



## **Sample Preparation**

## **Chromatography & Mass Spectrometry**

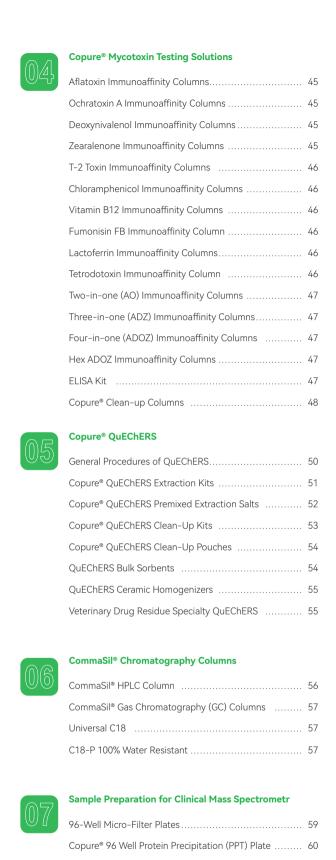
Copure® chromatography and mass spectrometry sample preparation products encompass HPLC columns, high-throughput purification plates, solid phase extraction (SPE) cartridges, QuEChERS, immunoaffinity columns, multifunctional purification cartridges, syringe filters, sample vials, and a variety of compatible small devices and consumables.

These products are widely used in food analysis for pesticide residues, food additives, mycotoxins, contaminants, and other analytes.

## Contents

M41	Copure® HPLC Columns				
	Copure® HPLC Columns Specially for Preservative	4			
	Copure® HPLC Columns Specially for Carbonhydrate	4			
	Copure® HPLC Columns Specially for Synthetic Colorants	5			
	Copure® HPLC Columns Specially for Mycotoxin	6			
	Copure® HPLC Columns Specially for Pesticide Residue .	7			
	Copure® HPLC Columns Specially for Veterinary Residue	12			
	Copure® HPLC Columns Specially for Organic Acid	16			
	Copure® HPLC Columns Specially for Organic Acid	16			
$\mathbb{Q}^{2}$	Copure® High Throughput Cleanup Soluti	ons			
$\mathbb{U}\mathbb{Z}_{2}$	Copure®24-Well HLB Lim Plates	19			
	Copure® 24-Well Pesticide Residue Purification Plate	21			
	Copure® 24-Well Multi-Functional Purification Plates	23			
MQ)	Copure® SPE				
03	Copure® SPE Pretreatment for Food Safety Testing				
03	•	26			
03	Pretreatment for Food Safety Testing	26 27			
03	Pretreatment for Food Safety Testing  SPE Cartridge Sorbent Selection Guide				
03	Pretreatment for Food Safety Testing  SPE Cartridge Sorbent Selection Guide	27 28			
03	Pretreatment for Food Safety Testing  SPE Cartridge Sorbent Selection Guide  Solid Phase Extraction Cartridge Operation Procedures  SPE Cartridge Directions	27 28 28			
03	Pretreatment for Food Safety Testing  SPE Cartridge Sorbent Selection Guide  Solid Phase Extraction Cartridge Operation Procedures  SPE Cartridge Directions  Analysis and Solutions of Low Recovery Rate  Solid Phase Extraction (SPE) Cartridge Product List	27 28 28			
03	Pretreatment for Food Safety Testing  SPE Cartridge Sorbent Selection Guide  Solid Phase Extraction Cartridge Operation Procedures  SPE Cartridge Directions	27 28 28 29			
03	Pretreatment for Food Safety Testing  SPE Cartridge Sorbent Selection Guide  Solid Phase Extraction Cartridge Operation Procedures  SPE Cartridge Directions  Analysis and Solutions of Low Recovery Rate  Solid Phase Extraction (SPE) Cartridge Product List	27 28 28 29			
03	Pretreatment for Food Safety Testing  SPE Cartridge Sorbent Selection Guide  Solid Phase Extraction Cartridge Operation Procedures  SPE Cartridge Directions  Analysis and Solutions of Low Recovery Rate  Solid Phase Extraction (SPE) Cartridge Product List  Polymer Sorbent  HLB Hydrophilic-Lipophilic Balanced	27 28 28 29 31 31			
03	Pretreatment for Food Safety Testing  SPE Cartridge Sorbent Selection Guide  Solid Phase Extraction Cartridge Operation Procedures  SPE Cartridge Directions	27 28 28 29 31 31 31			
03	Pretreatment for Food Safety Testing  SPE Cartridge Sorbent Selection Guide  Solid Phase Extraction Cartridge Operation Procedures  SPE Cartridge Directions	27 28 28 29 31 31 31 32			
03	Pretreatment for Food Safety Testing  SPE Cartridge Sorbent Selection Guide  Solid Phase Extraction Cartridge Operation Procedures  SPE Cartridge Directions	27 28 28 29 31 31 31 32			
03	Pretreatment for Food Safety Testing  SPE Cartridge Sorbent Selection Guide  Solid Phase Extraction Cartridge Operation Procedures  SPE Cartridge Directions	27 28 28 29 31 31 31 32			

SPE Cartridges	
C8 Octyl	34
C18 Endcapped Octadecyl	34
C18A Unendcapped Octadecyl	34
C18N Unendcapped Octadecyl	34
Diol Dihydroxy	35
Silica Unbounded Silica Gel	35
NH <sub>2</sub> Aminopropyl	35
CN Cyanopropyl	35
SAX Strong Anion Exchange	36
SCX Strong Cation Exchange	36
PSA Primary-Secondary Amine	36
PRS Propylsulfonic Acid	36
C8/SAX Octyl/Strong Anion Exchange	37
Carb-GCB Graphitized Carbon Black	37
C8/SCX Octyl/Strong Cation Exchange	37
Carb-GCB/PSA Graphitized Carbon Black/	
Primary-Secondary Amine Bilayer	37
Carb-GCB/NH <sub>2</sub>	38
PH Phenyl	38
Florisil Pesticide Grade Florisil	38
ALA, ALN, ALB, Alumina	38
Bulk Packing Material	39
Special SPE Cartridges	
SLE Cartridges for AZO Dye Testing	41
SPE Cartridges for Pesticide Residue Testing in Tea	42
Cartridges for Ion Chromatography Preparation	42
Destaining Cartridges for Chrome (VI) Testing	42
Cartridges for Plasticizer Testing	43



Copure® 96 Well Phospholipid Removal (PRP) Plate ..... 60

Copure® MS Series 96-Well Solid Phase

$\bigcap_{i} \bigcirc i$	Copure® Laboprtory Device & Consumables	
$\mathbb{W}$	Filtration Guide	64
	Syringe Filters	6
	Sterile Syringe Filters	6
	Microfiltration Membranes	6
$\bigcirc$	Copure® Autosampler Vials and Caps	
W B	Autosampler Vials and Caps	68
	Headspace Vials and Caps	70
	Storage Vials and Caps	7
40	General Laboratory Consumables	
	Collection Plates	7
	Silicone Sealing Mats	7
	Reagent Reservoirs	7
	Connectors	7
	Flow Regulators	7
वावा	LABORATORY EQUIPMENT	
	BCY96 Positive Pressure 96 Processor	7
	SPEMF Solid Phase Extraction Vacuum Manifold	7
	Vacuum Pump	7
	SDC-4000-D Multi-Tube Vortex Mixer	78
	BN24 Intelligent Water-Bath Nitrogen Evaporator	78
	96-Well Plate Nitrogen Evaporator	78

## Expert in Food Safety

## Copure® HPLC Columns

The Copure® chromatography columns are specifically designed for food testing, aimed at addressing the various challenges in the food testing industry. This product line includes specialized liquid chromatography columns for preservatives, sugars, synthetic colorants, mycotoxins, pesticide residues, and more, dedicated to solving the pain points in food testing, enhancing detectionefficiency and accuracy, and ensuring food safety and quality.

By using high-purity silica materials and customized surface coating technology, Copure® chromatography columns provide exceptional separation performance and reproducibility, meeting the analytical needs of complex matrix samples. Additionally, these columns undergo stringent quality control to ensure that each batch delivers consistent performance and high reliability, making laboratory operations more efficient and dependable.



### **Designed Specifically for Food Testing**

- Includes chromatography columns specialized for preservatives, sugars, synthetic colorants, mycotoxins, and pesticide residues, among other products.
- Effectively addresses critical issues in the food testing industry.

### **Exceptional Material and Technology**

- Uses ultra-high purity, fully porous silica with > 99.999% purity.
- Customizable surface coverage and end-capping options.
- Ensures long-lasting performance and superior peak shapes.

### **Suitable for Complex Matrix Analysis**

- Preservative-specialized columns: Efficient separation of preservatives.
- Sugar-specialized columns: Precise separation of glucose, sucrose, and other sugars.
- Synthetic colorant-specialized columns: Sharp peak shapes for accurate detection of synthetic colorants.
- Mycotoxin-specialized columns: Reliable detection of mycotoxins in complex matrices.
- Pesticide-residue-specialized columns: Excellent separation and detection of pesticide residues.
- Veterinary drug-specialized columns: Outstanding separation and detection of veterinary drug residues.

### **Reliable Performance**

- Excellent inter-column and batch-to-batch reproducibility.
- High-efficiency separation with precise determination of food additives and contaminants.
- Outstanding peak shapes and selectivity.



### Copure® HPLC Columns Specially for Preservative

Copure® HPLC Columns Specially for Preservative is designed specifically for the detection of preservatives such as benzoic acid, sorbic acid, and dehydroacetic acid in food.

Column: Copure® HPLC Columns Specially for Preservative

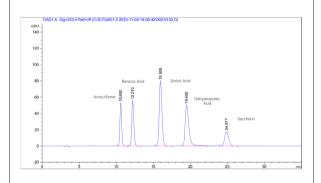
(4.6×250mm, 5μm)
Part Number: HC18PS01

Mobile Phase: 20mmol/L ammonium acetate buffer

(adjusted with ammonia to pH 7.5)

Flow Rate: 1.0 mL/min Column Temperature: 30° C

Wavelength: 230nm Injection Volume: 5µL Chromatogram:



### Test Results:

		Compound	Retention Time[min]	Resolution	Theoretical Plates	Tailing Factor
	1	Acesulfame	10.600	-	9830	1.14
2	2	Benzoic Acid	12.210	3.46	9511	1.17
(	3	Sorbic Acid	15.958	6.43	9293	1.19
4	4	Dehydroacetic Acid	19.492	4.65	8316	1.51
į	5	Saccharin	24.877	5.86	10320	1.11
Ľ		0000101111	2	0.00	.0020	

### Ordering Information

Cat#	Specification	Qty.
HC18PS01	4.6mm×250mm, 5μm	1 unit/box
HC18PS03	4.6mm×150mm, 5μm	1 unit/box

## Copure® Copure® HPLC Columns Specially for Carbonhydrate

The Copure® Sugar HPLC Column features highpurity silica bonded with a chemically stable amine phase, offering significant retention capacity for highly polar compounds, making it ideal for sugar analysis.

Column: Copure® HPLC Columns Specially for

Carbonhydrate (250×4.6mm, 3.5µm)

Part Number: HAMH535

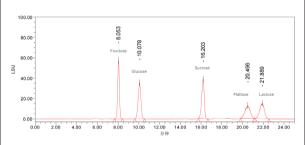
Detector: ELSD Flow Rate: 1.0 ml/min Column Temperature: 50° C

Mobile Phase: Acetonitrile-Water-50mm Ammonium

Acetate (with 0.5% Ethylenediamine) (80:20)

Injection Volume: 10µL

Time /min	A/%	B/%
0	10	90
6	10	90
11	30	70
20	30	70
21	10	90



#### Test Results:

	Compound	Retention Time[min]	Resolution	Theoretical Plates	Tailing Factor
1	Fructose	8.053		10235.39	0.89
2	Glucose	10.078	4.99	6575.37	0.92
3	Sucrose	16.203	13.21	24740.28	0.83
4	Maltose	20.496	6.34	8601.91	0.95
5	Lactose	21.889	1.59	10581.05	0.88

Cat#	Specification	Qty.
HAMH535	4.6mm×250mm, 3.5μm	1 unit/box

### Copure® HPLC Columns Specially for Synthetic Colorants

Based on the latest national standard GB 5009.35-2023, Biocomma has launched the Copure® HPLC column specifically for synthetic colorants. This product utilizes monodisperse silica particles with fast mass transfer and high separation efficiency, combined with a suitable bonding coverage and full end-capping technology. It ensures accurate and efficient detection of synthetic colorants, providing high-density tailing reproducibility and excellent peak shape performance, with an extended service life.



Reference Method: GB 5009.35-2023

Column: Copure® HPLC Column for Synthetic Colorants (4.6

mm×250 mm, 5 μm)
Part Number: HDYE01

Mobile Phase: A: 20mmol/L Ammonium Acetate B:

Methanol

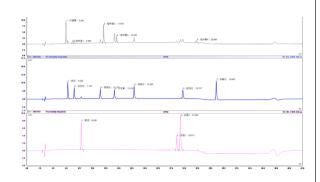
Elution Mode: Gradient Elution, see Table 1

Flow Rate: 1.0 mL/min Column Temperature: 30°C Injection Volume: 10 µL Detector: UV Detector

Detection Wavelength: 400-800 nm

Table 1 Elution Program

Time /min	A/%	B/%
0.01	90	10
12.0	65	35
19.0	55	45
22.5	50	50
23.0	45	55
24.0	35	65
34.0	35	65
35.0	90	10
42.0	90	10



Liquid Chromatography of 11 Synthetic Colorants

- 415nm: 1. Tartrazine
- 2. Quinoline Yellow 1
- 3. Quinoline Yellow 2
- 4. Quinoline Yellow 3
- 5. Quinoline Yellow 4
- 520nm: 1. New Red
- 2. Amaranth
- 3. Carmine
- 4. Sunset Yellow
- 5. Allura Red
- 6. Acid Red
- 7. Erythrosine
- 610nm: 1. Indigo Carmine
- 2. Brilliant Blue 1
- 3. Brilliant Blue 2

Cat#	Specification	Qty.
HDYE01	4.6mm×250mm, 5μm	1 unit/box

### Copure® HPLC Columns Specially for Mycotoxin

This product features high-strength silica particles with enhanced pressure tolerance, suitable for UPLC system pressures. The column's proprietary end-capping technology provides a broad range of compound inertness and improves retention for polar compounds. It is compatible with all aqueous phases and exhibits Copure® HPLC Columns Specially for Mycotoxin excellent acid resistance, with minimal column loss over extended use.

#### Ochratoxin A

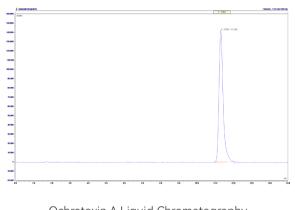
Reference Method: GB 5009.96-2016

Column: Copure® HPLC ColumnsSpecially for Mycotoxin (4.6

mm×250 mm, 5 μm) Part Number: HMY01

Mobile Phase: Acetonitrile-Water-Glacial

Acetic Acid (96+102+2) Flow Rate: 1.0 mL/min Column Temperature: 35°C Injection Volume: 50 μL Detection Wavelength: 460nm Excitation Wavelength: 333nm



Ochratoxin A Liquid Chromatography

#### **Fumonisins**

Reference Method: GB 5009.240-2023

Instrument: UPLC-MS/MS (Thermo Fisher TSQ

Endura)

Column: Copure® HPLC Column for Mycotoxins

(2.1 mm×100 mm, 3 μm) Part Number: HMY02

Mobile Phase: A: Water (0.1% Formic Acid)
B: 0.1% Formic Acid Methanol Solution
Elution Mode: Gradient Elution, see Table 1

Flow Rate: 0.3 mL/min Column Temperature: 35°C Injection Volume: 5 μL Elution Program, Table 1

Time /min	A/%	B/%
0	60	40
1.5	60	40
6.5	5	95
7	5	95
7.5	60	40
10	60	40

Mass Spectrometry Conditions

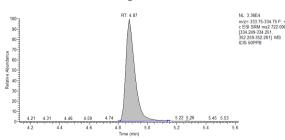
Ion Source: HESI

Electrospray Voltage: 3500 V Sheath Gas Pressure: 40 arb Auxiliary Gas Pressure: 2 arb Ion Transfer Tube: 380°C Auxiliary Temperature: 350°C

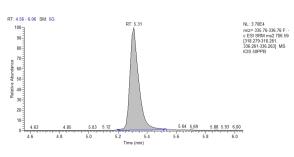
See Table 2 for Ion Pair Information
Table 2 Ion Pair Information

No.	ltem	Parent Ion (m/z)	Daughter Ion (m/z)
1	Fumonisin B2	706.55	318.28
		706.55	336.262
2	Fumonisin B1	722	334.25
		722	352.26

### II. Extracted Ion Chromatograms of Fumonisins



Fumonisin B1



Fumonisin B2

#### Aflatoxin B1

Reference Method: GB 5009.22-2016

Column: Copure® HPLC Column for Mycotoxins (2.1

mm×100 mm, 3 μm)
Part Number: HMY02

Mobile Phase: A: 5 mmol/L Ammonium Acetate B:

0.1% Formic Acid Methanol Flow Rate: 0.3 mL/min Column Temperature:  $40^{\circ}$ C Injection Volume: 5  $\mu$ L

Elution Mode: Gradient Elution, see Table 1

Table 1: Gradient Elution Program

Time /min	A/%	B/%
0	90	10
1.2	40	60
2.1	10	90
4.8	10	90
5	90	10
6	90	10

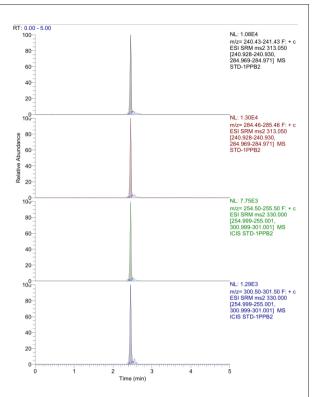
Mass Spectrometry Conditions

Ion Source: HESI

Scan Mode: Positive Ion Scan Electrospray Voltage: 3500 V Sheath Gas Pressure: 30 arb Auxiliary Gas Pressure: 8 arb Ion Transfer Tube: 300°C Auxiliary Temperature: 350°C

Table 2 Component Names, Retention Times, and Characteristic lons (indicates Quantitative Ion)\*

Component Name	Parent Ion	Daughter Ion
Aflatoxin B1	313.1	285*、241.1
13C17-AFB1	330.1	255、301*



Ion Chromatogram of Aflatoxin B1

Cat#	Specification	Qty.
HMY01	4.6mm×250mm, 5μm	1 unit/box
HMY02	2.1mm×100mm, 3μm	1 unit/box
HMY03	2.1mm×100mm, 1.7μm	1 unit/box

### Copure® HPLC Columns Specially for Pesticide Residue

Copure® HPLC ColumnsSpecially for Pesticide Residue utilizes ultra-high purity, narrow particle size distribution silica, combined with mature and stable bonding technology and precise end-capping process, ensuring high column efficiency and suitable pressure range. In pesticide residue analysis, it provides high sensitivity, excellent separation, and symmetrical peak shapes, enhancing accuracy and reliability in detection.

Instrument: UPLC-MS/MS (Thermo Fisher TSQ Endura)
Column: Copure® HPLC ColumnsSpecially for Pesticide

Residue (2.1 mm×100 mm, 3 µm)

Part Number: HNC01

Mobile Phase: A: Ammonium Formate-Formic Acid Water (2mmol/L) B: Ammonium Formate-Formic Acid Methanol

(2mmol/L)

Flow Rate: 0.3 mL/min Column Temperature:  $40^{\circ}$ C Injection Volume: 2  $\mu$ L

Elution Mode: Gradient Elution, see Table 1

Table 1: Gradient Elution Program

Time /min	A/%	B/%
0.00	97	3.0
1.00	97	3.0
1.50	85	15.0
2.50	50	50.0
18.0	30	70.0
23.0	2	98.0
25.0	2	98.0
25.1	97	3.0
27.0	97	3.0

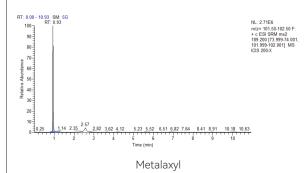


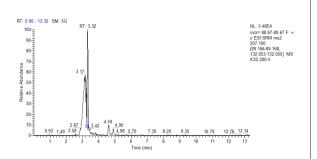
Ion Source: HESI

Electrospray Voltage: Positive Ion Mode 3500 V, Negative Ion

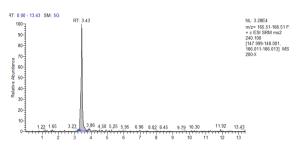
Mode 3500V

Sheath Gas Pressure: 35 arb Auxiliary Gas Pressure: 3 arb Ion Transfer Tube: 380°C Auxiliary Temperature: 420°C

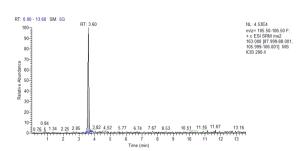




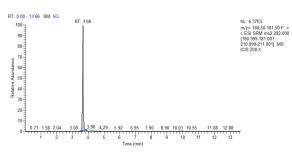
### Methomyl Sulfoxide



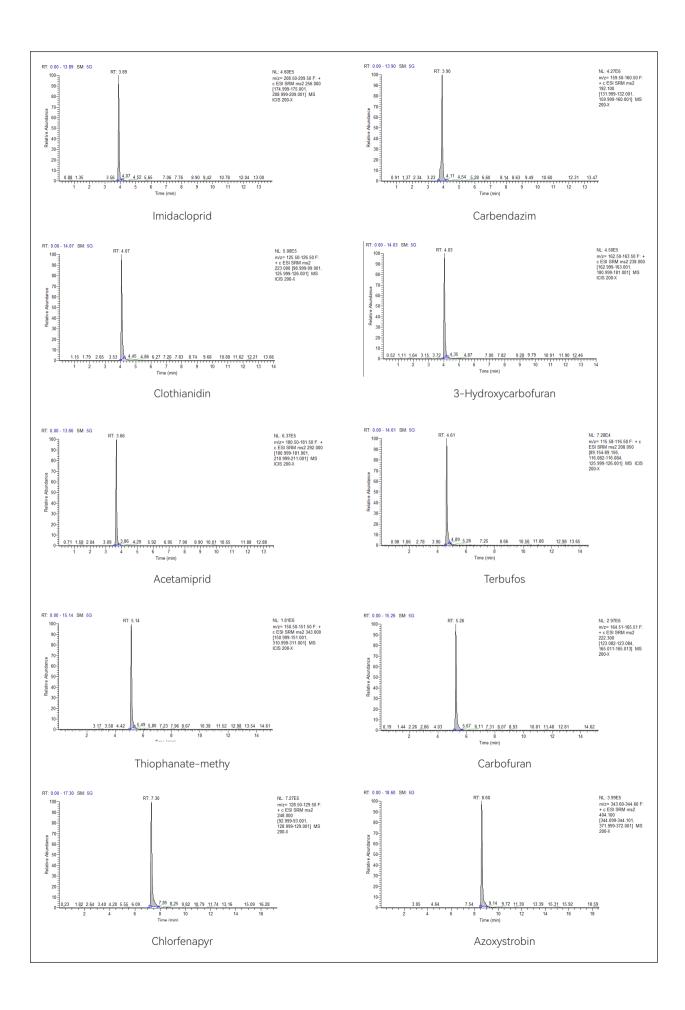
Aldicarb Sulfoxide

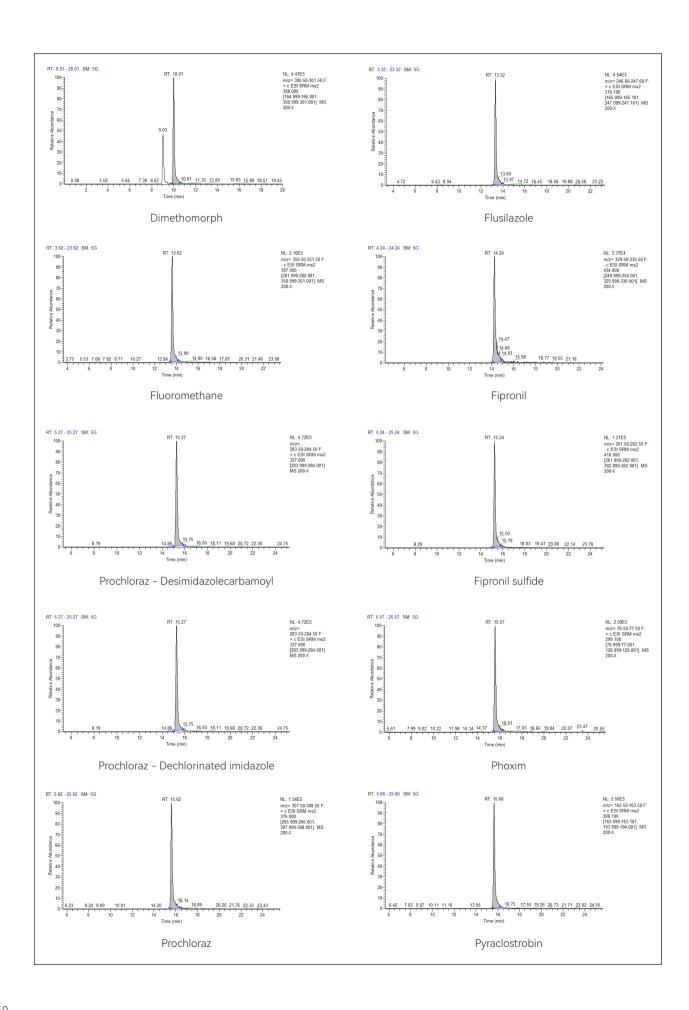


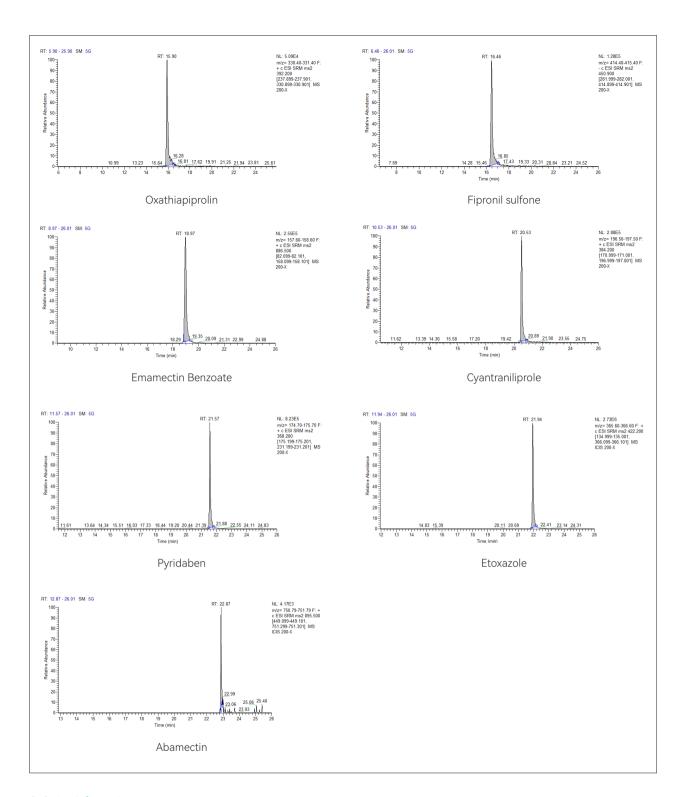
Methomyl



Thiamethoxam







Cat#	Specification	Qty.
HNC01	2.1mm×100mm, 3μm	1 unit/box
HNC02	2.1mm×100mm, 1.7μm	1 unit/box

### Copure® Specially for Veterinary Residue

This product utilizes advanced hybrid silica gel and multi-bonded technology, with a broader pH range (1–12) and more stable functional groups. The bonded phase is resistant to loss, providing high efficiency and precision in detecting multiple veterinary drug residues. It also exhibits exceptional durability and reliability, enabling continuous testing under strong acidic and basic conditions.

#### 36 Types of Veterinary Drug Residues

Reference Method: GB 31658.17-2021

- 1. Instrument Conditions
- 1.1 Chromatographic Conditions
- a. Instrument: UPLC-MS/MS (Thermo Fisher TSQ Endura)

Column:Copure®Specially for Veterinary

Residue(2.1mm×100mm, 3 µm)

Catalog Number: HSC01

c. Mobile Phase A: Water (0.1% Formic Acid) B:Methanol:

Acetonitrile = 2:8 (0.1% Formic Acid)

- d. Elution Method: Gradient elution, see Table 1
- e. Flow Rate: 0.3 mL/min
- f. Column Temperature: 35°C
- g. Injection Volume: 5 μL

Elution Program: see Table 1

Time /min	A/%	В/%
0	98	2
3	90	10
8	65	35
10	20	80
11	5	95
12	98	2
14	98	2

Mass Spectrometry Conditions

- a: Ion Source: HESI
- b: Electrospray Voltage: 3500 V
- c: Sheath Gas Pressure: 40 arb
- d: Auxiliary Gas Pressure: 2 arb
- e: Ion Transfer Tube Temperature: 380° C
- f: Auxiliary Gas Temperature: 350° C
- g: Qualitative and Quantitative Ion Pairs, Cone

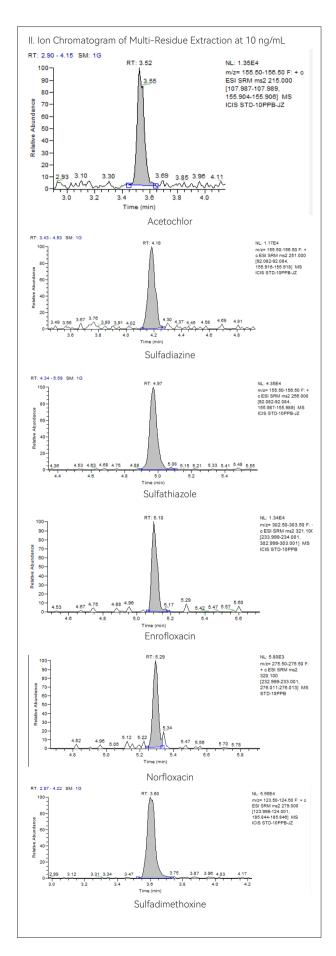
Voltage, and Collision Energy are listed in Table 2

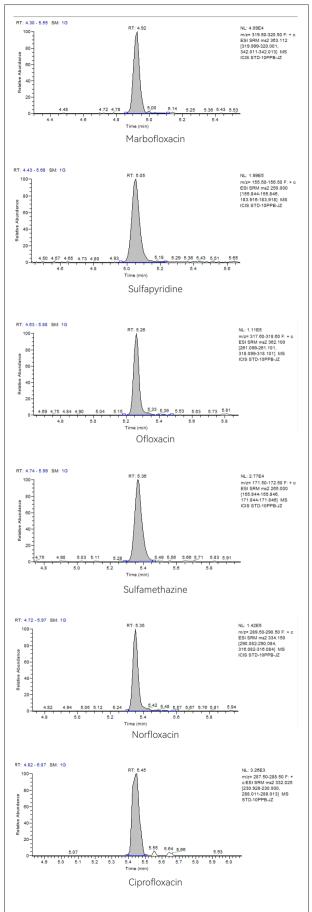
Table 2: Qualitative and Quantitative Ion Pairs, Cone Voltage,

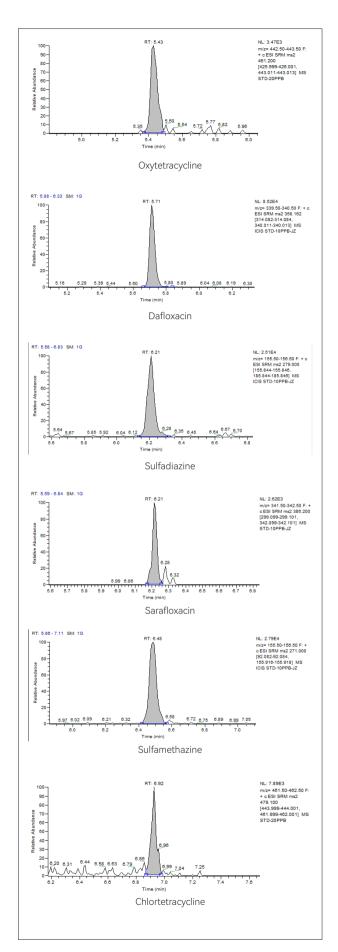
and Collision Energy

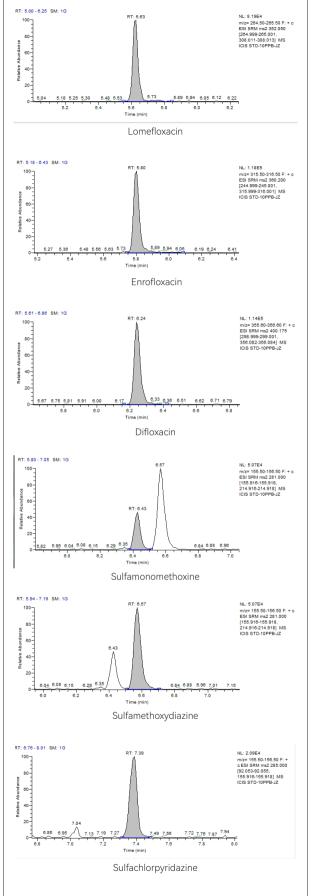
No.	Compound Name	Retention Time(min)	Parent Ion	Daughter lons
1	Acetylsulfamethoxazole	3.18	215.0	108.0、155.9*
2	Sulfapyridine	4.67	250.1	155.8*、183.9
3	Sulfadiazine	3.79	251.1	92.1、155.9*
4	Sulfamethoxazole	7.67	254.0	108.1、155.9*
5	Sulfathiazole	4.62	256.0	155.9*、92.1
6	Flumequine	8.59	262.0	201.9、244.1*
7	Oxolinic Acid	10.07	262.0	215.9、244.1*
8	Sulfamethylthiadiazole	5.03	265.1	155.8*、171.8
9	Sulfadimethoxazole	8.12	268.0	113.0、155.8*
10	Sulfamethizole	6.26	271.0	92.1、155.9*
11	Sulfabenzamide	8.59	277.0	107.9、155.9*
12	Sulfadimethoxypyridazine	3.22	279.1	124.0*、185.8
13	Sulfadoxine	5.91	279.1	155.8、185.8*
14	Sulfamonomethoxine	6.21	281.0	155.8*、126.0
15	Sulfamethoxydiazine	6.36	281.0	155.9*、214.9
16	Sulfamethoxypyridazine	7.10	281.0	155.9*、214.9
17	Sulfachlorpyridazine	7.19	285.0	92.1、155.9*
18	Sulfamonomethylpyridazine	7.61	311.1	155.8*、244.9
19	Sulfadiazine	9.05	311.1	155.8*、244.8
20	Sulfabenzthiazole	9.10	315.0	157.9*、159.9
21	Norfloxacin	5.34	320.1	233.0、276.0*
22	Enoxacin	5.15	321.1	234.0、303.0*
23	Ciprofloxacin	5.49	332.0	230.9、288.0*
24	Pefloxacin	5.40	334.2	290.1*、316.1
25	Lomefloxacin	5.67	352.0	265.0*、308.0
26	Delafloxacin	5.76	358.2	314.1、340.0*
27	Enrofloxacin	5.85	360.2	245.0、316.0*
28	Ofloxacin	5.31	362.1	261.1、318.1*
29	Marbofloxacin	4.96	363.1	320.0*、342.0
30	Sarafloxacin	6.28	386.2	299.1、342.1*
31	Difloxacin	6.30	400.2	299.0、356.1*
32	Sulfathiazole	8.11	404.0	148.9、255.8
33	Doxycycline	7.45	445.2	321.0、428.0*
34	Tetracycline	5.55	445.2	410.0*、427.0
35	Oxytetracycline	5.33	461.2	426.0*、443.0
36	Chlortetracycline	6.92	479.1	444.0*、462.0

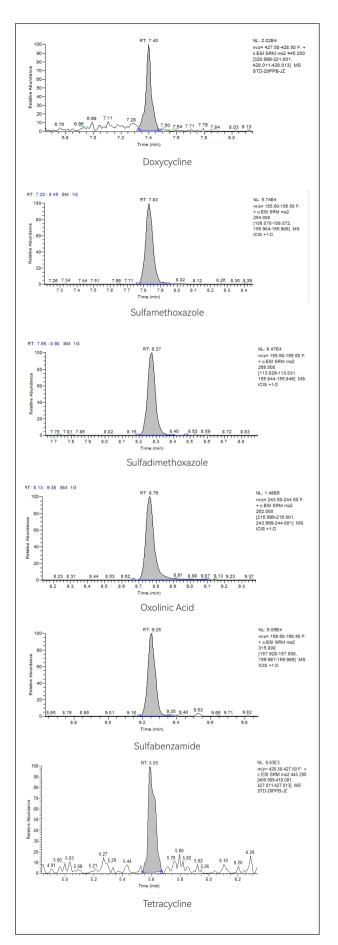
Cat#	Specification	Qty.
HSC01	2.1mm×100mm, 3μm	1 unit/box
HSC02	2.1mm×100mm, 1.7μm	1 unit/box

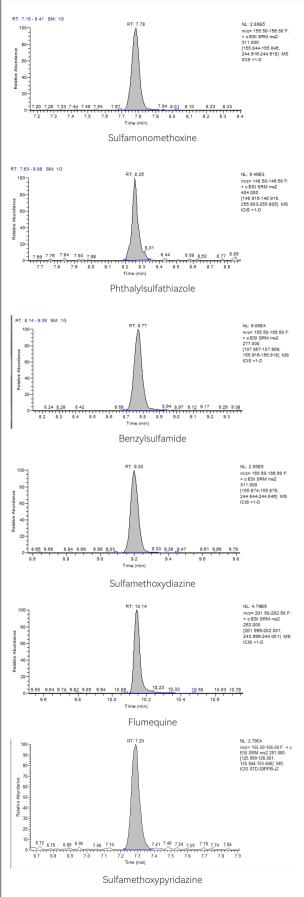






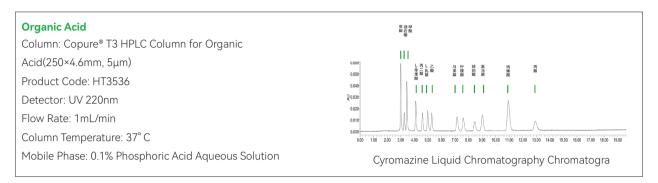






### Copure® HPLC Columns Specially for Organic Acid

Copure® HPLC columns specifically designed for organic acids exhibit excellent polar retention capability and high tolerance for pure aqueous phases. The analysis of organic acids on these columns demonstrates superior peak shapes, making them the preferred choice for polar analytes and carboxylic acid substances in liquid chromatography.

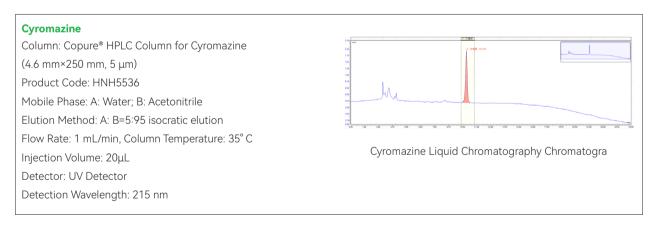


### Ordering Information

Cat#	Specification	Qty.
HT3536	4.6mm×250mm, 5μm	1 unit/box

### Copure® HPLC Columns Specially for Cyromazine

The Copure® HPLC column specifically designed for cyromazine testing in food uses ultra-pure silica and exclusive surface bonding and end-capping technologies. It ensures high sensitivity and accuracy for cyromazine detection, as well as a long service life. It meets the requirements for cyromazine residue detection in vegetables as per "NY/T 1725-2009" and in animal foods as per "GB 31658.12-2021 Food Safety National Standard" using high-performance liquid chromatography methods.



Cat#	Specification	Qty.
HNHS536	4.6mm×250mm, 5μm	1 unit/box



## Copure® Pro TIPS QuEChERS

In today's highly competitive laboratory environment, the demand for high-throughput sample processing has grown significantly. Copure® Pro TIPS QuEChERS offers innovative sample preparation technology and customized solutions to help you easily tackle high-throughput experimental challenges

### 01 Innovative Design for High-Throughput Production

Specifically designed for automated large-scale production, perfectly suited for high-throughput laboratory needs.

### 03 Superior Stability, Reduced Experimental Errors

With meticulously designed adsorbents and stringent preparation processes, significantly reduces experimental errors, ensuring highly consistent results.

### **05 Multiple Specifications, Customized Solutions**

Available in various specifications, supporting modified carbon in the range of 10–100 mg, to meet diverse laboratory requirements.

For orders, please contact 400-878-7248

### 02 High Recovery Rate, Reliable Results Guaranteed

Offers recovery rates and purification effectiveness comparable to traditional QuEChERS methods.

### 04 Lower Sample Volume, Enhanced Efficiency

Supports high-throughput while optimizing sample volume for greater efficiency.

### 06 Enabling Unlimited Possibilities

Through collaboration with our clients, we not only address chemical challenges but also create more possibilities through the innovation of Copure® pro TIPS QuEChERS.



# Copure® High Throughput Cleanup Solutions

In modern analytical laboratories, efficient and precise sample preparation is a critical step in ensuring the accuracy of results. To meet this demand, Biocomma has introduced Copure® pro High Throughput Cleanup Solutions, specifically designed to handle higher sample volumes. These products not only increase the speed of sample processing but also ensure excellent recovery rates and reproducibility, enabling researchers to achieve higher precision results in less time.

This product range includes the Copure® pro 24-well plates, concentrated and multifunctional high-throughput extraction cleanup plates, and the TIPS QuEChERS series. Designed for simultaneous processing of up to 24-96 samples, these products guarantee exceptional recovery rates and reproducibility in high-throughput applications, providing stable and reliable solutions that save time and enhance the accuracy of analytical results for researchers.

# Copure® High Throughput Residue Analysis of Veterinary Drug Solution

### Copure®24-Well HLB Lim Plates

### **Features**

- ✓ High-Throughput: 24 samples can be processed at a time, suitable for automated preparation workstations
- ✓ Limited Matrix Effects: HLB Lim media removes interference impurities such as fat, phospholipid and pigment quickly and efficiently
- ✓ Good Stability: reduce experimental error, higher reproducible data
- ✓ Easy Operation: skipped activation and equilibration steps, also, cooperate with biocomma\* Positive Pressure 24 Processor to simplify the purification process



### **Procedures**

Copure® 24-Well HLB Lim Plates



1. Pipette the sample supernatant to a Copure 24-Well HLB Lim Plates.



2. Filter with biocomma® Positive Pressure 24 Processor.



3. Concentrate by biocomma<sup>\*</sup> 24-Well Plate Intelligent Nitrogen Evaporator



4. Filter by biocomma® Syringe Filter and Sample Vials.



5. Liquid chromatography mass spectrometry analysis.

## **Total Ion Chromatogram of 36 Veterinary Residues in Pork Samples**

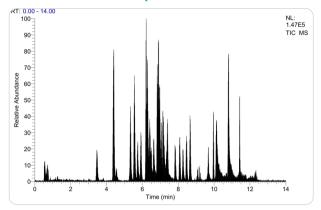


Figure 1 Total Ion Chromatogram of 36 Veterinary Residues in Pork Samples at an Addition Level of 10  $\mu g/kg$ 

## **Total Ion Chromatogram of 36 Veterinary Residues in Shrimp Samples**

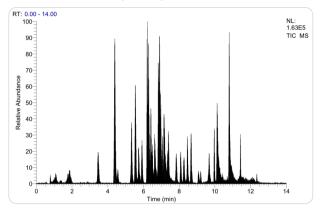


Figure 2 Total Ion Chromatogram of 36 Veterinary Residues in Shrimp Samples at an Addition Level of 10  $\mu g/kg$ 

## **Total Ion Chromatogram of 36 Veterinary Residues in Chicken Samples**

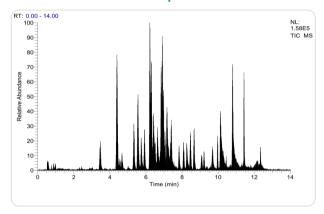


Figure 3 Total Ion Chromatogram of 36 Veterinary Residues in Chicken Samples at an Addition Level of 10  $\mu g/kg$ 

#### **Conclusion:**

This solution uses the HLB Lim 24-well purification plate to achieve rapid, high-throughput detection of 36 veterinary drug residues. A method has been established for the LC-MS/MS determination of residues of 36 drugs, including tetracyclines, sulfonamides, and nitrofurans, in animal food products (pork, chicken) and aquatic products (shrimp).

The spiked recovery rate at two levels (10 ng/g and 20 ng/g) ranges from 60–110%, with a recovery CV value less than 10% (n=8), meeting standard requirements for recovery and precision.

Cat#	Description	Qty.
COHLB24200-lim	HLB Lim 24-Well Purification Plate	1 Pc/box
SDC-4000-D	biocomma® Multi-Tube Vortex Mixer	1 Set/box
ASF130-22-NL	Nylon Syringe Filter, Diameter 13 mm, Pore Size 0.22 μm, Organic	100 pcs/box
SC2-1	2 mL Blue Screw Cap Vial, White PTFE/Red Silicone Septa, 9–425	100 pcs/box
V2-AL-N	2 mL Aluminum Screw Cap Sample Vial, Step Insert 11.6*32 mm, 9-425	100 pcs/box
BCY2402	24-Well Positive Pressure Extraction Device	1 Set/box
24WP-S100	24-Well Collection Plate	1 Pc/box
BN24	Intelligent Nitrogen Evaporator	1 Set/box

## Copure® High Throughput Pesticide Residue Purification Solution

## Copure® 24-Well Pesticide Residue Purification Plate

### **Features**

- ✓ High Throughput: 24 samples can be processed at a time, suitable for automated preparation workstations
- ✓ High Recovery Rate: equivalent to the recovery rate and purification effect
  of the traditional QuEChERS method
- ✓ Good Stability: reduce experimental error, higher reproducible data
- ✓ No Syringe Filter Needed: the sample filtered with 0.22µm nylon membrane can be tested on the machine directly
- ✓ Easy Operation: cooperate with biocomma® Positive Pressure 24

  Processor to simplify the purification process



### **Procedures**

Copure® 24-Well Pesticide Residue Purification Plates



1. Pipette the sample supernatant to a Copure<sup>\*</sup> 24-Well Pesticide Residue Purification Plate.



2. Filter with biocomma\* Positive Pressure 24 Processor, and the sample vials are placed in the sample vial tray to collect the sample.



3. Cap the vials, no syringe filter filtration needed.



4. Direct mass spectrometry analysis.

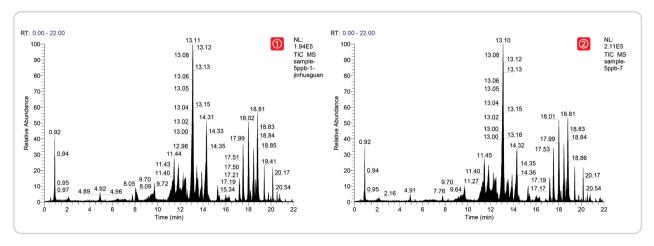


Figure 2 TIC Chromatograms of Multi-Pesticide Residues After Different Purification Methods (5 ng/g) (① Traditional QuEChERS Method ② Copure® 24-Well Pesticide Residue Purification Plates)

### **Strawberry**

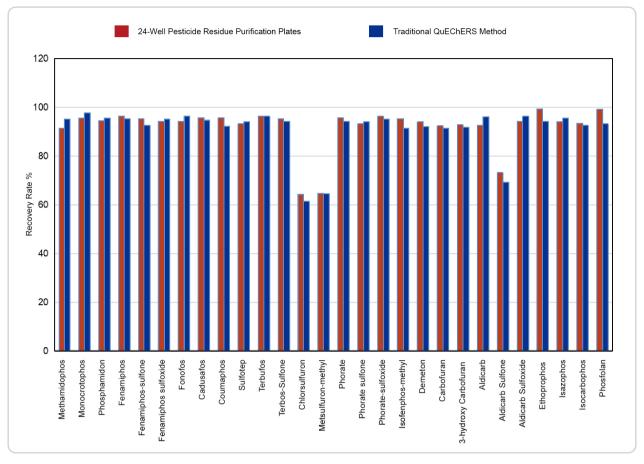


Figure 1 Recovery Rate Comparison of Multi-Pesticide Residues (5 ng/g)

### **Conclusion:**

Based on the experimental results, the Copure® pro 24-Well Pesticide Residue Purification Plate demonstrates better stability in experimental data, simpler and more convenient operation, reduced testing time, and significantly improved detection efficiency

Cat#	Description	Qty.
NC24001	Copure® 24-Well Pesticide Residue Purification Plates (suitable for vegetables, fruits and edible fungi with light pigment)	1 Pc/Box
NC24002	Copure® 24-Well Pesticide Residue Purification Plates (suitable for vegetables, fruits and edible fungi with dark pigment)	1 Pc/Box
NC24003	Copure® 24-Well Pesticide Residue Purification Plates (suitable for grains, oil and nuts)	1 Pc/Box
NC24004	Copure® 24-Well Pesticide Residue Purification Plates (suitable for tea and spices)	1 Pc/Box
COQ050010H	Extraction Salts + 50 mL Tube: 4 g MgSO4, 1 g NaCl, 1 g Trisodium Citrate, 0.5 g Disodium Citrate	50 Pcs/Box
COQ050020H	Extraction Salts + 50 mL Tube: 6 g MgSO4, 1.5 g NaOAc	50 Pcs/Box
SDC-4000-D	Biocomma® Multi-Tube Vortex Mixer	1 Set/Ctn.
NC24DZ	24-Well Vial Tray	1 Set/Ctn.
BCY2402	Positive Pressure 24 Processor	1 Set/Ctn.
BN24	Intelligent Water Bath Nitrogen Evaporator	1 Set/Ctn.

## **Copure® Fast Mycotoxin Determination Solution**

## Copure® 24-Well Multi-Functional Purification Plates

### **Features**

- ✓ High throughput: process 24 samples in one time, suitable for automated sample preparation workstations.
- ✓ High recovery rate: good purification effect, no background interference, high recoveries
- ✓ Good stability: reduce experimental errors, highly reproducible experimental data.
- ✓ Simple and fast: the purification can be finished within 30 seconds. Achieve selective adsorption of impurities such as pigments, lipids, and proteines in sample.



### **Procedures**

Copure® 24-Well HLB Lim Plates



1. Pipette the sample supernatant to a Copure <sup>®</sup> 24-Well Multi-Functional Purification Plates.



2. Filter with biocomma® Positive Pressure 24 Processor.



3. Concentrate by biocomma® 24-Well Plate Intelligent Nitrogen Evaporator



4. Filter by biocomma<sup>®</sup> Syringe Filter and Sample Vials.



5. Liquid chromatography mass spectrometry analysis.

### **Corn Flour**

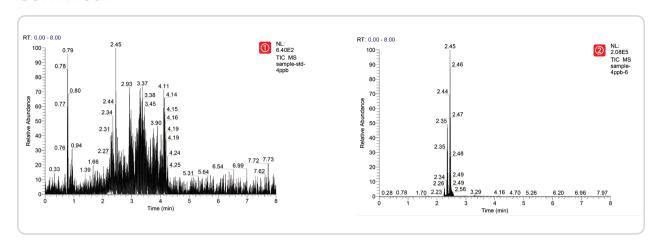


Figure 1 TIC Chromatograms of Corn Flour Sample

( ① Before Purification ② After Purification by Copure 226 Multifunctional Clean-Up Plate)

Test	Spike (ng/g)	Copure <sup>®</sup> 226 Multifunctional Clean-Up Plate		
1621	Spike (fig/g)	Recovery(%, n=24)	CV (%)	
AFT B1	0.5	105	3.92	
AFIDI	1.0	101	2.41	
AFT B2	0.5	102	4.12	
AFIDZ	1.0	95.8	4.15	
AFT G1	0.5	105	2.69	
AFIGI	1.0	104	4.13	
AFT G2	0.5	101	4.28	
AFT GZ	1.0	95.4	3.75	

Based on Figure 1, the impurities are obviously adsorbed, therefore miscellaneous peaks are fewer in the TIC chromatogram. As result, the purified sample is cleaner, and the purification effect is better.

Based on Table 1, the recovery rates of aflatoxin in the 24 wells are between 90-110%, and the CV value of the recovery rate between wells is less than 5%, which meet the standard of experimental requirements.

### Conclusion

According to the results, the Copure <sup>\*</sup> 24-Well Multi-Functional Purification Plates are more stable. The miscellaneous peaks are less on the chromatogram, and no interfering peaks next to the target peaks result in more accurate quantification.

Cat.#	Description	Application	Qty.
COAF228-GTL	Copure <sup>®</sup> 228 Multifunctional Clean-Up Plate	Patulin, Aflatoxin B1, B2, G1, G2	1 Pc/Box
COAF226-GTL	Copure <sup>®</sup> 226 Multifunctional Clean-Up Plate	Zearalenone, Alatoxin B1, B2, G1, G2	1 Pc/Box
COAF224-GTL	Copure® 224 Multifunctional Clean-Up Plate	Zearalenone	1 Pc/Box
COAF223-GTL	Copure® 223 Multifunctional Clean-Up Plate	Aflatoxin M1, M2	1 Pc/Box
COAF230-GTL	Copure® 230 Multifunctional Clean-Up Plate	Deoxynivalenol	1 Pc/Box
COAF229-GTL	Copure <sup>®</sup> 229 Multifunctional Clean-Up Plate	Ochratoxin	1 Pc/Box
COAF302-GTL	Copure® 302 Multifunctional Clean-Up Plate	Multiple functions	1 Pc/Box
BCY2401	Positive Pressure 24 Processor		1 Set/Ctn
BCN2403	24-Well Plate Intelligent Nitrogen Evaporator		1 Set/Ctn

## **Pretreatment for Food Safety Testing**

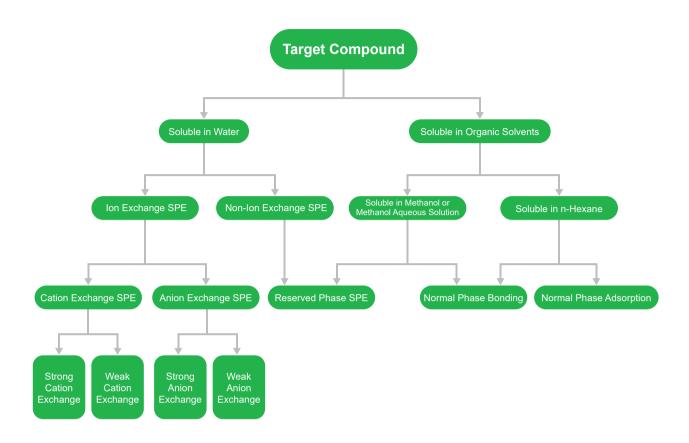
### Detection of pesticide residue, animal residue, mycotoxin, and additives

Biocomma Limited is committed to pretreatment of complex matrix samples in food analysis field. Our products effectively remove interfering components in the samples to ensure satisfactory recovery and repeatability of each target.

Food analysis products include polymer-based solid-phase extraction (SPE) cartridges, silica-based SPE cartridges, inorganic-based SPE cartridges, MS Series 96-well SPE plates, dispersive SPE (QuChERS), immunoaffinity cartridges, multifunctional purification column, and SPE specialty column, etc., which are widely applied to food analysis and testing of pesticide and veterinary drug residues, food additives, mycotoxins, pollutants, etc.



## **SPE Cartridge Sorbent Selection Guide**



### **Mechanism of Action**

Туре	Reversed Phase	Normal Phase	Ion Exchange	Other
Mechanism	The reversed phase column sorbent is less polar substance, which extract medium or less polar substances from the extract through hydrophobic interaction.	The normal phase column sorbent is a strong polar substance, which extract strong polar substance from the extract through hydrophilic interaction.	The ion exchange column sorbent is charged, which extract corresponding charged ions by interaction force.	Solid Supported Liquid- Liquid Extraction (SLE), Graphite-Carbon Black (GCB), etc.
Typical Application	Degreasing by reversed phase column in the detection of veterinary drug residues in foods of animal origin.	Remove organic acids from plant-based foods by normal phase column in pesticide residues test.	The MCX column adsorbs the target alkaline compounds such as melamine, ractopamine, etc., then rinse to remove impurities.	Extract aromatic amines in aqueous solution by SLE in azo dyes detection.



## **Solid Phase Extraction Cartridge Operation Procedures**

Distinguish whether the SPE cartridge is used to adsorb the target compound or impurities before experiment. If the SPE cartridge adsorbs the target compound, process will be in 4 steps: activating, loading, washing and elution. If the SPE cartridge adsorbs the impurities, process will be in 3 steps: activating, loading and elution.

1-2 mL/min flow rate and Vacuum Manifolds with pressure control function are recommended.



### **SPE Cartridge Directions**









### **Solvent Selection:**

SPE Cartridges	Category	Low Elution Strength Solvent (Weak Solvent)	High Elution Strength Solvent (Strong Solvent)
Reversed Phase Cartridges	HLB, C18, C8	Water, Acetonitrile, Methanol	Ethyl, Acetate, Ether
Normal Phase Cartridges	Florisil, ALN, Silica	n-Hexane, Cyclohexane	Acetone, Dichloromethane
Cation Exchange Cartridges	MCX, SCX, WCX, PRS	Acidic or Neutral Solution	Alkaline Solution
Anion Exchange Cartridges	MAX, SAX, WA X	Alkaline or Neutral Solution	Acid Solution

The elution strength gradually increases during the experiments. In general, weak solvent is used during activating and loading. Weak solvent (might mixed with small amount of strong solvent) used during washing. Strong solvent (might mixed with small amount of weak solvent) during elution.

## **Analysis and Solutions of Low Recovery Rate**

① Analyze the Solution Collected Each Step

When the absolute recovery of the target substance is low, detect the solution collected after each step, then optimize the filtration method.

Detected Target	Reason	Solution
Sample	Improper strong solvent Concentrate the sample, change to weak solvent	
Wash Solution	Excessive washing	Decrease the volume of wash solution, or decrease the wash strength (increase the proportion of weak solvent or decrease the proportion of strong solvent)
Re-Elute*	Insufficient elution	Increase the elution volume, or increase the eluent strength (decrease the proportion of weak solvent or increase the proportion of strong solvent)

<sup>\*</sup>After elution, elute the SPE cartridge with stronger solvent again

### 2 Add Spike in Different Steps

Detected Target	Reason	Solution
Low recovery of blank spike	Improper SPE cartridge or improper operation	Replace the SPE cartridge or exclude improper solvent
Good recovery of blank spike, but low recovery of pre spike	Matrix effect interference	Optimize pretreatment method or use matrix standard for quantification
Good recovery of pre spike, but low recovery of matrix spike	Low extraction efficiency	Change the extraction solvent or the extraction method

Notes:

① Blank spike: add a spike to pure solvent. ② Pre spike: add a spike to blank matrix extract. ③ Matrix spiked: add a spike to blank matrix.

## Solid Phase Extraction (SPE) Cartridge Product List

SorbentPhase	Biocomma	Waters	Agilent	Phenomenex	Supelco	Agela
C18	Copure® C18	Sep-pak tC18	Bond Elut C18	Strata C18-E	Sepelclean ENVI-18	Cleanert C18
C18-Ne	Copure® C18-n	Sep-pak C18	Bond Elut C18OH	Strata C18-U		Cleanert C18-N
C8	Copure® C8	Sep-pak C8	Bond Elut C8	Strata C8	Sepelclean ENVI-8	Cleanert C8
CN	Copure® CN	Sep-pak CN	Bond Elut CN-E	Strata CN	Sepelclean LC-CN	Cleanert CN
$NH_2$	Copure® NH₂	Sep-pak NH <sub>2</sub>	Bond Elut NH <sub>2</sub>	Strata NH <sub>2</sub>	Sepelclean LC-NH <sub>2</sub>	Cleanert NH <sub>2</sub>
PSA	Copure® PSA		Bond Elut PSA	Strata PSA	Sepelclean PSA	Cleanert PSA
SAX	Copure® SAX		Bond Elut SAX	Strata SAX	Sepelclean LC-SAX	Cleanert SAX
SCX	Copure® SCX		Bond Elut SCX	Strata SCX	Sepelclean LC-SCX	Cleanert SCX
Silica	Copure® Silica	Sep-pak SI	Bond Elut SI	Strata SI-I	Sepelclean LC-SI	Cleanert Silica
HLB	Copure® HLB	Oasis HLB	Bond Elut Plexa	Strata-X	Supel-Select HLB	Cleanert PEP
HLB-lim	Copure® HLB-lim	Oasis PRIME HLB				
MCX	Copure® MCX	Oasis MCX	Bond Elut Plexa PCX	Strata-XC	Supel-Select SCX	Cleanert PCX
MAX	Copure® MAX	Oasis MAX	Bond Elut Plexa PAX	Strata-XA	Supel-Select SAX	Cleanert PAX
Florisil	Copure® Florisil	Sep-pak FI	Bond Elut FL	Strata FR-PR	Sepelclean LC- Florisil	Cleanert Florisil
Graphitized Bond	Copure® Carb-GCB		Bond Elut Carbon		Sepelclean ENVI Carb	Cleanert PestiCarb
Alumina-N	Copure® ALN	Sep-pak Alumina-N	Bond Elut Alumina-N	Strata Alumina-N	Sepelclean LC- Alumina-N	Cleanert AluminaN
Alumina-A	Copure® ALA	Sep-pak Alumina-A	Bond Elut Alumina-A	Strata Alumina-A	Sepelclean LC- Alumina-A	Cleanert AluminaA
Alumina-B	Copure® ALB	Sep-pak Alumina-B	Bond Elut Alumina-B	Strata Alumina-B	Sepelclean LC- Alumina-B	Cleanert AluminaB
GCB/NH <sub>2</sub>	Copure® Carb-GCB/NH <sub>2</sub>		Bond Elut Carb/NH <sub>2</sub>		Sepelclean ENVI Carb/NH <sub>2</sub>	Cleanert PestiCarb/NH <sub>2</sub>
GCB/PSA	Copure® Carb-GCB/PSA		Bond Elut Carb/PSA		Sepelclean ENVI Carb-II/PSA	

## **Polymer Sorbent**

Biocomma® provides various specifications and sorbents of polymeric SPE Cartridges. Each batch has passed performance verification to meet the pretreatment needs of various sample matrices. We provide excellent products of high recoveries and good stability to customers.

Copure® poly HLB

Copure® poly HLB

### **Copure® Polymer SPE Cartridges**

## **HLB Hydrophilic-Lipophilic Balanced**

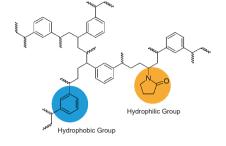
Extracting non-polar to moderately polar acidic, neutral and alkaline compounds **Specifications** 

Surface area:  $600 \text{ m}^2/\text{g}$  Particle size:  $40 \mu \text{m}$  Pore size: 300 Å

#### **Ordering Information**

Cat#	Description	Qty.
COHLB130	30mg/1mL	100 Pcs/Box
COHLB360	60mg/3mL	50 Pcs/Box
COHLB3200	200mg/3mL	50 Pcs/Box
COHLB6150	150mg/6mL	30 Pcs/Box
COHLB6200	200mg/6mL	30 Pcs/Box
COHLB6500	500mg/6mL	30 Pcs/Box
COHLB12500	500mg/12mL	20 Pcs/Box

Note: equivalent to Waters Oasis HLB



### **MAX Mixed-mode Anion Exchange**

Extracting acidic compounds

**Specifications** 

Surface area: 600 m<sup>2</sup>/g

### **Ordering Information**

Cat#	Description	Qty.
COMAX130	30mg/1mL	100 Pcs/Box
COMAX360	60mg/3mL	50 Pcs/Box
COMAX3200	200mg/3mL	50 Pcs/Box
COMAX6150	150mg/6mL	30 Pcs/Box
COMAX6200	200mg/6mL	30 Pcs/Box
COMAX6500	500mg/6mL	30 Pcs/Boxx
COMAX12500	500mg/12mL	20 Pcs/Box

Note: equivalent to Waters Oasis MAX

drophobic Group Strong Cation Exchanger

## **MCX Mixed-mode Cation Exchange**

Extracting alkaline compounds

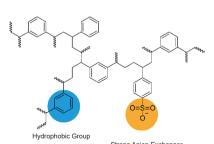
**Specifications** 

Surface area:  $600 \text{ m}^2/\text{g}$  Particle size:  $40 \mu \text{m}$  Pore size: 300 Å

### **Ordering Information**

Cat#	Description	Qty.
COMCX130	30mg/1mL	100 Pcs/Box
COMCX360	60mg/3mL	50 Pcs/Box
COMCX3200	200mg/3mL	50 Pcs/Box
COMCX6150	150mg/6mL	30 Pcs/Box
COMCX6200	200mg/6mL	30 Pcs/Box
COMCX6500	500mg/6mL	30 Pcs/Box
COMCX12500	500mg/12mL	20 Pcs/Box

Note: equivalent to Waters Oasis MCX



### **WCX Weak Cation Exchange**

Extracting strong bases

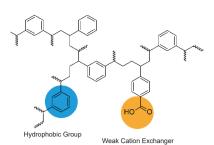
#### **Specifications**

Surface area: 600 m²/g Particle size:40 µm Pore size:300 Å

### **Ordering Information**

Cat#	Description	Qty.
COWCX130	30mg/1mL	100 Pcs/Box
COWCX360	60mg/3mL	50 Pcs/Box
COWCX3200	200mg/3mL	50 Pcs/Box
COWCX3500	500mg/3mL	50 Pcs/Box
COWCX6150	150mg/6mL	30 Pcs/Box
COWCX6200	200mg/6mL	30 Pcs/Box
COWCX6500	500mg/6mL	30 Pcs/Box

Note: equivalent to Waters Oasis WCX



### **WAX Weak Anion Exchange**

Extracting strong acids

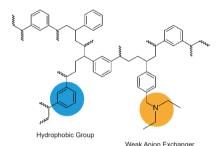
### **Specifications**

Surface area:  $600 \text{ m}^2/\text{g}$  Particle size:  $40 \mu \text{m}$  Pore size: 300 Å

### **Ordering Information**

Cat#	Description	Qty.
COWAX130	30mg/1mL	100 Pcs/Box
COWAX360	60mg/3mL	50 Pcs/Box
COWAX3200	200mg/3mL	50 Pcs/Box
COWAX3500	500mg/3mL	50 Pcs/Box
COWAX6150	150mg/6mL	30 Pcs/Box
COWAX6200	200mg/6mL	30 Pcs/Box
COWAX6500	500mg/6mL	30 Pcs/Box

Note: equivalent to Waters Oasis WAX



## **HLB Lim Cartridges for Multi-Residue Analysis of Veterinary Drug**

HLB Lim cartridge is a new type of solid phase extraction column packed with special sorbent. Comparing to traditional SPE cartridges, it removes interfering substances such as fat, phospholipid and pigment faster to reduce matrix effect.

### **Features**

- One step purification and shorter pretreatment time
- High recovery rate and good reproducibility.
- Suitable for multi-matrix and multi-residue analysis of veterinary drug.
- Save solvent and cost

### **Typical Recovery**

Compound	Recovery (%)
Tetracycline	97.7
Chlortetracycline	87.9
Oxytetracycline	87.7
Ractopamine	95.8
Salbutamol	108
Clenbuterol	91.6

Cat#	Description	Qty.
COHLB3200-Lim	Copure® HLB Lim Cartridges,3 mL	50 Pcs/Box



## **SPE Cartridges**

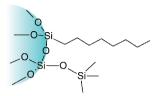
SPE cartridges generally include traditional silica-based SPE cartridges and inorganic chemical based SPE cartridges. Biocomma® independently researches and develops sorbents to ensure its stability and performance. Normal phase, reverse phase, and ion exchange phase are available to improve sample preparation efficiency.



### **Copure® Classic SPE Catridges**

### **C8 Octyl**

Extracting non-polar compounds



### **Specifications**

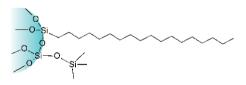
Carbon content: 9% Surface area:  $280 \text{ m}^2/\text{g}$ Particle size:  $40 - 75 \mu\text{m}$  Pore size: 70 Å

### **Ordering Information**

Cat. #	Description	Qty.
COC81100	100mg/1mL	100 Pcs/Box
COC83200	200mg/3mL	50 Pcs/Box
COC83500	500mg/3mL	50 Pcs/Box
COC86500	500mg/6mL	30 Pcs/Box
COC861000	1000mg/6mL	30 Pcs/Box
COC8121000	1000mg/12mL	20 Pcs/Box
COC8122000	2000mg/12mL	20 Pcs/Box

## C18 Endcapped Octadecyl

Extracting non-polar compounds



### **Specifications**

Carbon content: 17.6% Surface area: 300 m $^2$ /g Particle size: 40 - 60  $\mu$ m Pore size: 70 Å

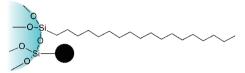
### **Ordering Information**

Cat.#	Description	Qty.
COC181100	100mg/1mL	100 Pcs/Box
COC18360	60mg/3mL	50 Pcs/Box
COC183200	200mg/3mL	50 Pcs/Box
COC183500	500mg/3mL	50 Pcs/Box
COC186500	500mg/6mL	30 Pcs/Box
COC1861000	1000mg/6mL	30 Pcs/Box
COC18121000	1000mg/12mL	20 Pcs/Box
COC18122000	2000mg/12mL	20 Pcs/Box

Note: equivalent to Waters Sep-Pak tC18/C18, Agilent Bond Elut C18, Supelco Supelclean ENVI-18

## C18A Unendcapped Octadecyl

Extracting non-polar compounds



### **Specifications**

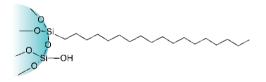
Carbon content: 12% Surface area: 300 m $^2$ /g Particle size: 40 - 75  $\mu$ m Pore size: 70 Å

### **Ordering Information**

Cat. #	Description	Qty.
COC18A1100	100mg/1mL	100 Pcs/Box
COC18A3200	200mg/3mL	50 Pcs/Box
COC18A3500	500mg/3mL	50 Pcs/Box
COC18A6500	500mg/6mL	30 Pcs/Box
COC18A61000	1000mg/6mL	30 Pcs/Box
COC18A121000	1000mg/12mL	20 Pcs/Box
COC18A122000	2000mg/12mL	20 Pcs/Box

## C18N Unendcapped Octadecyl

Extracting polar and non-polar compounds



### **Specifications**

Carbon content: 17% Surface area: 300 m²/g Particle size: 40 - 75  $\mu$ m Pore size: 70 Å

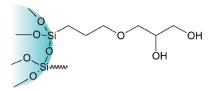
### **Ordering Information**

Cat.#	Description	Qty.
COC18N1100	100mg/1mL	100 Pcs/Box
COC18N3200	200mg/3mL	50 Pcs/Box
COC18N3500	500mg/3mL	50 Pcs/Box
COC18N6500	500mg/6mL	30 Pcs/Box
COC18N61000	1000mg/6mL	30 Pcs/Box
COC18N121000	1000mg/12mL	20 Pcs/Box
COC18N122000	2000mg/12mL	20 Pcs/Box

Note: equivalent to Agilent Bond Elut C18-OH

## **Diol Dihydroxy**

Extracting polar compounds



#### **Specifications**

Surface area: 290 m $^2$ /g Carbon content:5.5% Particle size: 40–75  $\mu$ m Pore size: 70 Å

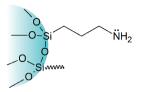
#### **Ordering Information**

Cat.#	Description	Qty.
CODI1100	100mg/1mL	100 Pcs/Box
CODI3200	200mg/3mL	50 Pcs/Box
CODI3500	500mg/3mL	50 Pcs/Box
CODI6500	500mg/6mL	30 Pcs/Box
CODI61000	1000mg/6mL	30 Pcs/Box
CODI121000	1000mg/12mL	20 Pcs/Box
CODI122000	2000mg/12mL	20 Pcs/Box

Note: equivalent to Waters Sep-Pak Diol & Agilent Bond Diol 2OH

## NH<sub>2</sub> Aminopropyl

Extracting moderately polar and acidic compounds



#### **Specifications**

Surface area: 200 m $^2$ /g Carbon content: 4.5% Particle size: 40-75  $\mu$ m Pore size: 70 Å

#### **Ordering Information**

Cat.#	Description	Qty.
CONH1100	100mg/1mL	100 Pcs/Box
CONH3100	100mg/3mL	50 Pcs/Box
CONH3200	200mg/3mL	50 Pcs/Box
CONH3500	500mg/3mL	50 Pcs/Box
CONH6200	200mg/6mL	30 Pcs/Box
CONH6500	500mg/6mL	30 Pcs/Box
CONH61000	1000mg/6mL	30 Pcs/Box
CONH121000	1000mg/12mL	20 Pcs/Box
CONH122000	2000mg/12mL	20 Pcs/Box

Note: equivalent to Waters Sep-Pak NH2 & Agilent Bond Elut NH2

### Silica Unbounded Silica Gel

Extracting polar compounds



#### **Specifications**

Surface area:  $480 \text{ m}^2/\text{g}$  Particle size: 40 –  $75 \text{ }\mu\text{m}$  Pore size: 70

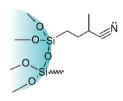
#### **Ordering Information**

Cat.#	Description	Qty.
COSIL1100	100mg/1mL	100 Pcs/Box
COSIL3200	200mg/3mL	50 Pcs/Box
COSIL3500	500mg/3mL	50 Pcs/Box
COSIL6500	500mg/6mL	30 Pcs/Box
COSIL61000	1000mg/6mL	30 Pcs/Box
COSIL121000	1000mg/12mL	20 Pcs/Box
COSIL122000	2000mg/12mL	20 Pcs/Box

Note: equivalent to Agilent Bond Elut Silica & Waters Sep-Pak Silica

## **CN Cyanopropyl**

Extracting polar and non-polar compounds, enriching metal ions

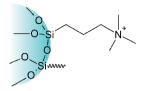


#### **Specifications**

Cat.#	Description	Qty.
COCN1100	100mg/1mL	100 Pcs/Box
COCN3200	200mg/3mL	50 Pcs/Box
COCN3500	500mg/3mL	50 Pcs/Box
COCN6500	500mg/6mL	30 Pcs/Box
COCN61000	1000mg/6mL	30 Pcs/Box
COCN121000	1000mg/12mL	20 Pcs/Box
COCN122000	2000mg/12mL	20 Pcs/Box

### **SAX Strong Anion Exchange**

Extracting acidic compounds



#### **Specifications**

Surface area: 510 m $^2$ /g Particle size: 40–75  $\mu$ m Pore size: 70 Å

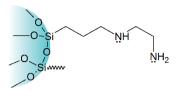
#### **Ordering Information**

Cat.#	Description	Qty.
COSAX130	30mg/1mL	100 Pcs/Box
COSAX1100	100mg/1mL	100 Pcs/Box
COSAX3100	100mg/3mL	50 Pcs/Box
COSAX3200	200mg/3mL	50 Pcs/Box
COSAX3500	500mg/3mL	50 Pcs/Box
COSAX6200	200mg/6mL	30 Pcs/Box
COSAX6500	500mg/6mL	30 Pcs/Box
COSAX61000	1000mg/6mL	30 Pcs/Box
COSAX121000	1000mg/12mL	20 Pcs/Box
COSAX122000	2000mg/12mL	20 Pcs/Box

Note: equivalent to Supelco Supelclean LC-SAX

## PSA Primary-Secondary Amine

Extracting strong acids, polar compounds and metal ions



#### **Specifications**

Surface area: 500 m²/g Carbon content: 8% Particle size: 50-75 µm Pore size: 70 Å

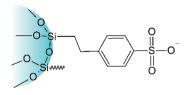
#### **Ordering Information**

Cat.#	Description	Qty.
COPSA1100	100mg/1mL	100 Pcs/Box
COPSA3100	100mg/3mL	50 Pcs/Box
COPSA3200	200mg/3mL	50 Pcs/Box
COPSA3500	500mg/3mL	50 Pcs/Box
COPSA6200	200mg/6mL	30 Pcs/Box
COPSA6500	500mg/6mL	30 Pcs/Box
COPSA61000	1000mg/6mL	30 Pcs/Box
COPSA121000	1000mg/12mL	20 Pcs/Box
COPSA122000	2000mg/12mL	20 Pcs/Box

Note: equivalent to Agilent Bond Elut PSA

## **SCX Strong Cation Exchange**

Extracting basic compounds



#### **Specifications**

Surface area: 510 m²/g  $\,$  Particle size: 40 – 75  $\mu m$  Pore size: 70 Å

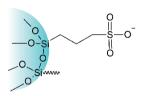
#### **Ordering Information**

Cat.#	Description	Qty.
COSCX130	30mg/1mL	100 Pcs/Box
COSCX1100	100mg/1mL	100 Pcs/Box
COSCX3100	100mg/3mL	50 Pcs/Box
COSCX3200	200mg/3mL	50 Pcs/Box
COSCX3500	500mg/3mL	50 Pcs/Box
COSCX6200	200mg/6mL	30 Pcs/Box
COSCX6500	500mg/6mL	30 Pcs/Box
COSCX61000	1000mg/6mL	30 Pcs/Box
COSCX121000	1000mg/12mL	20 Pcs/Box
COSCX122000	2000mg/12mL	20 Pcs/Box

Note: equivalent to Agilent Bond Elut SCX

## **PRS Propylsulfonic Acid**

Extracting weak bases in biological fluids



#### **Specifications**

Surface area: 310 m $^2$ /g Carbon content: 4.5% Particle size: 40-75  $\mu$ m Pore size: 70 Å

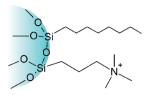
#### **Ordering Information**

Cat.#	Format	Qty.
COPRS1100	100mg/1mL	100 Pcs/Box
COPRS3200	200mg/3mL	50 Pcs/Box
COPRS3500	500mg/3mL	50 Pcs/Box
COPRS6500	500mg/6mL	30 Pcs/Box
COPRS61000	1000mg/6mL	30 Pcs/Box
COPRS121000	1000mg/12mL	20 Pcs/Box

Note: equivalent to Agilent Bond Elut PRS

## **C8/SAX Octyl/Strong Anion Exchange**

Extracting acidic drugs in biological fluids



#### **Specifications**

Surface area: 510 m<sup>2</sup>/g Particle size: 40-75 µm Pore size: 70 Å

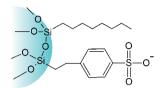
#### **Ordering Information**

Cat.#	Description	Qty.
COC8SAX1100	100mg/1mL	100 Pcs/Box
COC8SAX3200	200mg/3mL	50 Pcs/Box
COC8SAX3500	500mg/3mL	50 Pcs/Box
COC8SAX6500	500mg/6mL	30 Pcs/Box
COC8SAX61000	1000mg/6mL	30 Pcs/Box
COC8SAX121000	1000mg/12mL	20 Pcs/Box
COC8SAX122000	2000mg/12mL	20 Pcs/Box

Note: equivalent to Agilent Bond Elut Certify II & Phenomenex Screen-A

## **C8/SCX Octyl/Strong Cation Exchange**

Extracting basic drugs in biological fluids



#### **Specifications**

Surface area: 510 m<sup>2</sup>/g Particle size: 40-75 µm Pore size: 70 Å

#### **Ordering Information**

Cat.#	Description	Qty.
COC8SCX1100	100mg/1mL	100 Pcs/Box
COC8SCX3200	200mg/3mL	50 Pcs/Box
COC8SCX3500	500mg/3mL	50 Pcs/Box
COC8SCX6500	500mg/6mL	30 Pcs/Box
COC8SCX61000	1000mg/6mL	30 Pcs/Box
COC8SCX121000	1000mg/12mL	20 Pcs/Box
COC8SCX122000	2000mg/12mL	20 Pcs/Box

Note: equivalent to Agilent Bond Elut Certify & Phenomenex Screen-C

## Carb-GCB Graphitized Carbon Carb-GCB/PSA **Black**

Extracting herbicides in drinking water

#### **Specifications**

Surface area: 100 m<sup>2</sup>/g Particle size: 100-300 mesh

#### **Ordering Information**

Cat.#	Description	Qty.
COGCB1100	100mg/1mL	100 Pcs/Box
COGCB3200	200mg/3mL	50 Pcs/Box
COGCB3500	500mg/3mL	50 Pcs/Box
COGCB6500	500mg/6mL	30 Pcs/Box
COGCB61000	1000mg/6mL	30 Pcs/Box
COGCB121000	1000mg/12mL	20 Pcs/Box
COGCB122000	2000mg/12mL	20 Pcs/Box

Note: equivalent to Agilent Bond Elut Carbon

### **Graphitized Carbon Black/ Primary-Secondary Amine Bilayer**

Cleanup of samples in multiresidual pesticide analysis

#### **GCB Specifications**

Surface area: 100 m<sup>2</sup>/g Particle size: 100-300 mesh

#### **PSA Specifications**

Carbon content: 8% Surface area: 500 m2/g Particle size: 40-75 μm Pore size: 70 Å

Cat.#	Description	Qty.
COPSGC32525	250mg/250mg/3mL	50 Pcs/box
COPSGC655	500mg/500mg/6mL	30 Pcs/Box
COPSGC653	300mg/500mg/6mL	30 Pcs/Box

### Carb-GCB/NH<sub>2</sub>

#### **Graphitized Carbon Black/Aminopropyl Bilayer**

Cleanup of samples in multiresidual pesticide analysis

#### **GCB Specifications**

Surface area: 100 m<sup>2</sup>/g Particle size: 100-300 mesh

#### **NH2 Specifications**

Carbon content: 4.5% Surface area: 200 m2/g Particle size: 40 - 75 µm Pore size: 70 Å

#### **Ordering Information**

Cat.#	Description	Qty.
CONHGC32525	250mg/250mg/3mL	50 Pcs/Box
CONHGC655	500mg/500mg/6mL	30 Pcs/Box
CONHGC653	300mg/500mg/6mL	30 Pcs/Box

## **PH Phenyl**

Extracting non-polar compounds

#### **Specifications**

Surface area:  $480\text{m}^2/\text{g}$  Carbon content: 8.8% Particle size:  $40\text{--}75\,\mu\text{m}$  Pore size:  $70\,\text{Å}$ 

#### **Ordering Information**

Cat.#	Description	Qty.
COPH3500	500mg/3mL	50 Pcs/Box
COPH6500	500mg/6mL	30 Pcs/Box

### Florisil Pesticide Grade Florisil

#### Extracting multiresidual pesticides

#### **Specifications**

Particle size: 150 – 250  $\mu m$ 

#### **Ordering Information**

Cat.#	Description	Qty.
COFL1100	100mg/1mL	100 Pcs/Box
COFL3200	200mg/3mL	50 Pcs/Box
COFL3500	500mg/3mL	50 Pcs/Box
COFL6500	500mg/6mL	30 Pcs/Box
COFL61000	1000mg/6mL	30 Pcs/Box
COFL121000	1000mg/12mL	20 Pcs/Box
COFL122000	2000mg/12mL	20 Pcs/Box

## ALA, ALN, ALB, Alumina

Extracting aromatic amines

#### **Specifications**

Surface area >150 m²/g pH: Acidic Alumina pH 4.0 Neutral Alumina pH 7.0 Basic Alumina pH 9.5

#### **Ordering Information**

1) Acidic Alumina (ALA)

Cat.#	Description	Qty.
COALA1100	100mg/1mL	100 Pcs/Box
COALA3200	200mg/3mL	50 Pcs/Box
COALA3500	500mg/3mL	50 Pcs/Box
COALA6500	500mg/6mL	30 Pcs/Box
COALA61000	1000mg/6mL	30 Pcs/Box
COALA121000	1000mg/12mL	20 Pcs/Box
COALA122000	2000mg/12mL	20 Pcs/Box

Note: equivalent to Waters Sep-Pak Alumina-A

#### ② Neutral Alumina(ALN)

Description	Qty.
100mg/1mL	100 Pcs/Box
200mg/3mL	50 Pcs/Box
500mg/3mL	50 Pcs/Box
500mg/6mL	30 Pcs/Box
1000mg/6mL	30 Pcs/Box
1000mg/12mL	20 Pcs/Box
2000mg/12mL	20 Pcs/Box
	100mg/1mL 200mg/3mL 500mg/3mL 500mg/6mL 1000mg/6mL 1000mg/12mL

Note: equivalent to Waters Sep-Pak Alumina-N

#### 3 Basic Alumina(ALB)

Cat.#	Description	Qty.
COALB1100	100mg/1mL	100 Pcs/Box
COALB3200	200mg/3mL	50 Pcs/Box
COALB3500	500mg/3mL	50 Pcs/Box
COALB6500	500mg/6mL	30 Pcs/Box
COALB61000	1000mg/6mL	30 Pcs/Box
COALB121000	1000mg/12mL	20 Pcs/Box
COALB122000	2000mg/12mL	20 Pcs/Box

Note: equivalent to Waters Sep-Pak Alumina-B

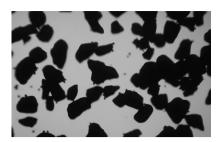
## **Bulk Sorbents**

Suitable for filling SPE and QuEChERS

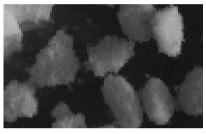
Copure® bulk packing material has been rigorously evaluated by Doteon

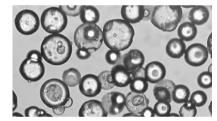
Biotech and is suitable for self-filling SPE columns and QuEChERS kits.

Cat.#	Description	Qty.
HLB-1-50	HLB (Hydrophilic-Lipophilic Balance) Polymer Filler	50g/bottle
MCX-1-50	MCX (Mixed Strong Cation Exchange) Polymer Filler	50g/bottle
MAX-1-50	MAX (Mixed Strong Anion Exchange) Polymer Filler	50g/bottle
WCX-1-50	WCX (Weak Anion Exchange) Polymer Filler	50g/bottle
WAX-1-50	WAX (Weak Anion Exchange) Polymer Filler	50g/bottle
C18-1-100	C18 (Endcapped Octadecyl) Silica Gel Filler	100g/bottle
C18N-1-100	C18N (Non-Endcapped Octadecyl) Silica Gel Filler	100g/bottle
C18A-1-100	C18A (Hydrophilic Octadecyl) Silica Gel Filler	100g/bottle
C8-1-100	C8 (Octyl) Silica Gel Filler	100g/bottle
SILICA-1-100	Silica (Non-Bonded Silica) Filler	100g/bottle
FLORISIL-1-100	Pesticide Residue Grade Florisil Filler	100g/bottle
DIOL-1-100	Diol (Diol Group) Silica Gel Filler	100g/bottle
CN-1-100	CN (Cyanopropyl) Silica Gel Filler	100g/bottle
ALA-1-100	ALA (Acidic Alumina) Filler	100g/bottle
ALN-1-100	ALN (Neutral Alumina) Filler	100g/bottle
ALB-1-100	ALB (Alkaline Aluminum Oxide) Filler	100g/bottle
GCB-1-50	Carb-GCB (Graphitized Carbon Black) Filler	100g/bottle
NH-1-100	NH2 (Aminopropyl) Silica Gel Filler	100g/bottle
PSA-2-100	PSA (Ethylene Diamine-N-Propyl) Silica Gel Filler	100g/bottle
PRS-1-100	PRS (Benzenesulfonic Acid Group) Silica Gel Filler	100g/bottle
SCX-1-100	SCX (Strong Cation Exchange) Silica Gel Filler	100g/bottle
SAX-2-100	SAX (Strong Anion Exchange) Silica Gel Filler	100g/bottle
C8SCX-100	C8/SCX (Octyl/Strong Cation Exchange) Mixed Silica Gel Filler	100g/bottle
C8SAX-100	C8/SAX (Octyl/Strong Anion Exchange) Mixed Silica Gel Filler	100g/bottle









## **Special SPE Cartridges**



## **SLE Cartridges for AZO Dye Testing**

#### Determination of banned azo dyes in textile products

Most currently-used dyes and pigments in textile and leather industries are azo dye compounds which under reductive conditions, are decomposed to form fatty or aromatic amines. Those amines derived from azo compounds, some aromatic amines are believed to be carcinogenic or potentially carcinogenic and banned in EU, the U.S. and China.

Biocomma provides SLE cartridges dedicatedly optimized for determining banned azo dyes in textile products, helping you manage product quality quickly and reliably and protect health of your customers.

#### **Features**

- Packed with dedicatedly optimized diatomaceous earth
- Frits with excellent flowrate control technology
- Complying with China and EU official methods
- Superb performance proven by China's most authoritative textile testing institute



Analyte	Recovery Rate
2,4-diaminoanisole	>20
o-toluidine	>50
2,4-diaminotoluene	>50
other aromatic amines	>70

#### Related Methods

 EN 14362-1:2017 Textiles: methods for determination of certain aromatic amines derived from azo colorants

Cat. #	Description	Qty.
COAZO060	SLE Cartridges for Azo Dye Testing	4 Pcs/PK





# SPE Cartridges for Pesticide Residue Testing in Tea

Copure® SPE Cartridges have good performance for pigment, tea polyphenol, organic acid etc in tea.

#### **Features**

- Packed with dedicatedly optimized diatomaceous earth
- Frits with excellent flowrate control technology
- Complying with China and EU official methods
- Superb performance proven by China's most authoritative textile testing institute

#### **Ordering Information**

Cat. #	Description	Qty.
COTPT6	6 mL	30 Pcs/Box
COTPT12	12 mL	20 Pcs/Box

# **Cartridges for Ion Chromatography Preparation**

In ion chromatography, organic, metal and other interfering ions may affect the analysis of target compounds. The pretreatment columns are based on the principle of reversed phase adsorption or ion exchange, can effectively remove interferences and ensure the accuracy of the results.

#### **Ordering Information**

Cat. #	Description	Format	Qty.
COICC1801	C18 catridge	300mg	50 Pcs/Box
COICRP01	RP catridge	1mL	50 Pcs/Box
COICH01	H catridge	1mL	50 Pcs/Box
COICAG01	Ag catridge	1mL	50 Pcs/Box
COICNA01	Na catridge	1mL	50 Pcs/Box
COICAGH01	Ag/H catridge	1mL	50 Pcs/Box
COICAGNA01	Ag/Na catridge	1mL	50 Pcs/Box

# Destaining Cartridges for Chrome (VI) Testing

Chrome (VI) in leather articles are converted from Chrome (III) in the process of leather production. The toxic substance has been banned by China and EU. To determine Chrome (VI), pigments in leather should be removed firstly.

Destaining cartridges for Chrome (VI) testing are dedicatedly optimized, capable of helping you remove pigments.

#### **Features**

- Optimized for destaining leather samples
- Improved recovery and repeatability
- Complying with official methods

#### **Applications**

Determination of Chrome (VI) in leather.

#### **Related Methods**

 ISO 17075:2007 Leather -- Chemical tests -- Determination of chromium(VI) content

Cat.#	Description	Qty.
COCR3500	500mg/3mL	50 Pcs/Box
COCR6500	500mg/6mL	30 Pcs/Box
COCR121000	1000mg/12mL	20 Pcs/Box

# **Cartridges for Plasticizer Testing**

#### **Determination of Phthalate Esters**

Plasticizers are currently used in plastic and packaging food contact materials and their products are mostly phthalate esters (PAEs), some of which are carcinogenic and reproductively toxic. As toxic PAEs leached into food cause health risks for human beings, their use is strictly limited in EU, the U.S., China, Japan, etc.

Biocomma's cartridges for plasticizer testing are made of glass tubes and PTFE frits that prevent impurities from being introduced into the sample. Dedicatedly optimized PSA sorbent also enables thorough cleanup and satisfactory recoveries for official methods.

#### **Features**

- Chemically inert glass tubes
- High purity PTFE frits
- Satisfactory recoveries for official methods



#### **Applications**

Determination of phthalate esters in foods

#### **Related Methods**

• SN/T 3147-2012 Determination of phthalate esters in foods for export

#### **Ordering Information**

Cat.#	Description	Qty.
COPAE655	500mg/500mg/6mL	30 Pcs/Box
COPAE61000	1000mg/6mL	30 Pcs/Box

### Polyamide(PA) SPE Cartridges

#### For Testing Artificial Color in Extraction Samples

PA is a macromolecule substance polymerized by Amide monomer(hexanolactam, adipamide, Oxalic acid), its amido linkage is easily to bring Hydrogen bond with other Polar bond groups, this enables to remove interferents such as artificial color from samples, this is used for testing artificial color.

PA SPE cartridges are filled with special optimized PA sorbent which enables its good decoloring and high recovery.



#### **Specifications**

Particle Size: 100-200 mesh

#### **Related Methods**

 EN ISO17075-2007 Leather-Chemical Tests-Determination of chromium(VI) content

Cat. #	Description	Qty.
COPACR36	500mg/3mL	50 Pcs/Box
COPACR66	500mg/6mL	30 Pcs/Box
COPACR61	1000mg/6mL	30 Pcs/Box
COPACR122	2000mg/12mL	20 Pcs/Box





## Aflatoxin Immunoaffinity Columns

Aflatoxin is a highly toxic substance, which is harmful to human and animal liver tissues. Aflatoxin Immunoaffinity Columns are based on the antigen-antibody specific reaction, binding the antibody to the gel to combine with aflatoxin specificity, thereby achieving the effect of separation and purification.



Cat.#	Description	Qty.
COAFMT101	Aflatoxin B1,B2,G1,G2 , 1mL	25 Pcs/Box
COAFMT103	Aflatoxin B1,B2,G1,G2 , 3mL	20 Pcs/Box
COAFMB101	Aflatoxin B1, 1mL	25 Pcs/Box
COAFMB103	Aflatoxin B1, 3mL	20 Pcs/Box
COAFMM101	Aflatoxin M1, 1mL	25 Pcs/Box

20 Pcs/Box

## Ochratoxin A Immunoaffinity Columns

Aflatoxin M1, 3mL

Ochratoxin A is very common in moldy grains and feed. It comes from the aspergillus and penicillium on various crops (wheat, corn, barley, oats, rye, rice and millet), peanuts, vegetables (beans), etc., which cause enormous harm to the kidneys and livers of human and animal. Ochratoxin A immunoaffinity column can selectively adsorb ochratoxin A in the sample extract, so as to have a very targeted purification effect on ochratoxin A in the sample solution.



#### Ordering Information

COAFMM103

Cat.#	Description	Qty.
COAFOCH101	Ochratoxin A, 1mL	25 Pcs/Box
COAFOCH103	Ochratoxin A, 3mL	20 Pcs/Box

## Deoxynivalenol Immunoaffinity Columns

DON, also known as deoxynivalenol, is mostly distributed in wheat, barley, corn and other grains, and has a certain harmful effect on the human body. It is three-level carcinogen in the EU classification standard. DON Immunoaffinity Columns can selectively separate deoxynivalenol from the sample by the specific binding of antibody and antigen to achieve good purification effect.



#### **Ordering Information**

Cat.#	Description	Qty.
COAFDON101	Deoxynivalenol, 1mL	25 Pcs/Box
COAFDON103	Deoxynivalenol, 3mL	20 Pcs/Box

## Zearalenone Immunoaffinity Columns

Zearalenone is widely found in moldy corn, sorghum, wheat, oats, barley and other cereal crops and milk, and is the most widely contaminated Fusarium toxin in the world. It has estrogenic effects, mainly acts on the reproductive system, and is very harmful to humans and animals. Zearalenone Immunoaffinity Columns can be used to extract and enrich zearalenone from samples ,which makes high targeted purification performance come true.



Cat.#	Description	Qty.
COAFZEA101	Zearalenone, 1mL	25 Pcs/Box
COAFZEA103	Zearalenone, 3mL	20 Pcs/Box

## T-2 Toxin Immunoaffinity Columns

T-2 toxin is a mycotoxin produced by a variety of Fusarium species. It mainly pollutes wheat, barley, corn and other food crops and their products, and poses a great harm to human health and animal husbandry. T-2 toxin immunoaffinity column can selectively adsorb the T-2 toxin in the sample solution to specifically purify T-2 toxin. The purified sample solution can be directly used in the liquid phase test.

#### **Ordering Information**

Cat.#	Description	Qty.
COAFT2101	T-2 toxin, 1mL	25 Pcs/Box
COAFT2103	T-2 toxin, 3mL	20 Pcs/Box

# **Chloramphenicol Immunoaffinity Columns**

Chloramphenicol is an antibiotic frequently found in food and feed. The Chloramphenicol Immunoaffinity Columns are specialized for the purification of chloramphenicol from complex matrices. This method offers ease of use, high sensitivity, and reliable results.

#### Relevant Standards:

GB 5009.222-2016 National Food Safety Standard - Determination of Patulin in Food

#### **Ordering Information**

Cat.#	Description	Qty.
COIAC109	Chloramphenicol, 1mL	25 Pcs/Box
COAFCTN109-3	Chloramphenicol, 3mL	20 Pcs/Box

## Vitamin B12 Immunoaffinity Columns

Vitamin B12, or cobalamin, is a vital water-soluble vitamin that plays an essential role in DNA synthesis and nervous system function. The Vitamin B12 Immunoaffinity Columns provide selective isolation and concentration of pure B12 from food matrices for accurate measurement.

#### Relevant Standards:

GB 5009.285-2022 National Food Safety Standard - Determination of Vitamin B12 in Food

#### **Ordering Information**

Cat.#	Description	Qty.
COAFB12103	Vitamin B12, 1mL	20 Pcs/Box

## Fumonisin FB Immunoaffinity Columns

Fumonisin FB is a mycotoxin, which is a watersoluble metabolite produced by Fusarium moniliforme. It is a kind of diester compound composed by different polyhydric alcohols and glycerol tricarboxylic acid. Fumonisin has FA1, FA2, FB1, FB2, FB3 etc. FB1 is the main component.

#### **Ordering Information**

Cat.#	Description	Qty.
COAFFB101	Fumonisin FB, 1mL	25 Pcs/Box
COAFFB103	Fumonisin FB, 3mL	20 Pcs/Box

## Lactoferrin Immunoaffinity Columns

Lactoferrin is a naturally occurring protein with immunomodulatory and gut health benefits, widely used in milk and infant formulas. The Lactoferrin Immunoaffinity Columns are specifically tailored for the selective extraction and purification of lactoferrin from milk-based samples. The purified lactoferrin is then analyzed by HPLC or LC-MS for concentration and purity.

#### Relevant Standards:

GB 5009.299–2024 National Food Safety Standard - Determination of Lactoferrin in Food

#### **Ordering Information**

Cat.#	Description	Qty.
COAFHP103	Lactoferrin, 1mL	10 Pcs/Box

## Tetrodotoxin Immunoaffinity Columns

Tetrodotoxin is an aminoperhydroquinazoline compound, which is one of the most toxic neurotoxins found in nature. It was once considered to be the most toxic non-protein toxin in nature. The toxin has a local stimulating effect on the intestinal tract. After absorption, it acts on nerve endings and nerve centers rapidly. It can block sodium ion channels on nerve excitation membrane with high selectivity and affinity, and block nerve conduction, thus causing nerve paralysis and death. Tetrodotoxin immunoaffinity column has a strong targeted purification effect on the extraction and enrichment of tetrodotoxin.

Cat.#	Description	Qty.
COAFTTX10	Tetrodotoxin, 1mL	25 Pcs/Box
COAFTTX103	Tetrodotoxin, 3mL	20 Pcs/Box

# Two-in-one (AO) Immunoaffinity Columns

Copure® AO Immunoaffinity columns are highly efficient immunoaffinity columns for the purification of aflatoxins B1, B2, G1, G2, and ochratoxin A from samples of grain, food, feed, nuts, peanuts, soy sauce, and more. The product utilizes advanced immunoaffinity technology to precisely separate and remove interfering substances from complex matrices, providing higher analytical accuracy.

#### **Ordering Information**

Cat.#	Description	Qty.
COAFAO203	3mL	10 Pcs/Box

# Three-in-one (ADZ) Immunoaffinity Columns

Copure® ADZ immunoaffinity columns specifically purify and concentrate aflatoxin B1, B2, G1, G2, DON and zearalenone in samples. Copure® ADZ immunoaffinity column is widely used in the extraction of grain, food, feed, nuts, peanuts, soy sauce, vinegar, pepper, pepper, medicinal materials and wine. The method is high essicency, easy operation and high accuracy.

#### **Ordering Information**

Cat.#	Description	Qty.
COAFADZ303	3mL	10 Pcs/Box

# Four-in-one (ADOZ) Immunoaffinity Columns

Copure® ADOZ immunoaffinity column is suitable for the purification of aflatoxin B1, B2, G1, G2, zearalenone, DON, ochratoxin A in samples of grain, food, feed, nuts, peanuts, soy sauce, etc. This method can treat four toxins at one time, greatly improving the pretreatment efficiency, and the recoveries of the four toxins can reach more than 80%.

#### **Ordering Information**

Cat.#	Description	Qty.
COAFADOZ403	3mL	10 Pcs/Box

## Hex ADOZ Immunoaffinity Columns

The Copure® AFADOZTF Immunoaffinity Columns are designed for the efficient purification and concentration of six mycotoxins: aflatoxins (B, G), ochratoxin A, fumonisins, T2 toxin, zearalenone, and deoxynivalenol. Widely used for the extraction and concentration of these mycotoxins from grains, food, feed, nuts, and oils, this hexafunctional column achieves high purification rates and ease of operation, enabling accurate and sensitive mycotoxin detection with recovery rates above 80% for each toxin.

#### **Ordering Information**

Cat.#	Description	Qty.
COAFADOZTF603	Hex ADOZ, 3mL	10 Pcs/Box

For more information on composite immunoaffinity columns, please contact 400-878-7248.

### **ELISA Kit**

ELISA (ELISA Kit) is the most widely used technology in enzyme immunoassay. In an ELISA assay, the antigen is immobilized to a solid surface. This is done either directly or via the use of a capture antibody itself immobilized on the surface. The antigen is then complexed to a detection antibody conjugated with a molecule amenable for detection such as an enzyme or a fluorophore.

#### **Features**

- This product is a quantitative detection kit based on the principle of immunocompetitive detection.
- It is simple and rapid to use, with accurate results and high sensitivity, and the accuracy rate is more than 95%.
- It is suitable for the detection of mycotoxins in grains, feed ingredients and other samples.

#### Application

Feed raw materials and finished feed, corn, rice, wheat, flour, nuts, peanuts and peanut products, vegetable oil, soy sauce, vinegar, spices, dairy products, milk, milk powder, cakes, wine, fish offal, fermentation broth, etc.

Cat.#	Description	Format
BC-201	Aflatoxin B1 ELISA Kit	96 wells
BC-201-48	Aflatoxin B1 ELISA Kit	48 wells
BC-202	Aflatoxin M1 ELISA Kit	96 wells
BC-202-48	Aflatoxin M1 ELISA Kit	48 wells
BC-203	Total Aflatoxin ELISA Kit	96 wells
BC-203-48	Total Aflatoxin ELISA Kit	48 wells
BC-204	Ochratoxin A ELISA Kit	96 wells
BC-204-48	Ochratoxin A ELISA Kit	48 wells
BC-205	Zearalenone ELISA Kit	96 wells
BC-205-48	Zearalenone ELISA Kit	48 wells
BC-206	Deoxynivalenol ELISA Kit	96 wells
BC-206-48	Deoxynivalenol ELISA Kit	48 wells

## Copure® Clean-up Columns

Copure® Multi-Functional Purification Column contains multiple adsorption matrices to adsorb quickly and selectively of lipids, organic acids, proteins, pigments and other impurities. The matrices do not absorb the target to realize fast purification.

#### **Features**

- Complete purification in 30s
- Easy operation and high efficiency
- Stored at room temperature for more than 18 months
- Recovery rate ≥ 90%, RSD ≤ 5%

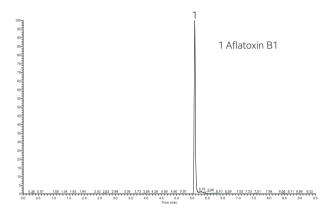


Figure 1 Chromatogram for the detection of aflatoxin B1 in peanut oil spiked at 20  $\mu g/kg$ 

#### **Procedures**

- 1. Extract sample.
- 2. Add the extracted sample to the test tube and insert the rubber-tipped end of the purification column into the test tube.
- 3. Push the purification column to the bottom of the test tube.
- 4. The purified sample passes through sorbent to the top of the purification column.
- 5. The purified sample can be analyzed after concentrate.

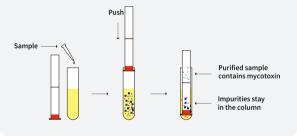


Table 1 Recovery of aflatoxin B1 in 20 µg/kg peanut oil

	Commonad	Re	covery (	(%)	Average	RSD (%)	
	Compound	1	2	3	recoveries (%)	K2D (%)	
ſ	Aflatoxin B1	81.9	84.5	82.4	82.9	1.7	

Cat.#	Description	Application	Qty.
COAF228-E	Copure® 228 Column	Patulin, Aflatoxin B1 B2 G1 G2	25 Pcs/Box
COAF226-E	Copure <sup>®</sup> 226 Column	Zearalenone, Aflatoxin B1 B2 G1 G2	25 Pcs/Box
COAF224-E	Copure <sup>®</sup> 224 Column	Zearalenone	25 Pcs/Box
COAF223-E	Copure® 223 Column	Aflatoxin M1 M2	25 Pcs/Box
COAF230-E	Copure® 230 Column	Deoxynivalenol	25 Pcs/Box
COAF229-E	Copure <sup>®</sup> 229 Column	Ochratoxin A	25 Pcs/Box
COAF302-E	Copure <sup>®</sup> 302 Column	Aflatoxin Zea Don T2 Och TB	25 Pcs/Box



In 2003, Michelangelo Anastassiades and Steven J. Lehotay developed a dispersive SPE (dSPE) method called QuEChERS (Quick, Easy, Cheap, Effective, Rugged, and Safe) to simplify the preparation of food samples pesticide analysis. The groundbreaking preparation method is widely applied to pollution tests in food safety, environmental water samples and soil pollutants.

Biocomma offers standard EN and AOAC QuEChERS kits including centrifuge tubes, extraction tubes, purification tubes and reagents in different specifications to help you establish standard detection quickly.





#### **Features**

- Good recovery rate for most pesticides, veterinary drugs and additives
- Fewer steps to limit manual error
- More friendly to the operators and environment
- Simple, quick and inexpensive

#### **Standards**

- EN 15662 Foods of Plant Origin Determination of pesticide residues using GC-MS and/or LC-MS/MS following acetonitrile extraction/partitioning and clean-up by dispersive SPE - QuEChERS-method
- AOAC Official Method 2007.01 Pesticide Residues in Foods by Acetonitrile Extraction and Partitioning with Magnesium Sulfate



### Copure® QuEChERS Extraction Kits

Copure® QuEChERS Extraction Kits include extraction pouches and 50 mL centrifuge tubes, ceramic homogenizers are optional as well.

The pouches contain anhydrous extraction salts. Among the mixture,  $MgSO_4$  is responsible for removing water from samples, while other components are responsible for maintaining appropriate pH to ensure the recoveries of alkaline–sensitive pesticides.

Directly adding water-abundant samples into tubes containing extraction salts may cause local overheating which compromise the resulting recoveries. To avoid such situations, Biocomma provides separate extraction salt pouches that the operator can add extraction salts after the addition of organic solvents.



#### **Features**

- The salts are sealed in aluminum foil bags to avoid leakage.
- The compositions are printed on the bag for handy choice. The easy-tear package is very convenient for use.
- Automated powder dispensing & packaging assembly line promise the accuracy and repeatability.

#### **Ordering Information**

#### AOAC 2007.01 Kits

Cat.#	Description	Sorbents	Qty.
COQ050020H	Extraction Salts+50 mL Tube	6 g MgSO4 1.5 g NaOAc	50 Pcs/Box
COQ050020CH	Extraction Salts+50 mL Tube+Ceramic Homogenizers		50 Pcs/Box

#### **EN 15662 Kits**

Cat.#	Description	Sorbents	Qty.
COQ050010H	Extraction Salts+50 mL Tube	4 g MgSO₄ 1 g NaCl	50 Pcs/Box
COQ050010CH	Extraction Salts+50 mL Tube+Ceramic Homogenizers	1 g Trisodium Citrate 0.5 g Disodium Citrate	50 Pcs/Box

#### **Original Method Kits**

Cat.#	Description	Sorbents	Qty.
COQ050040H	Extraction Salts+50 mL Tube	4 g MgSO <sub>4</sub>	50 Pcs/Box
COQ050040CH	Extraction Salts+50 mL Tube+Ceramic Homogenizers	1 g NaCl	50 Pcs/Box

#### **Ceramic Homogenizers**

Cat.#	Description	Qty.
009903A	Ceramic Homogenizers, 50 mL	100 Pcs/Box

## **Copure® QuEChERS Premixed Extraction Salts**

Copure® QuEChERS Premixed Extraction Salts are suitable for various QuEChERS Standards and used in analysis of multi-pesticide residue.

#### **Features**

- Optimized premixed formula, more flexible operation
- Two optional packages: easy-tear pouches and bottle Package (equivalent to 150 extractions)
- Suitable for AOAC 2007, EN 15662 standards, etc.



#### AOAC 2007.01 Kits

Cat.#	Description	Sorbents	Qty.
COQP6150	Extraction Pouches	6 g MgSO4	50 Pcs/Box
COQS6150	Bottled Premixed Extraction Salts	1.5 g NaOAcc	1 Kg/Bottle

#### **EN 15662 Kits**

Cat.#	Description	Sorbents	Qty.
COQP4115	Extraction Pouches	4g MgSO4	50 Pcs/Box
COQS4115	Bottled Premixed Extraction Salts	1g NaCl 1g Trisodium Citrate 0.5g Disodium Citrate	1 Kg/Bottle

#### **Original Method Kits**

Cat.#	Description	Sorbents	Qty.
COQP4100	Extraction Pouches	4g MgSO4	50 Pcs/Box
COQS4100	Bottled Premixed Extraction Salts	1g NaCl	1 Kg/Bottle







## Copure® QuEChERS Clean-Up Kits

Copure® QuEChERS Clean-Up Kits include sorbents and anhydrous MgSO4, 2 mL and 15 mL centrifuge tubes, ceramic homogenizers are optional as well.

The sorbents include PSA/C18-EC/GCB, etc. PSA is to remove the fatty acids and organic acids from samples. C18-EC is to remove the fats from samples, GCB is to remove the pigments from samples. Choose appropriate sorbent according to different samples.





#### **Features**

- Supply 2 mL or 15 mL clean-up tubes
- Suitable for AOAC 2007, EN 15662 standards, etc

#### **Ordering Information**

#### BS EN 15662: 2018 Kits

Cat.#	Format	Application	Sorbents	Qty.
COQ002030H	2 mL	Canaral fruits and variations	25 mg PSA, 150 mg MgSO <sub>4</sub>	100 Pcs/Box
COQ015022H	15 mL	— General fruits and vegetables	150 mg PSA, 900 mg MgSO <sub>4</sub>	50 Pcs/Box
COQ002032H	2 mL	General fruits and vegetables with fats and waxes	25 mg PSA, 25 mg C18, 150 mg MgSO <sub>4</sub>	100 Pcs/Box
COQ015032H	15 mL		150 mg PSA, 150 mg C18, 900 mg MgSO <sub>4</sub>	50 Pcs/Box
COQ002020H	2 mL	General fruits	25 mg PSA, 2.5 mg GCB, 150 mg MgSO <sub>4</sub>	100 Pcs/Box
COQ015020H	15 mL	and vegetables with pigments	150 mg PSA, 15 mg GCB, 900 mg MgSO <sub>4</sub>	50 Pcs/Box
COQ002024H	2 mL	General fruits and vegetables with highly pigments	25 mg PSA, 7.5 mg GCB, 150 mg MgSO <sub>4</sub>	100 Pcs/Box
COQ015024H	15 mL		150 mg PSA, 45 mg GCB, 900 mg MgSO <sub>4</sub>	50 Pcs/Box

#### **Ceramic Homogenizers**

Cat.#	Description	Qty.
009902B	Ceramic Homogenizers, 15 mL	100/Bottle
009901B	Ceramic Homogenizers, 2 mL	200/Bottle

#### AOAC 2007.01 Kits

Cat.#	Format	Application	Sorbents	Qty.
COQ002031H	2 mL	Comment for the sound consisted as	50 mg PSA, 150 mg MgSO <sub>4</sub>	100 Pcs/Box
COQ015031H	15 mL	— General fruits and vegetables	400 mg PSA, 1200 mg MgSO <sub>4</sub>	50 Pcs/Box
COQ002033H	2 mL	General fruits and vegetables with	50 mg PSA, 50 mg C18, 150 mg MgSO <sub>4</sub>	100 Pcs/Box
COQ015033H	15 mL	fats and waxes	400 mg PSA, 400 mg C18, 1200 mg MgSO <sub>4</sub>	50 Pcs/Box
COQ002036H	2 mL	General fruits	50 mg PSA, 50 mg GCB, 150 mg MgSO <sub>4</sub>	100 Pcs/Box
COQ015036H	15 mL	and vegetables with pigments	400 mg PSA, 400 mg GCB, 1200 mg MgSO <sub>4</sub>	50 Pcs/Box
COQ002040H	2 mL	General fruits and vegetables	50 mg PSA, 50 mg C18, 50 mg GCB, 150 mg MgSO <sub>4</sub>	100 Pcs/Box
COQ015040H	15 mL	with pigments and fats	400 mg PSA, 400 mg C18, 400 mg GCB, 1200 mg MgSO <sub>4</sub>	50 Pcs/Box
COQ002025H	2 mL		25 mg C18, 150 mg MgSO <sub>4</sub>	100 Pcs/Box
COQ015025H	15 mL	Other food methods	150 mg C18, 900 mg MgSO <sub>4</sub>	50 Pcs/Box
COQ002035H	2 mL	All C. Li	50 mg PSA, 50 mg C18, 7.5 mg GCB, 150 mg MgSO <sub>4</sub>	100 Pcs/Box
COQ015035H	15 mL	— All food types	400 mg PSA, 400 mg C18, 45 mg GCB, 1200 mg MgSO <sub>4</sub>	50 Pcs/Box

### Copure® QuEChERS Clean-Up Pouches

Copure® QuEChERS Clean-Up Pouches are used for the analysis of multi-pesticide residual. Biocomma uses its automatic powder distribution technology to transfer the sorbent into pouches instead of tube, which is very convenient to match with customer's own 15 mL centrifuge tubes.

#### **Features**

- Save 50% of volume, convenient for transportation, saving laboratory space
- Easy-tear package to open easily without any tools required
- Lower cost, suitable for mass quantity testing



#### **Ordering Information**

Cat.#	Туре	Sorbents	Qty.
COQ015031P	AOAC 2007	400 mg PSA, 1200 mg MgSO <sub>4</sub>	100 Pcs/Box
COQ015033P	AOAC 2007	400 mg PSA , 400 mg C18, 1200 mg MgSO <sub>4</sub>	100 Pcs/Box
COQ015036P	AOAC 2007	400 mg PSA, 400 mg GCB, 1200 mg MgSO <sub>4</sub>	100 Pcs/Box
COQ015040P	AOAC 2007	400 mg PSA, 400 mg C18, 400 mg GCB, 1200 mg MgSO <sub>4</sub>	100 Pcs/Box
COQ015025P	AOAC 2007	150 mg C18, 900 mg MgSO <sub>4</sub>	100 Pcs/Box
COQ015035P	AOAC 2007	400 mg PSA, 400 mg C18, 45 mg GCB, 1200 mg MgSO <sub>4</sub>	100 Pcs/Box
COQ015022P	EN 15662	150 mg PSA, 900 mg MgSO <sub>4</sub>	100 Pcs/Box
COQ015032P	EN 15662	150 mg PSA, 150 mg C18, 900 mg MgSO <sub>4</sub>	100 Pcs/Box
COQ015020P	EN 15662	150 mg PSA, 15 mg GCB, 900 mg MgSO <sub>4</sub>	100 Pcs/Box
COQ015024P	EN 15662	150 mg PSA, 45 mg GCB, 900 mg MgSO <sub>4</sub>	100 Pcs/Box

# **Veterinary Drug Residue Specialty QuEChERS**

In order to solve the problem of rapid detection of veterinary drug residues in animalderived foods, biocomma has launched Veterinary Drug Residue Specialty QuEChERS for different types of veterinary drug residues. The specific extraction and clean-up kits are as follows:



Application	Extraction Kit	Qty.	Clean-Up Kit	Qty.
Sulfonamides	COQ050050H	50 Pcs/Box	COQ015601H	50 Pcs/Box
Hormones	COQ050050H	50 Pcs/Box	COQ015601H	50 Pcs/Box
Chloramphenicol	COQ050050H	50 Pcs/Box	COQ015601H	50 Pcs/Box
Beta-agonist	COQ050050H	50 Pcs/Box	COQ015601H	50 Pcs/Box
Quinolone	COQ050051H	50 Pcs/Box	COQ015601H	50 Pcs/Box
Tetracycline	COQ050051H	50 Pcs/Box	COQ015601H	50 Pcs/Box
Fipronil	COQ050051H	50 Pcs/Box	COQ015602H	50 Pcs/Box
Dimetridazole	COQ050051H	50 Pcs/Box	COQ015603H	50 Pcs/Box
Diethylstilbestrol	COQ050050H	50 Pcs/Box	COQ002603H	100 Pcs/Box

## **QuEChERS Ceramic Homogenizers**

biocomma® Ceramic Homogenizers can be used in Copure® QuEChERS extraction kit and clean-up kit to improve extraction recovery and reproducibility.

#### **Features**

- Inert ceramic material, no impurities dissolution
- Shorten sample extraction time and reduce labor cost
- Improve recovery rate and reproducibility of sample extraction



#### **Ordering Information**

Cat.#	Description	Qty.
009903A	Ceramic Homogenizers, 50 mL	100 Pcs/Box
009902A	Ceramic Homogenizers, 15 mL	100 Pcs/Box
009901A	Ceramic Homogenizers, 2 mL	200 Pcs/Box

## **QuEChERS Bulk Sorbents**

biocomma® provides superior quality QuEChERS bulk sorbents which have been verified by our lab. You can choose the ratio according to the needs of the experiment.



#### **Features**

- Supply 2 mL or 15 mL clean-up tubes
- Suitable for AOAC 2007, EN 15662 standards, etc.

Sorbent	Specification	Qty.
PSA	Carbon Content: 8%, Suface area: 480 m²/g, Particle size: 50-75 µm, Pore size: 70 Å	100 g
C18	Carbon Content: 17.6%, Suface area: 300 m²/g, Particle size: 40-75 µm, Pore size: 70 Å	100 g
Carb-GCB	Suface area: 100 m²/g, Particle size: 100-300 mesh	50 g
Anhydrous MgSO <sub>4</sub>	AR Grade	1 kg
NaOAc	AR Grade	1 kg
NaCl	AR Grade	1 kg
Trisodium Citrate	AR Grade	1 kg
Disodium Citrate	AR Grade	1 kg
	PSA C18 Carb-GCB Anhydrous MgSO <sub>4</sub> NaOAc NaCl Trisodium Citrate	PSA Carbon Content: 8%, Suface area: 480 m²/g, Particle size: 50-75 μm, Pore size: 70 Å  C18 Carbon Content: 17.6%, Suface area: 300 m²/g, Particle size: 40-75 μm, Pore size: 70 Å  Carb-GCB Suface area: 100 m²/g, Particle size: 100-300 mesh  Anhydrous MgSO <sub>4</sub> AR Grade  NaOAc AR Grade  NaCl AR Grade  Trisodium Citrate AR Grade

### CommaSil® HPLC Column

CommaSil® HPLC Columns utilize ultra-pure spherical and fully porous silica, coupled with mature and stable surface

bonding technology and a unique double end-capping manufacturing process. Strict adherence to quality control

standards ensures outstanding stability and reproducibility in every batch. This series of columns encompasses

reversed-phase, normal phase, and special-purpose columns to cater to diverse analysis requirements.

#### Features:

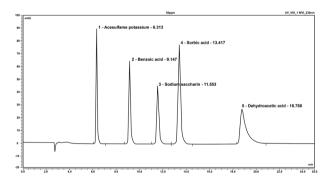
- Unique double end-capping technology, maximumly eliminates silicon hydroxyl residue.
- Low metal ions residue, optimize tailing of alkaline substances.
- Good reproducibility, long lifespan, and high cost-effectiveness.
- High column efficiency, high mechanical strength and high performance.
- Excellent lot-to-lot consistency

### Chromatography columns: CommaSil® AQ-C18

(4.6 mm×250 mm, 5µm)

Mobile phase: 0.002% acetic acid-0.02mol/L ammonium acetate

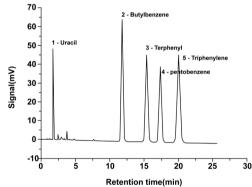
solution: methanol=90:10 Flow rate: 1.0 mL/min Column temperature: 30 °C Detector: UV detector Detection wavelength: 230 nm



#### Chromatography column: CommaSil® ODS 5µm (4.6 x150mm)

Mobile phase: methanol: water = 80:20

Flow rate: 1.0mL/min Column temperature: 30 °C Detector: UV detector Detection wavelength: 254 nm



### C18-H

- C18 functional group
- After special treatment, tolerated a wider pH range
- 1.8um and 3um are available, more suitable for UPLC

### C18

- C18 functional group
- PH: 1.5-9
- Excellent hydrophobic selectivity and low hydrogen bonding capacity

#### **C8**

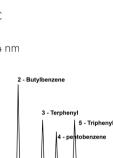
- C8 functional group
- Stronger retention than C18 group, shorter retention time for non-polar substances

#### CN

- CN functional group
- Fast elution of hydrophobic molecules with unique selectivity for polar compounds

- NH<sup>2</sup> functional group
- Suitable for the analysis of monosaccharide compounds

- Sulfonic acid type strong cation exchange silica SCX
- Suitable for the analysis of basic substances, especially amines



omnosti HPLC Columns

### **PEP**

- PEP functional group
- High selectivity for fluorine-containing and halogencontaining compounds

## CommaSil® Gas Chromatography (GC) Columns

CommaSil® Gas Chromatography Columns, performing test strictly for each GC column, have the advantages of high column efficiency, stable product performance, and high sensitivity. CommaSil® GC Columns are widely used in petrochemical, environmental protection, medicine, food, health and other fields.



#### **Features**

- High column efficiency, good separation effect
- High quality and competitive price, highly competitive choice
- Stable performance and long shelf life

### **Universal C18**

Universal C18 is crafted from high-purity silica microspheres, ensuring a high level of homogeneity in particle size and pore structure.

#### **Features**

- General purpose columns boasting excellent column-to-column and lot-to-lot reproducibility
- Exceptional selectivity and versatility across a wide range of applications.
- Universally applicable to pharmaceutical, environmental, and food safety testing fields.
- Equivelent to Waters Symmetry C18 series.

Carbon Load : 18% Pore Size: 120 Å Particle Size: 3/3.5/5 μm pH Range: 2-10 Surface Area: 300 m2/g USP Code: L1

### C18-P 100% Water Resistant

C18-P retains and separate polar analytes under reversed-phase and HILIC conditions.

#### **Features**

- Improves retention of polar compounds while maintaining moderate retention of moderately and strongly hydrophobic compounds.
- Tolerant to 100% aqueous mobile phases.
- Good separation reproducibility.
- Equivelent to Waters Atlantis C18 series

Carbon Load : 14% Pore Size: 100 Å Particle Size: 3/5  $\mu$ m pH Range: 2-8 Surface Area: 300 m2/q USP Code: L1



For more details, please download the catalog at www.biocomma.com/catalogs/

# Sample Preparation for Clinical Mass Spectrometry

biocomma® is specialized in providing innovative solutions in the field of clinical mass spectrometry. Through continuous independent innovation in materials, biocomma provides optimized solutions in technical services to help customers obtain more efficient, higher quality and more stable products. Sample preparation products for clinical mass spectrometry include 96-well PPT protein precipitation plate, 96-well SLE solid support liquid-liquid extraction plate, 96-well PPRP protein phospholipid removal plate and 96-well PPRP phospholipid removal plate, etc.



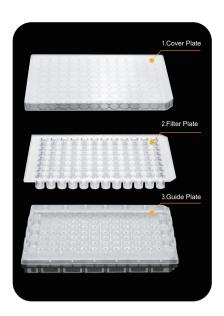
### 96-Well Micro-Filter Plates

biocomma® 96-Well Micro-Filter Plates are precision injection molded of polystyrene and equipped with many different types and materials of filter membranes, such as polyvinylidene fluoride (PVDF), mixed cellulose (MCE), polytetrafluoroethylene (PTFE) and other microporous filter membranes. Seamless integration is achieved by individually sealed well and removable guide plate and collection plate.

#### **Ordering Information**

Microporous filter plates equipped with MCE microporous filter membranes are applied for DNA hybridization, ELISPOT and protein binding assays.

Cat. #	Description	Qty.
M0096-MCE-45	96-Well Micro-Filter Plates 50–250 $\mu$ L, hydrophilic MCE, 0.45 $\mu$ m	10 Pcs/PK
M0096-MCE-22	96-Well Micro-Filter Plates 50–250 $\mu L,$ hydrophilic MCE, 0.22 $\mu m$	10 Pcs/PK



Microporous filter plates equipped with PVDF microporous filter membranes are applied for protein kinase/phosphatase analysis, sample preparation, fluorescent dyes removal, etc.

Cat. #	Description	Qty.
M0096-PVDF-45	96–Well Micro–Filter Plates 50–250 $\mu$ L, hydrophobic PVDF, 0.45 $\mu$ m	10 Pcs/PK
M0096-PVDF-22	96-Well Micro-Filter Plates 50-250 $\mu$ L, hydrophobic PVDF, 0.22 $\mu$ m	10 Pcs/PK
M0096-PVDF-H-45	96-Well Micro-Filter Plates 50-250 $\mu$ L, hydrophilic PVDF, 0.45 $\mu$ m	10 Pcs/PK
M0096-PVDF-H-22	96-Well Micro-Filter Plates 50-250 $\mu$ L, hydrophilic PVDF, 0.22 $\mu$ m	10 Pcs/PK

Microporous filter plates equipped with PTFE microporous filter membranes are applied for dissolution testing, total drug analysis, protein precipitation analysis, etc.

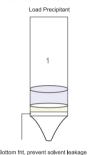
Cat. #	Description	Qty.
M0096-PTFE-45	96–Well Micro–Filter Plates 50–250 $\mu$ L, hydrophobic PTFE, 0.45 $\mu$ m	10 Pcs/PK
M0096-PTFE-22	96-Well Micro-Filter Plates 50-250 $\mu$ L, hydrophobic PTFE, 0.22 $\mu$ m	10 Pcs/PK
M0096-PTFE-H-45	96-Well Micro-Filter Plates 50-250 μL, hydrophilic PTFE, 0.45 μm	10 Pcs/PK
M0096-PTFE-H-22	96-Well Micro-Filter Plates 50-250 μL, hydrophilic PTFE, 0.22 μm	10 Pcs/PK

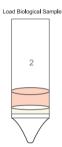
## Copure® 96 Well Protein Precipitation (PPT) Plate

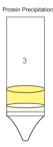
Copure® 96-Well Protein Precipitation (PPT) Plate is designed to remove proteins from biological fluid samples (plasma, serum or blood), suitable for LC-MS/MS clinical detection studies.

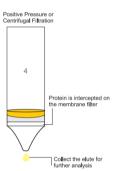
#### **Features**

- Low adsorption membrane filter is applied, which resistant to pH 0-14
- Membrane filter is made by a special process and does not break at high-speed centrifugation
- Super long retention time, effective interception of precipitator, no liquid leakage
- Suitable for clinical diagnosis, pharmacokinetic study, new drug development and scientific research













General processing method for pretreatment of liquid biological samples by CommaSep<sup>™</sup> PPT 96 well protein precipitation plate

#### **Ordering Information**

Cat.#	Description	Qty.
MPPT9601	Copure® 96 Well PPT Plate, 1.0 mL/well	1 Pc/Box
MPPT9602	Copure® 96 Well PPT Plate, 2.0 mL/well	1 Pc/Box
M0096-PTFE-H-45	Copure® 96 Well Micro-Filter PPT Plate, 50-250 μL, Hydrophilic PTFE, 0.45 μm	10 Pcs/Box
M0096-PTFE-45	Copure® 96 Well Micro-Filter PPT Plate, 50-250 μL, Organic PTFE, 0.45 μm	10 Pcs/Box
M0096-PTFE-22	Copure® 96 Well Micro-Filter PPT Plate, 50-250 μL, Organic PTFE, 0.22 μm	10 Pcs/Box

# Copure® 96 Well Phospholipid Removal (PRP) Plate

Copure® 96 Well Phospholipid Removal (PRP) Plate with specially developed new adsorbents Lipoclean® in the pores captures phospholipid interferents that cause ion suppression to provide excellent cleanup effect for lipid-containing samples, also, improve data quality for target analyte detection and minimize LC-MS/MS system maintenance.

#### **Features**

- Remove phospholipids to limit ion suppression effect
- Simple and convenient to use
- 96-well plate and 1 mL cartridge are available





## Copure® MS Series 96-Well Solid Phase Extraction (SPE) Plates

Copure® MS Series 96-well SPE Plates are designed for high-throughput clinical mass spectrometry based on biocomma® special SPE sorbents and core accessories.

The special SPE sorbents have more uniform particle size, larger specific surface area, higher loading capacity, higher purity, and no background impurities. Copure® MS Series overcame the difficulties of complex matrix of biological samples and extremely low amount of target to achieve excellent purity, excellent stability and low background interference result to ensure the quality of analysis.

Beside the products, we also provide applications as reference to address customer concerns. Our products have excellent recovery rate of steroid hormones, catecholamines, vitamins, etc.

#### **Features**

- MS Series HLB is a versatile, hydrophilic-lipophilic-balanced reversed-phase sorbent suitable for acidic, basic, and neutral compounds.
- MS Series MCX is a strong cation exchange reversed-phase sorbent with high selectivity for weakly basic compounds.
- MS Series MAX is a strong anion exchange reversed-phase sorbent with high selectivity for weakly acidic compounds.
- MS Series WCX is a weak cation exchange reversed-phase sorbent with high selectivity for strongly basic compounds.
- MS Series WAX is a weak anion exchange reversed-phase sorbent with high selectivity for strongly acidic compounds.

#### **DVfree 96-Well Plates**

- No dead volume structure design, no solvent residue, reduce analyte loss.
- 3-5 mg sorbent per well, suitable for extraction of trace substances.
- Trace sorbent evenly packed with better results consistency and reproducibility.
- No evaporation and reconstitution necessary due to elution volumes as low as 25  $\mu$ L.
- Compatible with biocomma® positive pressure devices and most liquid-handling robotic systems for automated, reliable high-throughput solid phase extraction.

#### Regular 96-Well Plates

- Classic 96-well plate design for greater versatility.
- Available in 10 mg, 30 mg, etc. with high sample loading to meet most customer needs.
- Compatible with biocomma® positive pressure devices and most liquid-handling robotic systems for automated, reliable high-throughput solid phase extraction.

#### Results

1. MS Series HLB 96-Well Plate recovery and stability results

4 Steroid Hormones in Spiked Plasma					
	Recovery (%,n=24)				
Concentration (ppb) Cortisone Corticosterone Androstenedion				Testosterone	
2	82.2	101.0	102.6	128.4	
20	102.4	101.0	125.4	125.0	

As result, under different spiked concentrations, the four compounds have good recovery.

MS Series HLB Stability			
Compound	CV (%,n=24)		
Cortisone	6.00		
Corticosterone	5.44		
Androstenedione	5.35		
Testosterone	6.89		

In this experiment, the results of target compound compared from different wells from different plates and batches. The result shows good stability.

#### 2. MS Series WCX 96-well plate stability test

Catecholamine Stability				
Compound CV (%) n				
NMN	11.63	44		
MN	4.75	44		

#### 3. MS Series MCX 96-Well Plate recovery and stability results

Thyroid Hormones T3 and T4 in Serum Recovery Rate				
Recovery (%,n=24)				
Compound	4.5 ppb	18 ppb	45 ppb	
T3	86.36	96.15	93.73	
T4	103.5	116.2	109.22	

As result, under different spiked concentrations, both T3 and T4 have good recovery.

Thyroid Hormones T3 and T4 in Serum Stability				
Compound CV (%) n				
	4.5 ppb	4.88		
ТЗ	18 ppb	2.98		
	45 ppb	1.05		
T4	4.5 ppb	7.92		
	18 ppb	1.41		
	45 ppb	0.75		

In this experiment, the results of target compound compared from different wells from different plates and batches. The result shows good stability.



	Cat.#	Description	Specification	Qty.
	MHLB9603	Copure® MS HLB 96-well plate	3 mg/600 μL	1 PC/PK
	MHLB9605	Copure® MS HLB 96-well plate	5 mg/600 μL	1 PC/PK
	MWAX9603	Copure® MS WAX 96-well plate	3 mg/600 μL	1 PC/PK
	MWAX9605	Copure® MS WAX 96 -well plate	5 mg/600 μL	1 PC/PK
Dyfree 96-Well Plate	MWCX9603	Copure® MS WCX 96 -well plate	3 mg/600 μL	1 PC/PK
Dviree 96-Well Plate	MWCX9605	Copure® MS WCX 96-well plate	5 mg/600 μL	1 PC/PK
	MMAX9603	Copure® MS MAX 96-well plate	3 mg/600 μL	1 PC/PK
	MMAX9605	Copure® MS MAX 96-well plate	5 mg/600 μL	1 PC/PK
	MMCX9603	Copure® MS MCX 96-well plate	3 mg/600 μL	1 PC/PK
	MMCX9605	Copure® MS MCX 96-well plate	5 mg/600 μL	1 PC/PK
	MHLB9610	Copure® MS HLB 96-well plate	10 mg/1 mL, 10 mg/2 mL	1 PC/PK
	MHLB9630	Copure® MS HLB 96-well plate	30 mg/1 mL, 30 mg/2 mL	1 PC/PK
	MWAX9610	Copure® MS WAX 96-well plate	10 mg/1 mL, 10 mg/2 mL	1 PC/PK
	MWAX9630	Copure® MS WAX 96-well plate	30 mg/1 mL, 30 mg/2 mL	1 PC/PK
Dogular Of Wall Distan	MWCX9610	Copure® MS WCX 96-well plate	10 mg/1 mL, 10 mg/2 mL	1 PC/PK
Regular 96-Well Plates	MWCX9630	Copure® MS WCX 96-well plate	30 mg/1 mL, 30 mg/2 mL	1 PC/PK
	MMAX9610	Copure® MS MAX 96-well plate	10 mg/1 mL, 10 mg/2 mL	1 PC/PK
	MMAX9630	Copure® MS MAX 96-well plate	30 mg/1 mL, 30 mg/2 mL	1 PC/PK
	MMCX9610	Copure® MS MCX 96-well plate	10 mg/1 mL, 10 mg/2 mL	1 PC/PK
	MMCX9630	Copure® MS MCX 96-well plate	30 mg/1 mL, 30 mg/2 mL	1 PC/PK



## **Filtration Guide**

Filtration Media	Main Features	Applications
Nylon	<ul><li>Hydrophilic</li><li>Robust</li><li>pH range: 3-12</li><li>Broad Chemical compatibility</li></ul>	Chemicals filtration     Beverage filtration     HPLC sample preparation
PES	<ul><li>Hydrophilic</li><li>High flow rate</li><li>Low extractables</li><li>Low protein binding</li><li>pH range: 1-14</li></ul>	<ul><li>Protein filtration</li><li>Tissue culture media filtration</li><li>Buffer prep</li><li>HPLC sample preparation</li></ul>
PTFE	<ul> <li>Broad chemical compatibility</li> <li>Hydrophobic and hydrophilic available</li> <li>pH range: 1-14</li> <li>Available supported or unsupported</li> </ul>	<ul><li>Organic solvents</li><li>Strong acid and alkaline resistance</li><li>Gas filtration</li><li>Air sampling</li></ul>
PVDF	<ul><li>High thermal resistance</li><li>Broad chemical compatibility</li><li>Hydrophobic and hydrophilic available</li><li>Low protein binding</li></ul>	Gas filtration     Food industry     Pharmaceutical filtration
MCE	<ul><li>Hydrophilic</li><li>High flow rate</li><li>Low protein binding</li><li>pH range: 4-8</li></ul>	<ul> <li>Cell culture media</li> <li>Microorganism enumeration and identification</li> <li>Acid digestion</li> <li>Heavy metals testing</li> </ul>
CA	<ul><li>Hydrophilic</li><li>Low protein binding</li><li>pH range: 4-8</li></ul>	Protein, enzyme and biological solutions     Tissue culture media
Glass Fiber	<ul> <li>Broad chemical compatibility</li> <li>High dirt holding capacity</li> <li>pH range: 4-14</li> <li>High thermal resistance (up to 500°C)</li> <li>With or without binders</li> </ul>	<ul> <li>Clarification and prefiltration</li> <li>Tissue Culture media</li> <li>DNA/RNA adsorption and purification</li> <li>Qualification and quantification</li> </ul>
PP microfiber	Broad chemical compatibility     pH range: 1-14	Pre-filtration     Clarification

## **Syringe Filters**

#### Specification

Diameter (mm)	13 mm	25 mm
Filtration Area (cm²):	0.92	2.98
Housing Material:	PP	
Holdup-Volume (μl):	<10	<100
Volume Throughput (ml):	<10	<50
Connections (Inlet/Outlet):	Female Luer Lock inlet and Male Luer slip outlet	
Max Operating Pressure (psi):	87	
Max Operating Temperature (°C )	100	

Filter Media	Diameter (mm)	Pore Size (um)	Pre-Fliter Layer
Nylon CA PES MCE PVDF PTFE RC	13 25 33	0.22 0.45 0.8 1.0	PP GF

## **Syringe Filters**

biocomma<sup>®</sup> Syringe Filters are suitable for solution preparation, sterilization filtration and biological sample preparation.

#### **Ordering Information**

Mixed Cellulose Ester (MCE) Syringe Filters

Cat. #	Description	Qty.
SF130-22-MCE	MCE / Φ13 mm / 0.22 μm / Hydrophilic	100 Pcs/Box
SF130-45-MCE	MCE / Φ13 mm / 0.45 μm / Hydrophilic	100 Pcs/Box
SF250-22-MCE	MCE / Φ25 mm / 0.22 μm / Hydrophilic	100 Pcs/Box
SF250-45-MCE	MCE / Φ25 mm / 0.45 μm / Hydrophilic	100 Pcs/Box



Cat. #	Description	Qty.
SF130-22-CA	CA / Φ13 mm / 0.22 μm / Hydrophilic	100 Pcs/Box
SF130-45-CA	CA / Φ13 mm / 0.45 μm / Hydrophilic	100 Pcs/Box
SF250-22-CA	CA / Φ25 mm / 0.22 μm / Hydrophilic	100 Pcs/Box
SF250-45-CA	CA / Φ25 mm / 0.45 μm / Hydrophilic	100 Pcs/Box



Cat. #	Description	Qty.
SF130-22-PTFE-HL	PTFE / Φ13 mm / 0.22 μm / Hydrophilic	100 Pcs/Box
SF130-45-PTFE-HL	PTFE / Φ13 mm / 0.45 μm / Hydrophilic	100 Pcs/Box
SF250-22-PTFE-HL	PTFE / Φ25 mm / 0.22 μm / Hydrophilic	100 Pcs/Box
SF250-45-PTFE-HL	PTFE / Φ25 mm / 0.45 μm / Hydrophilic	100 Pcs/Box



Cat. #	Description	Qty.
SF130-22-PVDF-HL	PVDF / Φ13 mm / 0.22 μm / Hydrophilic	100 Pcs/Box
SF130-45-PVDF-HL	PVDF / Φ13 mm / 0.45 μm / Hydrophilic	100 Pcs/Box
SF250-22-PVDF-HL	PVDF / Φ25 mm / 0.22 μm / Hydrophilic	100 Pcs/Box
SF250-45-PVDF-HL	PVDF / Φ25 mm / 0.45 μm / Hydrophilic	100 Pcs/Box

#### Polyethersulfone (PES) Syringe Filters

Cat. #	Description	Qty.
SF130-22-PES	PES / Φ13 mm / 0.22 μm / Hydrophilic	100 Pcs/Box
SF130-45-PES	PES / Φ13 mm / 0.45 μm / Hydrophilic	100 Pcs/Box
SF250-22-PES	PES / Φ25 mm / 0.22 μm / Hydrophilic	100 Pcs/Box
SF250-45-PES	PES / Φ25 mm / 0.45 μm / Hydrophilic	100 Pcs/Box

#### Polytetrafluoroethylene (PTFE) Syringe Filters

Cat. #	Description	Qty.
SF130-22-PTFE	PTFE / Φ13 mm / 0.22 μm / Hydrophobic	100 Pcs/Box
SF130-45-PTFE	PTFE / Φ13 mm / 0.45 μm / Hydrophobic	100 Pcs/Box
SF250-22-PTFE	PTFE / Φ25 mm / 0.22 μm / Hydrophobic	100 Pcs/Box
SF250-45-PTFE	PTFE / Φ25 mm / 0.45 μm / Hydrophobic	100 Pcs/Box

#### Nylon Syringe Filters

Cat. #	Description	Qty.
SF130-22-NL	Nylon / Φ13 mm / 0.22 μm / Hydrophilic	100 Pcs/Box
SF130-45-NL	Nylon / Φ13 mm / 0.45 μm / Hydrophilic	100 Pcs/Box
SF250-22-NL	Nylon / Φ25 mm / 0.22 μm / Hydrophilic	100 Pcs/Box
SF250-45-NL	Nylon / Φ25 mm / 0.45 μm / Hydrophilic	100 Pcs/Box

#### Polyvinylidene Fluoride (PVDF) Syringe Filters

Cat. #	Description	Qty.
SF130-22-PVDF	PVDF / Φ13 mm / 0.22 μm / Hydrophobic	100 Pcs/Box
SF130-45-PVDF	PVDF / Φ13 mm / 0.45 μm / Hydrophobic	100 Pcs/Box
SF250-22-PVDF	PVDF / Φ25 mm / 0.22 μm / Hydrophobic	100 Pcs/Box
SF250-45-PVDF	PVDF / Φ25 mm / 0.45 μm / Hydrophobic	100 Pcs/Box







For more details, please download the catalog at www.biocomma.com/catalogs/

## **Sterile Syringe Filters**

biocomma $^*$  Sterile Syringe Filters remove bacteria fast and reduce the impact on active ingredients in liquid during sterilization process. Generally, 0.1  $\mu$ m syringe filter filters mycoplasma, 0.22  $\mu$ m filters bacteria, and 0.45 $\mu$ m filters solid particles. Sterile syringe filters are widely applied to various fields of life science to sterilize small-volume biological liquids, such as proteins, culture media, additives, buffers, reagents, pharmaceuticals and etc.

#### **Features**

- The easy tear packaging is made of medical polypropylene to ensure good sealing
- Sterilized by gamma radiation
- DNase and RNase free, pyrogen free and No Endotoxin
- Low protein adsorption rate

#### **Ordering Information**

#### Sterile Mixed Cellulose Ester (MCE) Syringe Filters

Cat. #	Description	Qty.
SSF130-22-MCE	MCE / $\Phi$ 13 mm / 0.22 $\mu$ m / Hydrophilic	100 Pcs/PK
SSF130-45-MCE	MCE / Φ13 mm / 0.45 μm / Hydrophilic	100 Pcs/PK
SSF250-22-MCE	MCE / Φ25 mm / 0.22 μm / Hydrophilic	100 Pcs/PK
SSF250-45-MCE	MCE / Φ25 mm / 0.45 μm / Hydrophilic	100 Pcs/PK

#### Sterile Polyvinylidene Fluoride (PVDF) Syringe Filters

Cat.#	Description	Qty.
SSF130-22-PVDF	PVDF / $\Phi$ 13 mm / 0.22 $\mu$ m / Hydrophobic	100 Pcs/PK
SSF130-45-PVDF	PVDF / $\Phi$ 13 mm / 0.45 $\mu$ m / Hydrophobic	100 Pcs/PK
SSF250-22-PVDF	PVDF / Φ25 mm / 0.22 μm / Hydrophobic	100 Pcs/PK
SSF250-45-PVDF	PVDF / Φ25 mm / 0.45 μm / Hydrophobic	100 Pcs/PK

#### Sterile Cellulose Acetate (CA) Syringe Filters

Cat. #	Description	Qty.
SSF130-22-CA	CA / Φ13 mm / 0.22 μm / Hydrophilic	100 Pcs/PK
SSF130-45-CA	CA / Φ13 mm / 0.45 μm / Hydrophilic	100 Pcs/PK
SSF250-22-CA	CA / Φ25 mm / 0.22 μm / Hydrophilic	100 Pcs/PK
SSF250-45-CA	CA / Φ25 mm / 0.45 μm / Hydrophilic	100 Pcs/PK

#### Sterile Polytetrafluoroethylene (PTFE) Syringe Filters

Cat. #	Description	Qty.
SSF130-22-PTFE	PTFE / Φ13 mm / 0.22 μm / Hydrophobic	100 Pcs/PK
SSF130-45-PTFE	PTFE / Φ13 mm / 0.45 μm / Hydrophobic	100 Pcs/PK
SSF250-22-PTFE	PTFE / Φ25 mm / 0.22 μm / Hydrophobic	100 Pcs/PK
SSF250-45-PTFE	PTFE / Φ25 mm / 0.45 μm / Hydrophobic	100 Pcs/PK

#### Sterile Polyethersulfone (PES) Syringe Filters

Cat.#	Description	Qty.
SSF130-22-PES	PES / Φ13 mm / 0.22 μm / Hydrophilic	100 Pcs/PK
SSF130-45-PES	PES / Φ13 mm / 0.45 μm / Hydrophilic	100 Pcs/PK
SSF250-22-PES	PES / Φ25 mm / 0.22 μm / Hydrophilic	100 Pcs/PK
SSF250-45-PES	PES / Φ25 mm / 0.45 μm / Hydrophilic	100 Pcs/PK

#### Sterile Nylon Syringe Filter

Cat. #	Description	Qty.
SSF130-22-NL	Nylon / $\Phi 13$ mm / 0.22 $\mu m$ / Hydrophilic	100 Pcs/PK
SSF130-45-NL	Nylon / $\Phi$ 13 mm / 0.45 $\mu$ m / Hydrophilic	100 Pcs/PK
SSF250-22-NL	Nylon / Φ25 mm / 0.22 μm / Hydrophilic	100 Pcs/PK
SSF250-45-NL	Nylon / Φ25 mm / 0.45 μm / Hydrophilic	100 Pcs/PK

### **Microfiltration Membranes**

biocomma® Microfiltration Membranes are used in sample filtration during analysis process in laboratories.

#### **Ordering Information**

#### Mixed Cellulous Ester (MCE) Microfiltration Membrane

Cat. #	Description	Qty.
MF047-22-MCE	MCE / Φ47 mm / 0.22 μm	200 Pcs/Box
MF047-45-MCE	MCE / Φ47 mm / 0.45 μm	200 Pcs/Box



#### Cellulose Acetate (CA) Microfiltration Membrane

Cat. #	Description	Qty.
MF047-22-CA	CA / Φ47 mm/0.22 μm	200 Pcs/Box
MF047-45-CA	CA / Φ47 mm/0.45 μm	200 Pcs/Box



#### Polyethersulfone (PES) Microfiltration Membrane

Cat.#	Description	Qty.
MF047-22-PES	PES / Φ47 mm/0.22 μm	200 Pcs/Box
MF047-45-PES	PES / Φ47 mm/0.45 μm	200 Pcs/Box

#### Hydrophilic Polytetrafluoroethylene (PTFE) Microfiltration Membrane

Cat. #	Description	Qty.
MF047-22-PTFE-HL	PTFE / Φ47 mm/0.22 μm	200 Pcs/Box
MF047-45-PTFE-HL	PTFE / Φ47 mm/0.45 μm	200 Pcs/Box

#### Nylon Microfiltration Membrane

Cat. #	Description	Qty.
MF047-22-NL	Nylon / Φ47 mm / 0.22 μm	200 Pcs/Box
MF047-45-NL	Nylon / Φ47 mm / 0.45 μm	200 Pcs/Box

#### Polyvinylidene Fluoride (PVDF) Microfiltration Membrane

Cat. #	Description	Qty.
MF047-22-PVDF	PVDF / Φ47 mm / 0.22 μm	200 Pcs/Box
MF047-45-PVDF	PVDF / Φ47 mm / 0.45 μm	200 Pcs/Box

#### Polytetrafluoroethylene (PTFE) Microfiltration Membrane

Cat.#	Description	Qty.
MF047-22-PTFE	PTFE / Φ47 mm / 0.22 μm	200 Pcs/Box
MF047-45-PTFE	PTFE / Φ47 mm / 0.45 μm	200 Pcs/Box

<sup>\*</sup>Customized diameter of mentioned membranes are available.

## **Autosampler Vials and Caps**

Copure® Chromatography vials are made of high-performance borosilicate glass, suitable for various brands of auto-samplers. We offer a variety of vials and caps to meet the specific needs of different experiments.

#### 8-425 2 mL Narrow-neck Screw-thread Vials and Inserts

Cat. #	Description	O.D.xL	Qty.
V1-T	2 mL 8-425 Narrow-Neck Screw-thread vials, clear	11.6×32 mm	100/PK
V1-TL	2 mL 8-425 Narrow-Neck Screw-thread vials with write-on spot, clear	11.6×32 mm	100/PK
V1-A	2 mL 8-425 Narrow-Neck Screw-thread vials, amber	11.6×32 mm	100/PK
V1-AL	2 mL 8-425 Narrow-Neck Screw-thread vials with write-on spot, amber	11.6×32 mm	100/PK
SI-1	150 uL Glass inserts with mandrel interior and polypropylene feet, for 8-425 screw-thread vials	29×5 mm	100/PK
SI-3	250 uL Flat-bottom glass inserts, for 2ml 8-425 screw-thread vials	31×5 mm	100/PK

#### Caps with Septa for 8-425 Screw-thread Vials

Cat. #	Description	Qty.
SC1-1	$8-425$ Black polypropylene screw caps (5.5 mm centre hole, 12 mm diameter) with white PTFE/red silicone septa ( $\phi$ 8*1.5 mm)	100/PK
SC1-2	$8\text{-}425$ Black polypropylene screw caps (5.5 mm centre hole, 12 mm diameter) with red PTFE/white silicone septa( $\varphi 8^*1.5$ mm)	100/PK
SC1-3	$8\text{-}425$ Black polypropylene screw caps (5.5 mm centre hole, 12 mm diameter) with red PTFE/white silicone/red PTFE septa( $\varphi 8^*1.5$ mm)	100/PK
SC1-4	$8\text{-}425$ Black polypropylene screw caps (5.5 mm centre hole, 12 mm diameter) with blue PTFE/white silicone septa ( $\varphi 8*1.5$ mm)	100/PK
SC1-5	8-425 Black polypropylene screw caps (5.5 mm centre hole, 12 mm diameter) with pre-slit white PTFE/red silicone septa	100/PK
SC1-6	8-425 Black polypropylene screw caps (5.5 mm centre hole, 12 mm diameter) with pre-slit red PTFE/white silicone septa	100/PK
SC1-7	8-425 Black polypropylene screw caps (5.5 mm centre hole, 12 mm diameter) with pre-slit blue PTFE/white silicone septa, 5.5mm hole	100/PK
SC1-9	8-425 White polypropylene screw caps (5.5 mm centre hole, 12 mm diameter) with red PTFE/white silicone septa( $\phi$ 8*1.5mm)	100/PK
SC1-14	8-425 Black polypropylene screw caps (12 mm diameter) with red PTFE/white silicone septa (φ8*1.2 mm)	100/PK

If you need additional models, we can assemble and adjust them based on different septa and caps.

#### 9-425 2 mL Screw-thread Vials and Inserts

Cat. #	Description	O.D.xL	Qty.
V2-T	2 mL 9-425 screw-thread vials, clear	11.6×32 mm	100/PK
V2-TL	2 mL 9-425 screw-thread vials with write-on spot, clear	11.6×32 mm	100/PK
V2-TL-N	2 mL 9-425 screw-thread vials with write-on spot, clear, economic glass	11.6×32 mm	100/PK
V2-A	2 mL 9-425 screw-thread vials, amber	11.6×32 mm	100/PK
V2-AL	2 mL 9-425 screw-thread vials with write-on spot, amber	11.6×32 mm	100/PK
V2-AL-N	2 mL 9-425 screw-thread vials with write-on spot, amber, economic glass	11.6×32 mm	100/PK
V2-TL-H	2 mL 9-425 screw-thread vials, clear, high recovery	11.6×32 mm	100/PK
V2-PC-2	2 mL 9-425 PP vials, clear	11.6×32 mm	100/PK
V2-PA-2	2 mL 9-425 PP vials, amber	11.6×32 mm	100/PK
V2SI-T	300 uL 9-425 Clear screw-thread vials with fixed insert	11.6×32 mm	100/PK
V2SI-TL	300 uL 9-425 Clear screw-thread vials with write-on spot, with fixed insert	11.6×32 mm	100/PK
V2SI-A	300 uL 9-425 Amber screw-thread vials with fixed insert	11.6×32 mm	100/PK
V2SI-AL	300 uL 9-425 Amber screw-thread vials with write-on spot, with fixed insert	11.6×32 mm	100/PK
V2-P	300 uL 9-425 Clear PP short screw-thread micro-sample vial	11.6×32 mm	100/PK
V2-PA	300 uL 9-425 Amber PP short screw-thread micro-sample vial	11.6×32 mm	100/PK
SI-2	$250\mathrm{uL}$ Glass inserts with mandrel interior and polypropylene feet, for 9-425 screw-thread vials	29×6 mm	100/Pk
SI-4	300 uL Flat-bottom glass inserts, for 9-425 screw-thread vials	31×6 mm	100/PK
SI-8	250 uL Glass inserts with mandrel interior, for 2 mL 9-425 screw-thread vials	31×6 mm	100/PK

#### Caps with Septa for 9-425 Screw-thread Vials

Cat. #	Description	Qty.
SC2-1	9-425 Blue polypropylene screw caps (6 mm centre hole, 12 mm diameter) with white PTFE/red silicone septa, 6 mm hole ( $\phi$ 9*1 mm)	100/PK
SC2-2	9-425 Blue polypropylene screw caps (6 mm centre hole, 12 mm diameter) with red PTFE/white silicone septa, 6 mm hole ( $\phi$ 9*1 mm)	100/PK













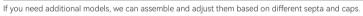
Cat. #	Description	Qty.
SC2-3	9-425 Blue polypropylene screw caps (6 mm centre hole, 12 mm diameter) with red PTFE/white silicone/ red PTFE septa, 6 mm hole ( $\phi$ 9*1 mm)	100/PK
SC2-4	9-425 Blue polypropylene screw caps (6 mm centre hole, 12 mm diameter) with blue PTFE/white silicone septa, 6 mm hole $(\phi 9*1 \text{ mm})$	100/PK
SC2-5	$9-425$ Blue polypropylene screw caps (6 mm centre hole, 12 mm diameter) with pre-slit white PTFE/red silicone septa ( $\phi$ 9*1 mm)	100/PK
SC2-5-Z	$9-425$ Blue polypropylene screw caps (6 mm centre hole, 12 mm diameter) with fixed pre-slit white PTFE/red silicone septa ( $\phi$ 9*1 mm)	100/PK
SC2-6	$9-425$ Blue polypropylene screw caps (6 mm centre hole, 12 mm diameter) with pre-slit blue PTFE/white silicone septa ( $\phi$ 9*1 mm)	100/PK
SC2-6-Z	$9-425$ Blue polypropylene screw caps (6 mm centre hole, 12 mm diameter) with fixed pre-slit blue PTFE/ white silicone septa ( $\phi$ 9*1 mm)	100/PK
SC2-8	$9-425$ Blue polypropylene closed top screw caps (12 mm diameter) with red PTFE/white silicone septa ( $\phi$ 9*1 mm)	100/PK
SC2-9	9-425 Blue polypropylene screw caps (6 mm centre hole, 12 mm diameter) with pre-slit red PTFE/white silicone septa ( $\phi$ 9*1 mm)	100/PK
SC2-11	9-425 Red polypropylene screw caps (6 mm centre hole, 12 mm diameter) with red PTFE/white silicone septa, 6 mm hole $(\phi9*1 \text{ mm})$	100/PK
SC2-12	$9-425$ Green polypropylene screw caps (6 mm centre hole, 12 mm diameter) with red PTFE/white silicone septa, 6 mm hole ( $\phi$ 9*1 mm)	100/PK
SC2-13	9-425 Yellow polypropylene screw caps (6 mm centre hole, 12 mm diameter) with red PTFE/white silicone septa, 6 mm hole ( $\phi$ 9*1 mm)	100/PK
SC2-14	9-425 White polypropylene closed top screw caps (12 mm diameter) with red PTFE/white silicone septa ( $\phi$ 9*1 mm)	100/PK
SC2-15	9-425 Blue polypropylene closed top screw caps (12 mm diameter) with white PTFE/red silicone septa (φ9*1 mm)	100/PK
SC2-16	$9-425$ Black polypropylene closed top screw caps (12 mm diameter) with red PTFE/white silicone septa ( $\phi$ 9*1 mm)	100/PK

#### 10-425 2 mL Wide Screw-thread Vials

Cat. #	Description	O.D.xL	Qty.
V3-T	2 mL 10-425 Screw-thread vials, clear	11.6×32 mm	100/PK
V3-TL	2 mL 10-425 Screw-thread vials with write-on spot, clear	11.6×32 mm	100/PK
V3-A	2 mL 10-425 Screw-thread vials, amber	11.6×32 mm	100/PK
V3-AL	2 mL 10-425 Screw-thread vials with write-on spot, amber	11.6×32 mm	100/PK

#### Caps with Septa for 10-425 Screw-thread Vials

Cat. #	Description	Qty.
SC3-1	10-425 Black polypropylene screw caps (7 mm centre hole) with red PTFE/white silicone septa (\$\phi\$10*1.5 mm)	100/PK
SC3-2	10-425 Black polypropylene screw caps (7 mm centre hole) with white PTFE/red silicone septa (\$\phi\$10*1.5 mm)	100/PK
SC3-3	10-425 Black polypropylene screw caps (7 mm centre hole) with pre-slit red PTFE/white silicone septa (\$\phi10-*1.5 mm)	100/PK
SC3-4	10-425 Black polypropylene screw caps (7 mm centre hole) with pre-slit white PTFE/red silicone septa (\$\phi10-*1.5 mm)	100/PK
SC3-5	10-425 Black polypropylene closed top screw caps with white PTFE/red silicone septa (φ10*1.5 mm)	100/PK
SC3-6	10-425 White polypropylene closed top screw caps with white PTFE/red silicone septa (φ10*1.5 mm)	100/PK



#### 11 mm 2 mL Snap-top Vials

Cat. #	Description	O.D.xL	Qty
V4-T	2 mL 11 mm Snap-top vials, clear	11.6×32 mm	100/PK
V4-TL	2 mL 11 mm Snap-top vials with write-on spot, clear	11.6×32 mm	100/PK
V4-A	2 mL 11 mm Snap-top vials, amber	11.6×32 mm	100/PK
V4-AL	2 mL 11 mm Snap-top vials with write-on spot, amber	11.6×32 mm	100/PK

### Caps with Septa for 11 mm Snap-top Vials

Cat.#	Description	Qty
SC4-1	Transparent polypropylene snap-top caps (6 mm centre hole, diameter 11 mm), with white PTFE/red silicone septa (φ11*1 mm)	100/PK
SC4-2	Transparent polypropylene snap-top caps (6 mm centre hole, diameter 11 mm), with red PTFE/white silicone/red PTFE septa (φ11*1 mm)	100/PK
SC4-3	Transparent polypropylene snap-top caps (6 mm centre hole, diameter 11 mm), with blue PTFE/white silicone septa (φ11*1 mm)	100/PK
SC4-4	Blue polypropylene snap-top caps (6 mm centre hole, diameter 11 mm), with white PTFE/red silicone septa ( $\phi$ 11*1 mm)	100/PK

If you need additional models, we can assemble and adjust them based on different septa and caps.









#### 11 mm 2 mL Crimp-top Vials

Cat.#	Description	O.D.x L	Qty
V5-T	2 mL 11 mm Glass crimp-top vials, clear	11.6×32 mm	100/PK
V5-TL	2 mL 11 mm Glass crimp-top vials with write-on spot, clear	11.6×32 mm	100/PK
V5-A	2 mL 11 mm Glass crimp-top vials, amber	11.6×32 mm	100/PK
V5-AL	2 mL 11 mm Glass crimp-top vials with write-on spot, amber	11.6×32 mm	100/PK

#### Caps with Septa for 11 mm 2 mL Crimp-top Vials

Cat.#	Description	Qty
SC5-1	Silver aluminum caps (5.5 mm centre hole, diameter 11 mm), with white PTFE/red silicone septa (φ11*1 mm)	100/PK
SC5-2	Silver aluminum caps (5.5 mm centre hole, diameter 11 mm), with red PTFE/white silicone septa (φ11*1 mm)	100/PK
SC5-3	Silver aluminum caps (5.5 mm centre hole, diameter 11 mm), with red PTFE/white silicone/red PTFE septa ( $\phi$ 11*1 mm)	100/PK
SC5-4	Silver aluminum caps (5.5 mm centre hole, diameter 11 mm), with white PTFE/red silicone pre-slit septa ( $\phi$ 11*1 mm)	100/PK
SC5-5	Silver aluminum caps (5.5 mm centre hole, diameter 11 mm), with red PTFE/white silicone pre-slit septa ( $\phi$ 11*1 mm)	100/PK

If you need additional models, we can assemble and adjust them based on different septa and caps.





#### 13-425 4 mL Screw-thread Vials

Cat.#	Description	O.D.x L	Qty
V6-T	4 mL 13-425 glass screw-thread vials, clear	15×45 mm	100/PK
V6-TL	4 mL 13-425 glass screw-thread vials with write-on spot, clear	15×45 mm	100/PK
V6-A	4 mL 13-425 glass screw-thread vials, amber	15×45 mm	100/PK
V6-AL	4 mL 13-425 glass screw-thread vials with write-on spot, amber	15×45 mm	100/PK

#### Caps with Septa for 13-425 4 mL Screw-thread Vials

Cat.#	Description	Qty
SC6-1	13-425 Black polypropylene screw caps, 8.5 mm centre hole, with white PTFE/red silicone septa (φ13*1.5 mm)	100/PK
SC6-2	13-425 Black polypropylene screw caps, 8.5 mm centre hole, with red PTFE/white silicone septa (φ13*1.5 mm)	100/PK
SC6-3	13-425 Black polypropylene screw caps, 8.5 mm centre hole, with red PTFE/white silicone/red PTFE septa (\$\phi\$13-1.5 mm)	100/PK
SC6-4	13-425 Black polypropylene screw caps, 8.5 mm centre hole, with natural PTFE/natural silicone septa (\$\phi\$13-1.5 mm)	100/PK
SC6-5	13-425 Black polypropylene closed-top screw caps, with natural PTFE/ natural silicone septa (φ13*1.2 mm)	100/PK

If you need additional models, we can assemble and adjust them based on different septa and caps.





## **Headspace Vials and Caps**

#### 18 mm Screw-thread Headspace Vials

	•		
Cat.#	Description	O.D.x L	Qty
V7-10T	10 mL 18 mm Precision glass screw-thread headspace vials, rounded bottom, clear	22.5×46 mm	100/PK
V7-10A	10 mL 18 mm Precision glass screw-thread headspace vials, rounded bottom, amber	22.5×46 mm	100/PK
V7-20T	20 mL 18 mm Precision glass screw-thread headspace vials, rounded bottom, clear	22.5×75.5 mm	100/PK
V7-20A	20 mL 18 mm Precision glass screw-thread headspace vials, rounded bottom, amber	22.5×75.5 mm	100/PK

#### Caps with Septa for 18 mm Screw-thread Headspace Vials

•		
Cat.#	Description	Qty
SC7-1	Silver magnetic metal caps (8 mm centre hole, 18 mm diameter), with blue PTFE/white silicone septa $(\phi 17*1.5 \text{ mm})$	100/PK
SC7-2	Silver magnetic metal caps (8 mm centre hole, 18 mm diameter), with red PTFE/white silicone septa (φ17*1.5 mm)	100/PK

If you need additional models, we can assemble and adjust them based on different septa and caps

#### 20 mm Crimp-top Headspace Vials

Cat.#	Description	O.D.x L	Qty
V8-10T	10 mL 20mm Glass crimp-top headspace vials, flat bottom, clear	22.5×46 mm	100/PK
V8-10T-R	10 mL 20mm Glass crimp-top headspace vials, rounded bottom, clear	22.5×46 mm	100/PK
V8-10A	10 mL 20mm Glass crimp-top headspace vials, flat bottom, amber	22.5×46 mm	100/PK
V8-10A-R	10 mL 20mm Glass crimp-top headspace vials, rounded bottom, amber	22.5×46 mm	100/PK







Cat.#	Description	O.D.x L	Qty
V8-20T	20 mL 20mm Glass crimp-top headspace vials, flat bottom, clear	22.5×75 mm	100/PK
V8-20T-R	20 mL 20mm Glass crimp-top headspace vials, rounded bottom,clear	22.5×75 mm	100/PK
V8-20A	20 mL 20mm Glass crimp-top headspace vials, flat bottom, amber	22.5×75 mm	100/PK
V8-20A-R	20 mL 20mm Glass crimp-top headspace vials, rounded bottom, amber	22.5×75 mm	100/PK

#### Caps with septa for 20 mm Crimp-top Headspace Vials

Cat.#	Description	Qty
SC8-1	Silver aluminum caps (10 mm centre hole, 20 mm diameter) , with white PTFE/white silicone septa ( $\phi$ 20*3 mm)	100/Pk
SC8-2	Silver aluminum caps (10 mm centre hole, 20 mm diameter) , with natural PTFE/natural silicone septa ( $\phi$ 20*3 mm)	100/Pk
SC8-3	Silver aluminum caps (10 mm centre hole, 20 mm diameter), with white PTFE/blue silicone septa (\$\phi 20*3 \text{mm})	100/Pk
SC8-4	Silver aluminum caps (10 mm centre hole, 20 mm diameter), with natural PTFE/yellow silicone septa ( $\phi$ 20*3 mm)	100/Pk
SC8-5	Silver aluminum caps (10 mm centre hole, 20 mm diameter), with natural PTFE/blue silicone septa (φ20*3 mm)	100/Pk
C8-7	Red bimetal magnetic aluminum caps (8 mm centre hole, 20 mm diameter), with blue PTFE/white silicone septa (φ20*3 mm)	100/Pk
C8-8	Blue bimetal magnetic aluminum caps (8 mm centre hole, 20 mm diameter), with blue PTFE/white silicone septa (φ20*3 mm)	100/Pk
C8-9	Silver aluminum caps (10 mm centre hole, 20 mm diameter), with grey PTFE/butyl rubber septa ( $\phi$ 20*3 mm)	100/Pk
C8-10	Silver pressure-release aluminum caps (20 mm diameter), with white PTFE/white silicone septa (φ20*3 mm)	100/Pk



## **Storage Vials and Caps**

#### 15-425 Screw-thread Storage Vials

Cat.# Description		O.D.x L	
V12-5T	5 mL 15-425 Glass screw-thread storage vials, clear		100/PK
V12-5A	A 5 mL 15-425 Glass screw-thread storage vials, amber		100/PK
V12-8T	2-8T 8 mL 15-425 Glass screw-thread storage vials, clear		100/PK
V12-8A	8 mL 15-425 Glass screw-thread storage vials, amber		100/PK
V12-12T	2T 12 mL 15-425 Glass screw-thread storage vials, clear		100/PK
V12-12A	12 mL 15-425 Glass screw-thread storage vials, amber	18.4×66 mm	100/PK





### Caps with Septa for 15-425 Screw-thread Storage Vials

Cat.#	Description	Qty
SC12-2	15-425 Black polypropylene closed-top screw caps, with natural PTFE/natural silicone septa (φ13.5*1.5 mm)	100/PK
SC12-3	15-425 White polypropylene closed-top screw caps, with natural PTFE/natural silicone septa (φ13.5*1.5 mm)	100/PK
SC12-4	15-425 Black polypropylene screw caps, 9 mm centre hole, with natural PTFE/natural silicone septa (φ13.5*1.5 mm)	100/PK

If you need additional models, we can assemble and adjust them based on different septa and caps

#### 18-400 Screw-thread Storage Vials

Cat.#	Description	O.D.x L	Qty
V13-10T	V13-10T		100/PK
V13-10A	10 mL 18-400 Glass screw-thread vials, amber	22×50 mm	100/PK
V13-15T	15 mL 18-400 Glass screw-thread vials, clear	22×70 mm	100/PK
V13-15A	15 mL 18-400 Glass screw-thread vials, amber	22×70 mm	100/PK

#### Caps with Septa for 15-425 Screw-thread Storage Vials

Cat.#	Description	Qty
SC13-1	18-400 Black polypropylene screw caps, 9.5 mm centre hole, with natural PTFE/natural silicone septa (φ17*1.5 mm)	100/PK
SC13-2	18-400 Black polypropylene closed-top screw caps, with natural PTFE/natural silicone septa (φ17*1.5 mm)	100/PK
SC13-3	18-400 White polypropylene closed-top screw caps, with natural PTFE/natural silicone septa (φ17*1.5 mm)	100/PK

If you need additional models, we can assemble and adjust them based on different septa and caps





If you need additional models, we can assemble and adjust them based on different septa and caps

#### 24-400 Screw-thread Storage Vials

Cat.#	Description	O.D.x L	Qty
V9-20A	20 mL 24-400 Glass screw-thread vials, amber	27.5×57 mm	100/PK
V9-20T	V9-20T 20 mL 24-400 Glass screw-thread vials, clear		100/PK
V9-30A	30 mL 24-400 Glass screw-thread vials, amber	27.5×75 mm	100/PK
V9-30T	30 mL 24-400 Glass screw-thread vials, clear	27.5×75 mm	100/PK
V9-40A	40 mL 24-400 Glass screw-thread vials, amber	27.5×95 mm	100/PK
V9-40T	40 mL 24-400 Glass screw-thread vials, clear	27.5×95 mm	100/PK
V9-60A	60 mL 24-400 Glass screw-thread vials, amber	27.5×140 mm	100/PK
V9-60T	60 mL 24-400 Glass screw-thread vials, clear	27.5×140 mm	100/PK



#### Caps with septa for 24-400 Screw-thread Storage Vials

Cat.#	Description	Qty
SC9-1	24-400 White polypropylene screw caps, 15mm centre hole, with natural PTFE/natural silicone septa (\$\phi22*3 \text{ mm}\$)	100/PK
SC9-2	24-400 White polypropylene closed-top screw caps, with natural PTFE/natural silicone septa (φ22*3 mm)	100/PK
SC9-3	24-400 Black polypropylene screw caps, 15mm centre hole, with natural PTFE/natural silicone septa (φ22*3 mm)	100/PK
SC9-4	24-400 Black polypropylene closed-top screw caps, with natura PTFE/natural silicone septa (φ22*3 mm)	100/PK

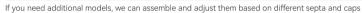


#### 20 mL Low Borosilicate Glass Scintillation Vials

Cat.#	Description	O.D.x L	Qty
V10-20T	20 mL Low borosilicate scintillation vials, 22-400 screw-thread, clear	27.5×57 mm	100/PK

#### Caps with Septa for 20 mL Low Borosilicate Glass Scintillation Vials

Cat.#	Description	Qty
SC10-1	22-400 Black closed-top caps, with natural PTFE/natural silicone septa	100/PK
SC10-2	22-400 White closed-top caps, with natural PTFE/natural silicone septa	100/PK







#### **Manual Crimpers & Manual Decappers for Aluminum caps**

Cat.#	Description	Qty
YGQ-01	Manual crimper for 20 mm aluminum caps	1/PK
KGQ-01	Manual decapper for 20 mm aluminum caps	1/PK
YGQ-02	Manual crimper for 11 mm aluminum caps	1/PK
KGQ-02	Manual decapper for 11 mm aluminum caps	1/PK

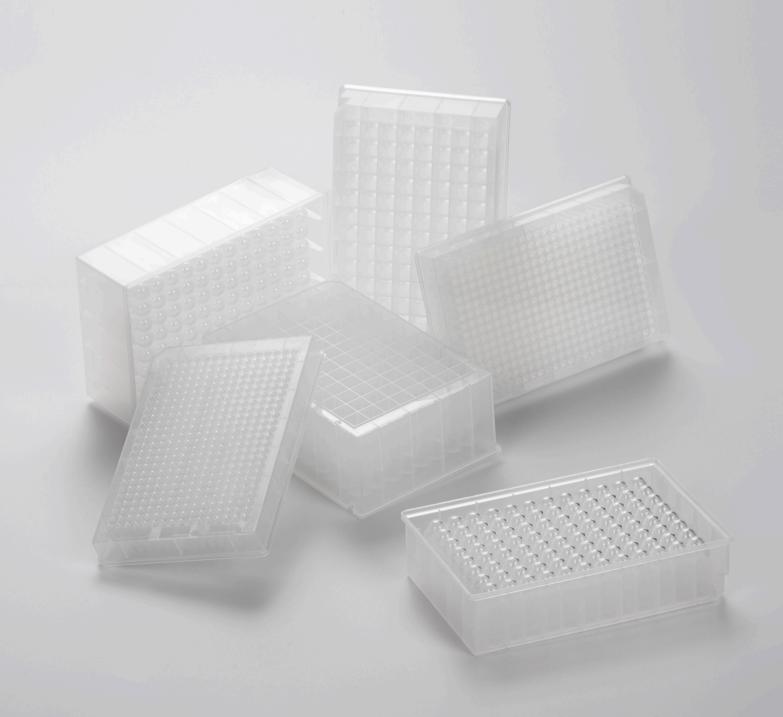




For more details, please download the catalog at www.biocomma. com/catalogs/

If you need additional models, we can assemble and adjust them based on different septa and caps

## General Laboratory Consumables



### **Collection Plates**

biocomma® Collection Plates are molded from high-purity polypropylene (PP), which is highly stable. The outstanding properties are excellent solvent resistance (including DMSO, ethanol and isopropanol), thermally resistance and low residual. The collection plates are international ANSI/SBS standards-compliant design with alphabetical marks.

#### **Features**

- Withstand high speed centrifugal force 3000-4000 g
- Tolerant to autoclave at 121 ° C for 20 min
- 4.6/3.5/2.2/2.0/1.6/1.0 mL deep well plates and 0.4/0.36 mL microplates are available



#### **Ordering Information**

#### Round Well:

Cat.#	Description	Qty.
48WP-C035	48-Well Collection Plate, Round Well, 3.5 mL, U-bottom	50 Pcs/Box
96WP-C020-N	96-Well Collection Plate, Round Well, 2.0 mL, U-bottom	24 Pcs/Box
96WP-C010	96-Well Collection Plate, Round Well, 1.0 mL, U-bottom	24 Pcs/Box
96WU-004	96-Well Collection Plate, Round Well, 0.4 mL, U-bottom	10 Pcs/Box
96WV-0036	96-Well Collection Plate, Round Well, 0.36 mL, V-bottom	10 Pcs/Box



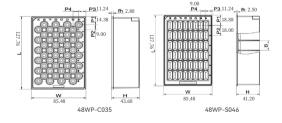
#### Square Well:

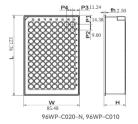
Cat. #	Description	Qty.
48WP-S046	48-Well Collection Plate, Square Well, 4.6 mL, U-bottom	24 Pcs/Box
96WP-S022-BN	96-Well Collection Plate, Square Well, 2.2 mL, U-bottom	24 Pcs/Box
96WP-S022V-N	96-Well Collection Plate, Square Well, 2.2 mL, V-bottom	24 Pcs/Box
96WP-S016-BN	96-Well Collection Plate, Square Well, 1.6 mL, U-bottom	30 Pcs/Box
96WP-S010-N	96-Well Collection Plate, Square Well, 1.0 mL, U-bottom	30 Pcs/Box
384WP-240	384-Well collection plate, Square Well, 0.24 mL	10 Pcs/Box

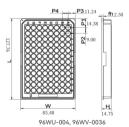
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Note: For sterilized collection plates, please contact us.

#### ALL DIMENSIONS IN MM



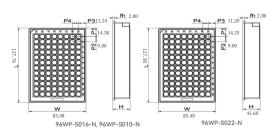




#### Note:

1.The length and width of round well plate of 96WP-C020-N and 96WP-C010 are the same, but the well height is 43.90 mm and 33.00 mm.

2.The length and width of square well plate of 96WP-S016-BN and 96WP-S010-N are the same, but the well height is 31.60 mm and 24.40 mm.



## **Silicone Sealing Mats**

#### **Ordering Information**

Cat. #	Description	Qty.
96WSC20	96-Well Round Capped Silicone Sealing Mats, for Sealing 96- Well Collection Plates (2.0 mL), Pierceable	10 Pcs/PK
96WSC10	96-Well Round Capped Silicone Sealing Mats, for Sealing 96- Well Collection Plates (1.0/0.4/0.36 mL), Pierceable	10 Pcs/PK
96WSS	96-Well Square Capped Silicone Sealing Mats, for Sealing 96- Well Collection Plates (2.2/1.6/1.0 mL)	10 Pcs/PK
96WSP	96-Well Square Capped Silicone Sealing Mats, for Sealing 96- Well Collection Plates (2.2/1.6/1.0 mL), Pierceable	10 Pcs/PK
96WS	Adhesive Sealing Films, for Sealing Deep Well Plates	500 Pcs/PK



## **Reagent Reservoirs**

biocomma® Reagent Reservoirs are available in 8-channel, 12-channel, 96-channel and 384-channel, free of DNase and RNase.



Cat. #	Description	Qty.
8WR	8-Channel Reagent Reservoirs, 22 mL	10 Pcs/Box
12WR	12-Channel Reagent Reservoirs, 15 mL	10 Pcs/Box
96WR	96-Channel Reagent Reservoirs, 195mL	10 Pcs/Box
384WR	384-Channel Reagent Reservoirs, 185 mL	10 Pcs/Box



### **Connectors**

The step cone-shaped and Luer inlet design ensure the connectors are suitable for 1, 3, 6, 12 mL cartridges, especially for tandem extraction.

#### **Ordering Information**

Cat. #	Description	Qty.
CS000-TJ-10	Connectors, for 1/3/6/12 mL Cartridges	10 Pcs/PK
CS003-JY-1	Connectors, for 3 mL Cartridges	100 Pcs/PK



## **Flow Regulators**

Flow regulators are suitable for connecting with vacuum manifolds to control flowrate and pressure, each with one Luer inlet and one Luer outlet.

Cat. #	Description	Qty.
CS002-PP-100	Flow Regulators	100 Pcs/PK





### **BCY96 Positive Pressure 96 Processor**

BCY96 Positive Pressure 96 Processor uses a continuous positive pressure gas source to drive variable viscosity liquids through each well of 96-well plate. Applying parallel gas pressure from top of the device ensures highly uniform flow rate across 96 wells.

#### **Ordering Information**

Cat.#	Description	Qty.
BCY9601-E	Positive Pressure 96 Processor	1 Set/Carton
ВСҮ9602-Е	Positive Pressure 96 Processor (includes adapters to fit more plates)	1 Set/Carton
BCY2401-E	Positive Pressure 24 Processor	1 Set/Carton



## **SPEMF Solid Phase Extraction Vacuum Manifold**

Solid Phase Extraction Vacuum Manifold processes multiple samples at the same time to realize activating, loading, rinsing, eluting and other processes in SPE sample preparation by controlling the pressure.

#### **Ordering Information**

Cat. #	Description	Qty.
SPEMF12G-E	12-Port SPE Vacuum Manifold, square shape, individual flow valve, transparent glass	1 Set/Carton
SPEMF24G-S-E	24-Port SPE Vacuum Manifold, square shape, individual flow valve, transparent glass	1 Set/Carton



12-Port SPF Vacuum Manifold



24-Port SPE Vacuum Manifold

### **Vacuum Pump**

biocomma® Vacuum Pumps are designed to work with vacuum manifolds. Utilizing diaphragm vacuum technology without oil to eliminate contamination of media that occurs in rotary vane pumps.

#### **Parameters**

Oil-Free Vacuum Pump	Portable	Adjustable
Model	SPEMFP01-E	SPEMFP02-E
Ultimate Pressure	0.08 MPa	0.02~0.08
Max. Flow	10 L/min	5~30 L/min
Power	55 W	90 W
Power Supply	A.C. 220 V, 50/60 Hz	A.C. 220 V, 50/60 Hz
Weight	3 Kg	3.8 Kg

Cat. #	Description	Qty.
SPEMFP01-E	Portable Oil-Free Vacuum Pump, ultimate pressure 0.08 MPa	1 Set/Carton
SPEMFP02-E	Adjustable Oil-Free Vacuum Pump, adjustable pressure: 0.02~0.08, waste collection bottle included	1 Set/Carton



Portable



Adjustable

### SDC-4000-D Multi-Tube Vortex Mixer

biocomma® Multi-Tube Vortex Mixer is a sample pretreatment device specially designed for liquid-liquid and solid-liquid mixing in the laboratory. The strong vortex effect is also suitable for high viscosity samples.

#### **Ordering Information**

Cat.#	Description	Qty.
SDC-4000-D-E	Multi-Tube Vortex Mixer with standard carousel accessories: 20 positions of 10 positions for 15mL tubes (10-16 mm diameter) plus 10 positions for 50mL (16-32 mm diameter)	1 Set/Carton
SDC-4000-15-D-E	Multi-Tube Vortex Mixer(26 positions for 15 mL tubes (10-16 mm diameter))	1 Set/Carton1 Set/Carton
SDC-4000-50-D-E	Multi-Tube Vortex Mixer(16 positions for 50 mL tubes (16-32 mm diameter))	



## **BN24 Intelligent Water-Bath Nitrogen Evaporator**

BN24 Intelligent Water-Bath Nitrogen Evaporator concentrates samples rapidly by water bath and blowing heated

nitrogen to the surface of samples. The device is widely applied to sample preparation in gas phase, liquid phase and mass spectrometry analysis.

#### **Ordering Information**

Cat. #	Description	Qty.
BN24-E	BN24 Intelligent Water-Bath Nitrogen Evaporator	1 Set/Carton



### 96-Well Plate Nitrogen Evaporator

The nitrogen concentration device combines microcomputer processing and PID control. The working principle is to blow nitrogen rapidly, continuously and uniformly to the surface of sample.

According to the evaporation speed and boiling point of the solvent, the heating temperature is set to complete rapid anaerobic concentration of large samples, which improves the recovery and reproducibility of the target analyte.

Sample preparation in clinical research and testing, drug screening, hormone analysis, liquid phase and mass spectrometry.

Cat. #	Description	Qty.
BCN9602-E	96-Well Plate Nitrogen Evaporator (110 V)	1 Set/Carton



## **BRAND PROFILE**







Copure® is a brand of Biocomma, specializing in the field of food safety. It is committed to providing comprehensive process solutions for chromatographic sample preparation, ensuring more reliable food safety testing results.

Copure® Brand Definition

Copure—comma+consistent

"Co"represents the first two letters of "comma," symbolizing the use of biocomma's technology to achieve consistent recovery rates and reproducibility for each target substance.

Copure—pure

Pure represents purity, meaning the effective removal of interfering components from samples using biocomma's technology, helping users obtain 'pure' chromatograms.

Co-pure combined forms Copure, which sounds like 'kao pu' in Chinese, meaning 'reliable.' Food safety is crucial to people's lives, and reliability is the front line. We provide reliable product technology and dependable after-sales support, empowering technology to protect the safety of what's on your plate.

Made in Shenzhen · Sevice for Global Business · Customization Supported

HH-SP-01-003EN

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