & Biotech Facilities – Ensures contamination-free drug manufacturing.
- Aseptic Processing Labs – Protects against particulate exposure in cleanrooms.
- Clinical Research & Testing – Reduces airborne contamination risks.
- Sterile Medical Environments – Complies with ISO & ASTM safety standards.



Product Code	Product type	Material type	Sizes Available	Color
XYS-FM-100	3-Ply Face Mask	Non-Woven Polypropylene	No	Blue, White
XYS-FM-200	N95 Respirator	Multi-Layer Filtration	Yes	White
XYS-FM-300	Earloop Mask	Soft Spun Polypropylene	No	White, Blue

## Sleeve Protectors

### PRODUCT DESCRIPTION

XyShield Sleeve Protectors offer extra arm protection in cleanroom environments, preventing contamination risks from exposed skin or clothing. Designed with fluid-resistant, low-linting materials, they ensure maximum safety without restricting movement.

### KEY FEATURES

- Non-Linting Fabric – Prevents particle shedding in critical environments.
- Elastic Cuffs for Secure Fit – Keeps sleeves in place, reducing contamination risks.
- Fluid-Resistant Material – Shields against chemical splashes and contaminants.
- Lightweight & Comfortable – Designed for long-term wear without discomfort.



### APPLICATIONS

- Sterile Pharmaceutical Manufacturing – Prevents biological cross-contamination.
- Medical Device Assembly – Reduces particulate risks in precision environments.
- Biotech Research Facilities – Ensures lab cleanliness during sensitive work.
- Aseptic Processing Units – Provides a barrier against fluid exposure.



Product Code	type	Material	Sizes Available	Color
XYS-SP-100	Elastic Cuff	Microporous Fabric	One Size	White
XYS-SP-200	Thumb Loop	SMS Fabric	One Size	Blue
XYS-SP-300	Fluid-Resistant	Polyethylene	One Size	White, Blue

## Shoe Cover

### PRODUCT DESCRIPTION

XyShield Shoe Covers prevent contamination and maintain cleanroom hygiene by covering footwear with low-linting, slip-resistant materials. Designed for ease of wear, they are available in disposable, anti-skid, and ESD-safe variants.



### KEY FEATURES

- Slip-Resistant Sole – Provides traction on cleanroom surfaces.
- Elastic Opening for Secure Fit – Ensures full shoe coverage.
- Anti-Static & Fluid-Resistant Options – Suitable for cleanroom & ESD applications.
- Disposable & Reusable Variants – Designed for various cleanroom needs.



### APPLICATIONS

- Pharmaceutical & Biotech Labs – Prevents cross-contamination in sterile areas.
- Electronics & Semiconductor Facilities – Reduces electrostatic discharge risks.
- Research & Development Centers – Ensures clean workspaces for sensitive processes.
- Aseptic Processing Units – Complies with ISO cleanroom classifications.



Product Code	Type	Material	Sizes Available	Color
XYS-SC-100	Standard Cover	Polypropylene	One Size	White, Blue
XYS-SC-200	Anti-Skid Cover	SMS Fabric	One Size	Blue
XYS-SC-300	ESD-Safe Cover	Conductive Polypropylene	One Size	White, Blue

## Nitrile Gloves

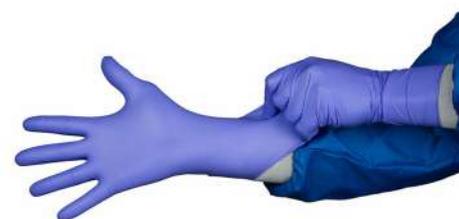
### PRODUCT DESCRIPTION

XyShield Nitrile Gloves are crafted from high-quality nitrile butadiene rubber (NBR), offering exceptional chemical resistance and durability. Designed for critical cleanroom environments, these gloves are accelerator-free, reducing the risk of Type IV chemical allergies and skin irritation. Their ambidextrous design and beaded cuffs facilitate easy donning, while textured fingertips enhance grip and tactile sensitivity.



### KEY FEATURES

- Superior Chemical & Puncture Resistance – Made from 100% Nitrile Butadiene Rubber (NBR).
- Ultra-Low Particle Contamination – ISO Class 4-5 certified, DI water-washed, and powder-free to minimize contamination.
- Ergonomic Fit & Comfort – Flexible, ambidextrous design with beaded cuffs to prevent roll-down and enhance user comfort.
- Textured Fingertips for Precision Handling
- Compliant with Industry Standards – Manufactured under ISO 13485 and meets ASTM D6319 requirements for medical and lab use.



### APPLICATIONS

- Pharmaceutical Manufacturing: Ensures contamination-free drug production
- Biotechnology Research: Maintains sterile conditions during experiments
- Medical Device Assembly: Prevents particulate contamination in sensitive equipment
- Microelectronics Production: Protects components from electrostatic discharge and contaminants



Product Code	Cuff Length	Thickness	Fit & Comfort	Sizes Available	Color Options
XYS-NG-100	Extended (12")	5.6 mil	Standard Fit	XS, S, M, L, XL	White
XYS-NG-200	Extended (12")	6.1 mil	High Dexterity	XS, S, M, L, XL	White, Blue
XYS-NG-300	Standard (9.5")	7.0 mil	Reinforced Strength	XS, S, M, L, XL	White, Blue
XYS-NG-400	Extended (12")	7.8 mil	Enhanced Durability	S, M, L, XL	White, Blue
XYS-NG-500	Extended (12")	8.5 mil	Heavy-Duty Protection	S, M, L, XL	White, Blue, Black

Note: All variants are powder-free and undergo rigorous cleaning processes to ensure low particle and extractable counts.

## Latex Gloves

### PRODUCT DESCRIPTION

XyShield Latex Gloves are made from natural rubber latex, providing exceptional elasticity and comfort. These gloves offer excellent tactile sensitivity, making them suitable for tasks requiring precision. They are DI water washed and double poly-bagged to ensure high cleanliness standards.



### KEY FEATURES

- High Tensile Strength: Ensures durability and resistance to tearing
- Textured Grip: Provides a secure hold in wet and dry conditions
- Rolled Beaded Cuff: Facilitates easy donning and enhances glove integrity
- Material: 100% Natural Rubber Latex
- Design & Features: Ambidextrous, smooth finish, ergonomic fit, beaded cuffs
- Powder-Free & Chlorinated: Double-chlorinated to reduce residual proteins
- Quality Assurance: Meets ASTM D3578 and EN 455 standards, manufactured under ISO 13485



### APPLICATIONS

- Pharmaceutical Laboratories: Maintains aseptic conditions during research and development
- Biotechnology Research: Protects against biological contaminants during experimental procedures
- Quality Control Labs: Ensures cleanliness during product testing and analysis
- Clinical Settings: Provides a protective barrier during medical examinations and procedures



Product Code	Cuff Length	Thickness	Fit & Comfort	Sizes Available	Color Options
XYS-LG-100	Standard (9.5")	5.0 mil	Ultra-Thin Precision	XS, S, M, L, XL	Natural
XYS-LG-200	Extended (12")	6.5 mil	Enhanced Grip Control	XS, S, M, L, XL	Natural, White
XYS-LG-300	Standard (9.5")	7.0 mil	High Elasticity & Durability	S, M, L, XL	Natural, Cream
XYS-LG-400	Extended (12")	7.5 mil	Reinforced for Protection	S, M, L, XL	Natural, White
XYS-LG-500	Extended (12")	8.0 mil	Heavy-Duty Barrier	M, L, XL	Natural, White

Note: All latex gloves are powder-free and undergo double chlorination to reduce protein content, minimizing the risk of latex allergies.

## Vinyl Gloves

### PRODUCT DESCRIPTION

XyShield Vinyl Cleanroom Gloves are an economical alternative for general cleanroom use, offering moderate chemical resistance with excellent anti-static (ESD) properties. Made from polyvinyl chloride (PVC) polymer, these gloves provide a comfortable, loose fit, ideal for short-term tasks requiring contamination control. The non-reactive nature of vinyl makes them ideal for pharmaceutical applications where powder-free, silicone-free protection is required.



### KEY FEATURES

- Economical Protection for General Use – Made from polyvinyl chloride (PVC) polymer, ideal for short-term lab and cleanroom tasks.
- Smooth, Flexible Fit – Comfortable, non-restrictive design allows ease of movement during handling.
- Latex-Free & DOP-Free – Eliminates allergy risks and plasticizer contamination, ensuring safety in pharmaceutical cleanrooms.
- Powder-Free & Low Residue – Complies with ISO 6-7 cleanroom standards, reducing particle contamination.
- Certified for General Cleanroom Applications – Meets ASTM D5250 and ISO 13485, ensuring consistent quality and safety.

### APPLICATIONS

- General Pharmaceutical Processing – Provides basic contamination control.
- Medical Testing & Sample Handling – Prevents cross-contamination in low-risk applications.
- Cleanroom Housekeeping & Maintenance – Protects against particulate exposure during facility upkeep.

Product Code	Cuff Length	Thickness	Fit & Comfort	Sizes Available	Color Options
XYS-VG-100	Standard (9.5")	3.5 mil	General Lab Use	XS, S, M, L, XL	Clear
XYS-VG-200	Standard (9.5")	4.5 mil	Basic Cleanroom Tasks	XS, S, M, L, XL	Clear
XYS-VG-300	Extended (12")	5.0 mil	Food & Medical Handling	S, M, L, XL	Clear
XYS-VG-400	Extended (12")	5.5 mil	Electrostatic Protection	S, M, L, XL	Clear
XYS-VG-500	Extended (12")	6.0 mil	Contamination Control	M, L, XL	Clear

Note: XyShield Vinyl Gloves meet ASTM D5250 and ISO 13485 manufacturing requirements, ensuring consistent quality for medical and cleanroom use.

## Wipes

### PRODUCT DESCRIPTION

XyShield Vinyl Cleanroom Gloves are an economical alternative for general cleanroom use, offering moderate chemical resistance with excellent anti-static (ESD) properties. Made from polyvinyl chloride (PVC) polymer, these gloves provide a comfortable, loose fit, ideal for short-term tasks requiring contamination control. The non-reactive nature of vinyl makes them ideal for pharmaceutical applications where powder-free, silicone-free protection is required.



### KEY FEATURES

- Low Particle Generation: Engineered to minimize particle release, maintaining the integrity of cleanroom environments.
- High Absorbency: Crafted from materials like polyester and microfiber, these wipes effectively absorb liquids, making them ideal for spill control and equipment cleaning.
- Chemical Compatibility: Resistant to a broad spectrum of chemicals, including acids, solvents, and disinfectants, ensuring durability during rigorous cleaning protocols.
- Durable Construction: Manufactured with materials that withstand abrasion, reducing linting and ensuring a longer lifespan.
- Sterile and Non-Sterile Options: Available in both sterile and non-sterile versions to cater to specific application needs.



### APPLICATIONS

- Pharmaceutical Manufacturing: Ideal for maintaining aseptic conditions during drug production and packaging.
- Biotechnology Laboratories: Suitable for cleaning sensitive equipment and surfaces in biotech research facilities.
- Medical Device Manufacturing: Maintains cleanliness standards critical for the production of medical instruments and devices.

Product Code	Material	Edge Type	Size	Sterility
XYS-WP-100	Polyester	Sealed Edge	9" x 9"	Non-Sterile
XYS-WP-200	Polyester	Sealed Edge	12" x 12"	Sterile
XYS-WM-300	Microfiber	Laser Cut	9" x 9"	Non-Sterile
XYS-WC-400	Cellulose/Polyester Blend	Cut Edge	9" x 9"	Non-Sterile
XYS-WF-500	Foam	Sealed Edge	8" x 8"	Sterile

Note: All XyShield Cleanroom Wipes are manufactured under stringent quality controls to ensure compliance with industry standards.

## Why XyShield?

### INDUSTRY-LEADING PROTECTION FOR CONTROLLED ENVIRONMENTS

XyShield, by BioExcel Pharma, delivers advanced cleanroom and pharmaceutical-grade solutions designed for precision, performance, and protection. From gloves and apparel to wipes and solvents, every product is manufactured to meet or exceed global cleanroom and bioprocessing standards.

- **Cleanroom & Pharmaceutical Compliance**
  - Certified to meet ISO Class 4–7 cleanroom classifications
  - Compliant with USP, ASTM, EN, and GMP standards for sterile manufacturing
  - Supports aseptic processing, vaccine production, and biotech R&D workflows
- **Advanced Material & Engineering**
  - Gloves: Offered in Nitrile, Latex, Neoprene, and Vinyl, tailored for chemical resistance, anti-static control, and tactile precision
  - Apparel: Low-linting coveralls, lab coats, bouffant caps, beard covers, sleeve protectors, and shoe covers
  - Wipes & Solvents: Cleanroom-validated dry, pre-saturated, and specialty wipes with ultra-low NVR, plus IPA and ethanol-based solutions
- **Powder-Free & Low-Contamination Performance**

All products are powder-free and DI water-washed to reduce:

  - Non-volatile residue (NVR)
  - Extractables
  - Particulate contamination
  - Sterile and non-sterile versions available for controlled environments and classified zones
- **Sizing, Length & Customization Options**
  - Gloves available in both 9.5" standard and 12" extended cuff lengths
  - Apparel is sized for optimized fit and lab safety compliance
  - Wipes offered in multiple materials (Polyester, Microfiber, Foam, Blends) and sizes to suit varied cleanroom cleaning protocols
- **Electrostatic Discharge (ESD) Protection**
  - ESD-safe gloves, garments, and wipes to prevent static buildup and discharge
  - Ideal for use in semiconductor, microelectronics, and sensitive pharma applications
- **Proven Across Diverse Industries**
  - Pharmaceutical Manufacturing – Aseptic compounding, sterile drug processing
  - Biotech & Vaccine R&D – Ultra-clean environments for biologics & cell therapies
  - Medical Device Production – ISO 13485-certified for precision manufacturing
  - Electronics & Semiconductor Labs – Cleanroom-safe with ESD compliance

### XYSHIELD BY BIOEXCEL PHARMA

XyShield is the cleanroom consumable line trusted by professionals in pharma, biotech, and medical industries. Each product is backed by rigorous testing, ISO certifications, and our commitment to global quality standards.



## FUTURE INNOVATIONS

### Future Product Developments

- AI-Optimized Bioprocessing Systems
- Next-Gen High-Performance Chromatography
- Smart, Sensor-Integrated Storage Bags
- Sustainable & Eco-Friendly Biotech Packaging



## CONTACT INFORMATION

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SCAN TO CONNECT WITH US



For technical specifications, compliance data, or consultation requests, contact our Business Development team. We're here to help you find the right solution for your bioprocess needs.