

# Product Catalogue

## Solid Phase Extraction



——Production of the SPE Cartridges/SPE Plates/ QuEChERS,Complete implementation of "automation, scale, mass"!

——Automatic distribution, loading, injection and packaging of super micro to large amount of powder packing,The production efficiency of this kind of product is greatly improved, the management cost is reduced, and the quality is more reliable!

——BM Life Science's SPE Cartridges/SPE Plates/ QuEChERS,within the industry, cost-effective products and total solutions provider!

## Shenzhen BM Life Science Co.,Ltd.(BM Life Science)

We are a integrated high-tech company focusing on R & D, manufacturing, marketing and technical consulting service for life science, biomedical related instruments, biochemical reagents, chemical products, testing reagents, diagnostic reagents, biochemical laboratory reagent consumables, filtration equipments, etc.

BM Life Science, headquartered in Shenzhen, with two factories in Dongguan and one R & D center self-owned, is offering as many as 1200 products and services for the moment, which is widely applied in life sciences and biomedicine enterprises at home and abroad, servicing and highly praised by related scientific research institutes and customers around the globe.

### What we are offering:

#### ★ Automation instrument and equipment:

Including automatic centrifuge tube/riser labeling machine series, automatic centrifuge tube/riser labeling + spurt the code machine series, automatic can add centrifugal pipe riser (powder) liquid marking label series screw cap spurt the code machine, automatic packing column machine/centrifugal column assembly machine series, pipetting, spear cartoning machine series, the public security forensic automatic FTA card/food filter plate punching machine series, automatic solid-phase extraction equipment series, fully automatic SPE/QuEChERS powder filling packaging machine and 96/384 sample orifice and assistant, 96/384 well plates automatic gas meter...Customer customization can be accepted for non-standard custom equipment.

#### ★ Sample pretreatment:

**Solid phase extraction (SPE) series**, solid phase support liquid extraction (SLE) series and dispersed solid phase extraction (QuEChERS) series.

#### ★ Reagent consumables:

Including **Tip SPE series**, G25 preloaded column series, **DNA/RNA extraction series**, filter equipment (Frits/filter/column and other) series, etc.

#### ★ Technical service:

Including DNA&RNA synthetic sequencing related services, STR/SNP analysis appraisal related services, in vitro diagnostic reagents and technical cooperation and project cooperation, **SPE cartridge /SPE plate/QuEChERS OEM/ODM** and other personalized custom services, etc.

BM Life Science specialised in instruments manufacturing, mold CNC, injection molding, electrical components, photoelectric tracking, software development, life science and biological medicine product research and development and application, and other interdisciplinary fields. we are dedicated ourselves to China's life sciences and biomedicine industry, contributing our wisdom and strength by giving our own advantages to play the roles of crossover and bridge or link in cross-regional interdisciplinary field !

"The sea is wide enough for fish, while the sky is high enough for flying birds", the independent and innovative BM Life Science, will achieve their own "transboundary" with innovative ideas, advanced technology and excellent services, and realizing the value of ourselves and customers, we will work together with customers for human health, protecting human health.





BM Life Science, Each series of SPE tubes adopt medical grade polypropylene injection molding; The sieve plate is made of ultra-pure ultra high molecular weight polyethylene, Various models are available; Packing is global sourced, and through authoritative organization evaluation, quality trustworthy; Production of all level clean workshop, standardized production process, whole ERP management, product quality traceability; Product specifications are diversified to meet customers' different needs; All the products of the company are personalized and customized to enable customers to enjoy a more high-quality one-stop service.

### The SPE series product features of BM Life Science

#### Technical advantages:

- ★ Some SPE filler research and production technology with independent intellectual property rights, SPE loading (powder distribution, filling, packing) is completely automated.
- ★ Relying on the mould CNC injection molding industry concentration of the pearl river delta unique advantages, Resource integration and efficient utilization, doubling the production capacity of the SPE string, the cost of molding injection is halved, the quality of the product has been greatly improved.
- ★ The company has a unique ultra - micro – size to large-size powder distribution technology. Powder distribution is completely automated, quantitative and scale, and product batches are more stable.
- ★ Hundreds of millions of screen, filter core development and production capacity, the production cost of SPE is minimized.
- ★ SPE sieve plate is completely independent, its diameter, thickness and pore diameter can be freely selected, any combination.
- ★ The company focuses on technical innovation and continuous improvement, especially the Tip SPE with independent intellectual property rights. The company focuses on technical innovation and continuous improvement, especially the Tip SPE 、 no sieve plate Mosaic SPE, 96&384 orifice SPE with independent intellectual property rights. It has filled the domestic gap and reached the world class level, which embodies the unique advantages of the life sciences in the SPE field.

#### Product advantages:

- ★ It is easy to operate and can achieve excellent velocity range and repeatability in natural gravity.
- ★ Need not use solid phase extraction instrument and vacuum equipment, can greatly save the instrument and consumables cost.
- ★ The packing is clean and there is no blank background interference.
- ★ The recovery rate is high, and the recovery rate of add the sample 10~100ppm is the best range of 95%~105%.
- ★ The adsorption capacity is larger than other domestic SPE column brands.
- ★ Product quality is stable, good reproducibility, load relative standard deviation (RSD) < 5%.
- ★ No fear of the stem. The stem column and not stem column are the same in the error range, the relative standard deviation (RSD) < 0.05%.
- ★ With Waters/Agilent/Supelco/Phenomenex products completely in the same quality level.
- ★ Our products are among the most cost-effective products in the world.

#### Application scope:

- ★ Widely used in soil;Oil;Body fluids (plasma/urine etc.);Food and other aspects.

#### Quality commitment:

- ★ We ensure that every product is qualified, adopt strict quality control standard and carry out every batch inspection.
- ★ Ensure that every product has no blank interference, and the sample recovery rate is superior to that of the state, reaching the highest level of the same kind of products.

#### Service commitment:

- ★ Provide professional technical support for free



### Polymer matrix series SPE

With spherical polymer as adsorbent, the filling particle size is better and the SPE column velocity is more stable. Laboratory classical polymer application column, whole series products have been widely used for food testing. The product is equivalent to the HLB, MAX and MCX of Waters.

### Silicone matrix series SPE

The classic silicone stromal SPE column, unshaped/ball adsorbent, is trusted by customers with high cost performance and good user experience. Whole products have been widely used in chemical analysis.

### Tip extraction/purification/enrichment of SPE

It is a Tip SPE that USES a pipe-shifter to extract/purify a biological sample or a product of the product. A C4/C18/silica powder/magnetic bead/ProtingA (G) agarose gel and other filler are added to the top of the pipe-head, Using filter/extraction/desalting/desalt/concentration of the target products, such as primers/genomic DNA/plasmid/PCR products/polypeptide/protein/antibody, etc.

### 96/384 orifice series SPE

The 96/384 orifice series SPE was developed for pretreatment of high fluxes. The whole sample pretreatment process can be completed with the company orifice filter or automatic workstation.

### Special test series SPE

Azo dye special detection column: select ultra-pure diatomite filler; Special sieve plate flow control technology, through domestic and foreign authoritative testing, OEM supply.

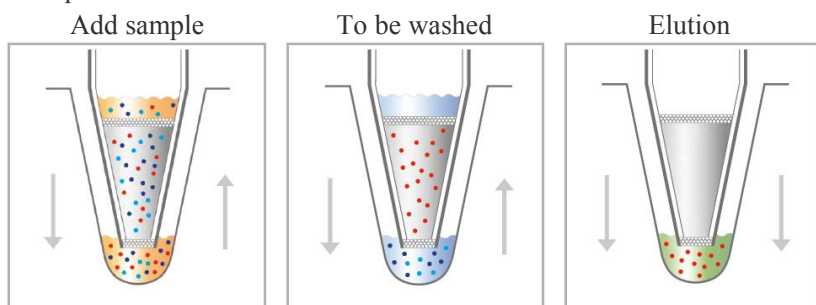
In addition, there are graphite carbon black, acid alkali neutral alumina, coconut shell activated carbon, honey detection column, leather decolorizing column...Please refer to the SPE column for more SPE products.

Action steps (for example, Tip SPE) :

According to the mechanism of packing retention compound (filler adsorption target product or adsorption impurity), the operation is slightly different.

1. Product of packing adsorption, remove impurities and remove the product of purpose

Principle:

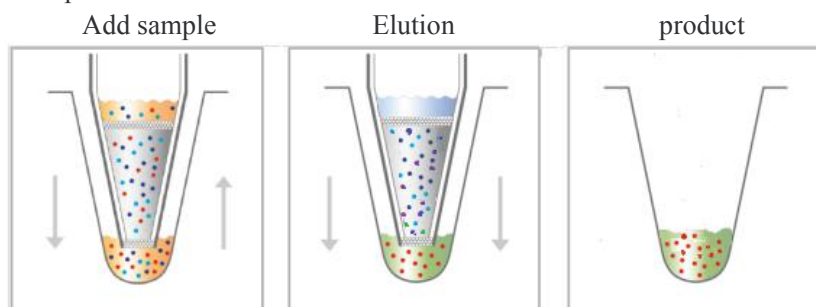


This kind of solid phase extraction operation generally has four steps:

- ① Activation - removing impurities in Tip SPE and producing a solvent environment;
- ② Add sample - dissolve the sample in a certain solvent, use the pipettes to inhale Tip SPE and keep the components in Tip;
- ③ To be washed -- to the extent that the non-target products, such as impurity, are removed;
- ④ Elution - a small solvent will be washed off and collected by the target product.

2. The filler adsorbs impurities and outputs the product

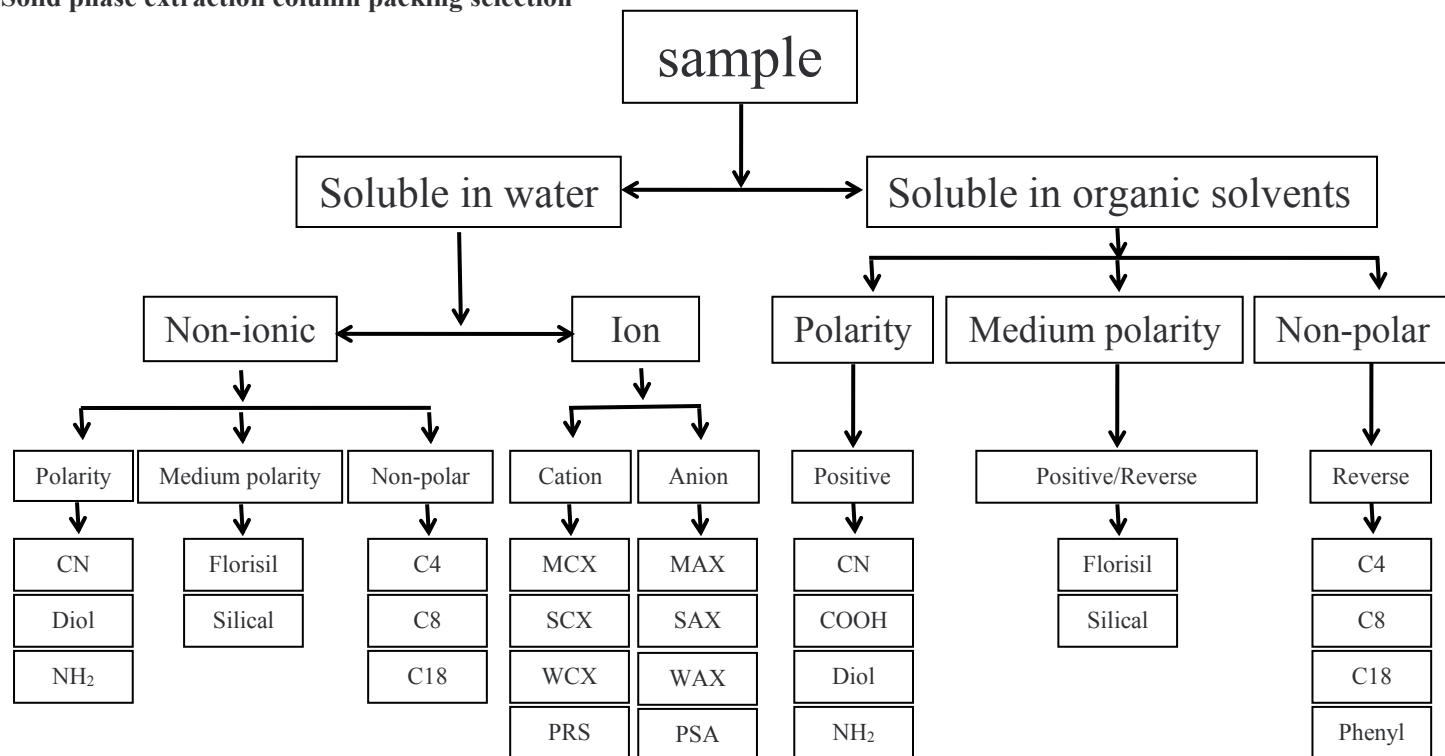
Principle:



This kind of solid phase extraction operation generally has three steps:

- ①Activation - remove impurities in Tip SPE and produce a solvent environment;
- ②Add sample - use a pipettes to inhale Tip SPE, At this point, most of the target compounds are played with the sample base fluid, Impurities are kept on Tip,this step is to start collecting;
- ③Elution - wash and collect the components in small volume solvents and collect them.

**Solid phase extraction column packing selection**



# Catalogue

## SPE Cartridges Of Silica Matrix

★ C8(辛烷基 SPE 柱)	7
★ C18(封端十八烷基 SPE 柱)	8
★ C18Q(亲水十八烷基 SPE 柱)	9
★ C18W(未封端十八烷基 SPE 柱)	10
★ CN (氰基 SPE 柱)	11
★ Diol (二醇基 SPE 柱)	12
★ NH2 (氨基 SPE 柱)	13
★ PRS (丙磺酸 SPE 柱)	14
★ PSA (N-丙基乙二胺基 SPE 柱)	15
★ SAX (强阴离子交换 SPE 柱)	16
★ SCX (苯基磺酸强阳离子交换 SPE 柱)	17
★ Silica (未键合硅胶 SPE 柱)	18
★ C8/SAX (辛基/季铵基 SPE 柱)	19
★ C8/SCX (辛基/磺酸基 SPE 柱)	20

## SPE Cartridges Of Spherical Polymer Matrix

★ HLB (吡咯烷酮 SPE 柱)	21
★ MAX (混合型阴离子交换 SPE 柱)	22
★ MCX (混合型阳离子交换 SPE 柱)	23
★ WAX (混合型阴离子交换 SPE 柱)	24
★ WCX (混合型阳离子交换 SPE 柱)	25

## SPE Cartridges Of Other Adsorptive Matrix

★ Alumina (A/B/N)氧化铝固相萃取柱/SPE 小柱	26-27
★ BaP (苯并芘 SPE 柱)	28
★ Florisil (硅酸镁 SPE 柱)	29
★ G25 柱 (SPE 专用柱)	30
★ GCB (石墨化碳黑 SPE 柱)	31
★ Polyamide (聚酰胺 SPE 专用柱)	32
★ Azo dye detection (偶氮染料检测专用柱)	33
★ Coconut shell activated carbon(椰子壳活性炭 SPE 柱)	34

## SPE Cartridges Of Mixed Matrix

★ GCB/NH2 (石墨化碳黑/氨基 SPE 柱)	35
★ GCB/PSA (石墨化碳/乙二胺基-N-丙基 SPE 柱)	36

## Detection of Mycotoxins Special Cartridges Series

★ Immunoaffinity detection Cartridges for Total aflatoxin/Aflatoxin B1/M1/DON/OTA/T2/Zearalenone/Fumonisin	37-42
--	-------

## Other Special Cartridges Series

★ Honey detection Cartridges(蜂蜜检测柱)	43
★ Decolorization of leather Cartridges(皮革脱色柱)	44
★ Tony red Detection Cartridges(苏丹红检测柱)	45

## SPE Cartridges Of Tip SPE Series

★ Tip SPE Series	46-47
------------------	-------

## BM-QuEChERS

★ BM-Q QuEChERS Series	48-50
------------------------	-------

## Supporting Series For SPE

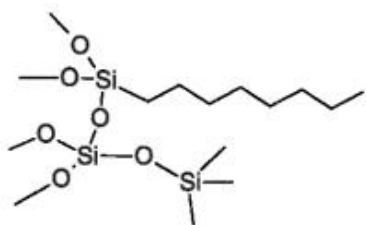
★ Column/Tube/Plate Series (1/3/6/12ml/96&384 Well Plates)	51
★ Frits/Filter Series (Hydrophilicity/Hydrophobicity Frits Of UHMWPE/PP/PTFE/Cotton)	52-54
★ Syringe Filters & Sample Vials Series	55-62

## Supporting Instrument /Technical Service/Technological advantage/Product patent

★ SPE instrument	63
★ SPE/QuEChERS/Nucleic Acid Extraction Column & Plate OEM/ODM and others	64-66
★ Core technology / Product patent	67
★ Contact us	68

## SPE Cartridges Of Silica Matrix

### C8 (辛烷基 SPE 柱)



#### Application:

Soil;Water;Body fluids(plasma/urine etc.);food

#### Typical Applications:

Drugs and metabolites are extracted from plasma/urine samples

Peptides in plasma

Both fat-soluble and water-soluble vitamins were extracted from human blood

B&M C8 is a medium hydrophobic anti-phase silicon matrix filler, similar to C18 bond in adsorption.

Since the C8 carbon bond is shorter than C18, the retention of non-polar compounds is weaker than C18, which is helpful for the washing of samples with strong non-polar adsorption.

If C18 is used to cause non-polar objects to be unwashed, C18 can be replaced by C8.

#### Sorbent Information

Matrix: Silica

Functional Group: Octyl

Mechanism of Action: Reversed-phase(RP) extraction

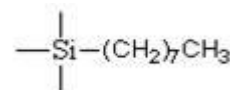
Carbon Content: 9%

Particle Size: 40-75 $\mu$ m

Surface Area: 280m<sup>2</sup>/g

Average Pore Size: 60Å

Molecular formula of C8 :

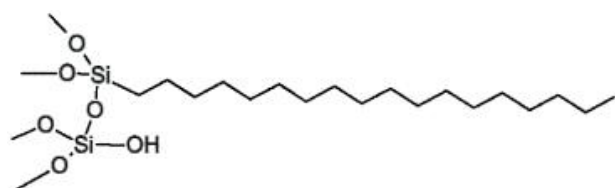


## Order Information

Sorbents	Form	Specification	Pcs/pk	Cat. No
C8	Cartridge	100mg/1ml	100	SPEC81100
		200mg/3ml	50	SPEC83200
		500mg/3ml	50	SPEC83500
		500mg/6ml	30	SPEC86500
		1g/6ml	30	SPEC861000
		1g/12ml	20	SPEC8121000
		2g/12ml	20	SPEC8122000
	Plates	96 $\times$ 50mg	96-well	SPEC89650
		96 $\times$ 100mg	96-well	SPEC896100
		384 $\times$ 10mg	384-well	SPEC838410
Sorbent		100g	Bottle	SPEC8100

## SPE Cartridges Of Silica Matrix

### C18 (封端十八烷基 SPE 柱)



#### Application:

Soil;Water;Body fluids(plasma/urine etc.);Food;Medicine

#### Typical Applications:

Separation of lipids and lipids

Official methods of Japan's JPMHW and us CDFA:

pesticides in food

Natural products

The AOAC method: food, sugar, pigment in the blood, plasma, drug and its metabolites in urine protein, DNA samples of macromolecular desalination, the organic matter enrichment in environmental water samples, drinks containing organic acid extraction.

Specific example: antibiotics, barbiturates, phthalazine, caffeine, drugs, dyes, aromatic oils, fat-soluble vitamins, fungicides, weeding agents, pesticides, carbohydrates,

The extraction and purification of hydroxytoluene, phenol, phthalate, steroid, surfactant and theophylline

B&M C18 (sealing end) is the most commonly used silica gel matrix anti-phase SPE column, and the more surface silicone functional groups provide additional polar interaction.

At the same time, the polar interaction of alkaline compounds is enhanced by comparison with other adsorbent.

The column is reserved for most organic compounds and is very selective and can be used as the extraction of polar and nonpolar compounds. It is a universal solid phase extraction column.

It is equivalent of Agilent Accu Bond C18, Bond elute C18.

#### Sorbent Information

Matrix: Silica

Functional Group: Octadecyl, Silicon alcohol-based

Mechanism of Action: Reversed-phase(RP) extraction

Carbon Content: 18%

Particle Size: 40-75 $\mu$ m

Surface Area: 300m<sup>2</sup>/g

Average Pore Size: 60Å

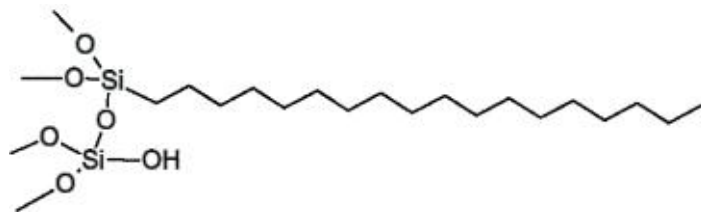
## Order Information

Sorbents	Form	Specification	Pcs/pk	Cat. No	
C18	Cartridge	100mg/1ml	100	SPEC181100	
		200mg/3ml	50	SPEC183200	
		500mg/3ml	50	SPEC183500	
		500mg/6ml	30	SPEC186500	
		1g/6ml	30	SPEC1861000	
		1g/12ml	20	SPEC18121000	
	Plates	2g/12ml	20	SPEC18122000	
		96 $\times$ 50mg	96-well	SPEC189650	
		96 $\times$ 100mg	96-well	SPEC1896100	
		384 $\times$ 10mg	384-well	SPEC1838410	
	Sorbent		100g	Bottle	SPEC18100



## SPE Cartridges Of Silica Matrix

### C18Q (亲水十八烷基 SPE 柱)



It is equivalent of Agilent Accu Bond C18, Bond elute C18.

#### Application:

Soil; Water; Body fluids (plasma/urine etc.); Food; Medicine

#### Typical Applications:

Separation of lipids and lipids

Official methods of Japan's JPMHW and us CDFA:

pesticides in food

Natural products

The AOAC method: food, sugar, pigment in the blood, plasma, drug and its metabolites in urine protein, DNA samples of macromolecular desalination, the organic matter enrichment in environmental water samples, drinks containing organic acid extraction.

Specific example: antibiotics, barbiturates, phthalazine, caffeine, drugs, dyes, aromatic oils, fat-soluble vitamins, fungicides, weeding agents, pesticides, carbohydrates,

The extraction and purification of hydroxytoluene, phenol, phthalate, steroid, surfactant and theophylline

B&M C18Q (hydrophilic) is a hydrophilic anti-phase C18 extraction column with all-covering bonded silica gel, with excellent stability. It can be used as a flow phase with pure water, which can isolate acidic, neutral and alkaline organic compounds, as well as many drugs and peptides.

It is similar to the sealing end C18, which is used to purify, extract and concentrate the pollutants in environmental water samples such as polycyclic aromatic hydrocarbons, pesticide residues in food and beverages, and drugs and metabolites in biological fluids. It can also be used to desalinate water before ion exchange. In biological applications such as polypeptides, DNA extraction performance is superior to classical C18.

#### Sorbent Information

Matrix: Silica

Functional Group: Octadecyl

Mechanism of Action: Reversed-phase (RP) extraction

Carbon Content: 17%

Particle Size: 40-75 μm

Surface Area: 300 m<sup>2</sup>/g

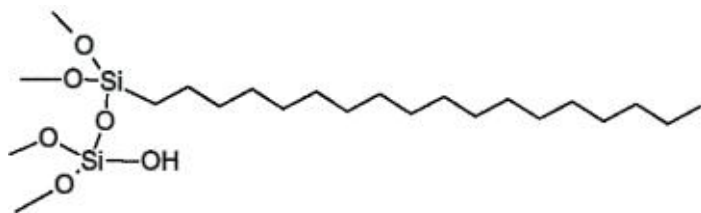
Average Pore Size: 60 Å

## Order Information

Sorbents	Form	Specification	Pcs/pk	Cat. No
C18Q	Cartridge	100mg/1ml	100	SPEC18Q1100
		200mg/3ml	50	SPEC18Q3200
		500mg/3ml	50	SPEC18Q3500
		500mg/6ml	30	SPEC18Q6500
		1g/6ml	30	SPEC18Q61000
	Plates	1g/12ml	20	SPEC18Q121000
		2g/12ml	20	SPEC18Q122000
		96 × 50mg	96-well	SPEC18Q9650
	Sorbent	96 × 100mg	96-well	SPEC18Q96100
		384 × 10mg	384-well	SPEC18Q38410
		100g	Bottle	SPEC18Q100

## SPE Cartridges Of Silica Matrix

### C18W (未封端十八烷基 SPE 柱)



It is equivalent of Agilent Accu Bond C18, Bond elute C18 OH.

#### Application:

Soil; Water; Body fluids (plasma/urine etc.); Food; Medicine

#### Typical Applications:

Separation of lipids and lipids

Official methods of Japan's JPMHW and us CDFA:

pesticides in food

Natural products

The AOAC method: food, sugar, pigment in the blood, plasma, drug and its metabolites in urine protein, DNA samples of macromolecular desalination, the organic matter enrichment in environmental water samples, drinks containing organic acid extraction.

Specific example: antibiotics, barbiturates, phthalazine, caffeine, drugs, dyes, aromatic oils, fat-soluble vitamins, fungicides, weeding agents, pesticides, carbohydrates,

The extraction and purification of hydroxytoluene, phenol, phthalate, steroid, surfactant and theophylline

B&M C18W (unsealed end) is an unsealed end C18 extraction column with silica gel as the substrate, and the surface of more silicone functional groups provides additional polar interaction. Non-polar compounds are extracted by hydrophobic action.

At the same time, the activity of silicon alcohol-based makes it much sealing side C18 for part of drug metabolites and alkaline compounds have better retention capacity, so its retention mechanisms include secondary nonpolar and polar secondary role.

#### Sorbent Information

Matrix: Silica

Functional Group: Unsealed end Octadecyl, Silicon alcohol-based

Mechanism of Action: Reversed-phase (RP) extraction

Carbon Content: 18%

Particle Size: 40-75 $\mu$ m

Surface Area: 300m<sup>2</sup>/g

Average Pore Size: 60Å

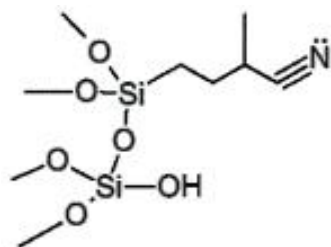
## Order Information

Sorbents	Form	Specification	Pcs/pk	Cat. No
C18W	Cartridge	100mg/1ml	100	SPEC18W1100
		200mg/3ml	50	SPEC18W3200
		500mg/3ml	50	SPEC18W3500
		500mg/6ml	30	SPEC18W6500
		1g/6ml	30	SPEC18W61000
		1g/12ml	20	SPEC18W121000
		2g/12ml	20	SPEC18W122000
	Plates	96 $\times$ 50mg	96-well	SPEC18W9650
		96 $\times$ 100mg	96-well	SPEC18W96100
		384 $\times$ 10mg	384-well	SPEC18W38410
Sorbent		100g	Bottle	SPEC1WF100

<http://www.bm-ls.com>

## SPE Cartridges Of Silica Matrix

### CN ( 氰基 SPE 柱 )



#### Application:

Soil;Water;Body fluids(plasma/urine etc.);Food

#### Typical Applications:

Drugs and metabolites (e.g. aflatoxin, antibiotics, steroids, etc.)

B&M CN based on silica gel matrix of cyanide propyl extraction column, and can be used as a non-polar adsorbent, used in polar and nonpolar molecules extracted from aqueous solution and relative in nonpolar solvent extraction from polar molecules. In addition, cyanopropyl was used as a complex ligand to enrich some metal ions in aqueous solution.

The equivalent of Waters Sep-Pak CN.

#### Sorbent Information

Matrix: Silica

Functional Group: Cyanide propyl

Mechanism of Action: Positive phase extraction

Carbon Content: 4.5 %

Particle Size: 40-75 $\mu$ m

Surface Area: 200 m<sup>2</sup> /g

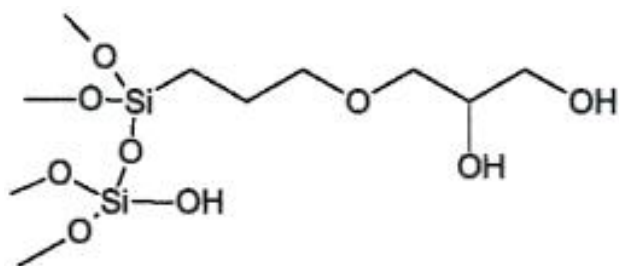
Average Pore Size: 100Å

## Order Information

Sorbents	Form	Specification	Pcs/pk	Cat. No	
CN	Cartridge	100mg/1ml	100	SPECN1100	
		200mg/3ml	50	SPECN3200	
		500mg/3ml	50	SPECN3500	
		500mg/6ml	30	SPECN6500	
		1g/6ml	30	SPECN61000	
		1g/12ml	20	SPECN121000	
		2g/12ml	20	SPECN122000	
		Plates	96 $\times$ 50mg	96-well	SPECN9650
			96 $\times$ 100mg	96-well	SPECN96100
			384 $\times$ 10mg	384-well	SPECN38410
Sorbent		100g	Bottle	SPECN100	

## SPE Cartridges Of Silica Matrix

### Diol (二醇基 SPE 柱)



B&M Diol is a Diol - based extraction column with silica gel, which is similar to silica gel. Through the polarity effect, polarity samples extracted from nonpolar solution, in effect, the nature of the hydrogen bonding interaction to the sample and not bonded silica gel are similar, and as well as silica gel column can distinguish between structural isomer and other similar compounds. In addition, It can also be used to extract nonpolar compounds, because of the bonded phase in the carbon chain can provide adequate nonpolar forces to retain samples of hydrophobic, and Silica in different have different selective solvent ratio.

Diol is usually used to isolate drugs or metabolites in biological solutions such as urea, such as THC.

### Sorbent Information

Matrix: Silica

Functional Group: Glycol base

Mechanism of Action: Positive phase extraction

Carbon Content: 5.5 %

Particle Size: 40-75 $\mu$ m

Surface Area: 310 m<sup>2</sup> /g

Average Pore Size: 60Å

The equivalent of Agilent Bond Elut 2OH&Waters Sep-Pak Diol.

#### Application:

Soil;Water;Body fluids(plasma/urine etc.);Food

#### Typical Applications:

Antibiotics in cosmetics

The proteins or peptides are separated by hydrophobic

Separation of isomers of different kinds of prostaglandins

Nonpolar organic solutions, oils, lipids, such as the

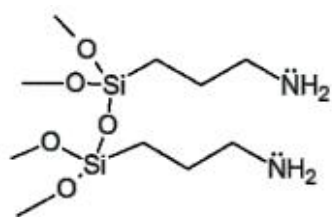
extraction of tetrahydrocannabinol (THC) from aqueous solutions

## Order Information

Sorbents	Form	Specification	Pcs/pk	Cat. No
Diol	Cartridge	100mg/1ml	100	SPEDI1100
		200mg/3ml	50	SPEDI3200
		500mg/3ml	50	SPEDI3500
		500mg/6ml	30	SPEDI6500
		1g/6ml	30	SPEDI61000
		1g/12ml	20	SPEDI121000
	Plates	2g/12ml	20	SPEDI122000
		96×50mg	96-well	SPEDI9650
		96×100mg	96-well	SPEDI96100
		384×10mg	384-well	SPEDI38410
Sorbent		100g	Bottle	SPEDI100

## SPE Cartridges Of Silica Matrix

### NH<sub>2</sub> (氨基 SPE 柱)



The equivalent of Agilent Bond Elut NH2  
& Waters Sep-Pak NH2.

#### Application:

Soil;Water;Body fluids(plasma/urine etc.);Food

#### Typical Applications:

The strong anions, such as sulfonate, are extracted in the pH<7.8 aqueous solution  
Extraction and separation of isomers  
Phenol, phenolic pigments, natural products  
Petroleum fraction;Sugar;Drugs and their metabolites

## Order Information

Sorbents	Form	Specification	Pcs/pk	Cat. No	
NH <sub>2</sub>	Cartridge	100mg/1ml	100	SPENH1100	
		200mg/3ml	50	SPENH3200	
		500mg/3ml	50	SPENH3500	
		500mg/6ml	30	SPENH6500	
		1g/6ml	30	SPENH61000	
		1g/12ml	20	SPENH121000	
		2g/12ml	20	SPENH122000	
		Plates	96×50mg	96-well	SPENH9650
			96×100mg	96-well	SPENH96100
			384×10mg	384-well	SPENH38410
Sorbent		100g	Bottle	SPENH100	

B&M NH<sub>2</sub>(amino) is aminopropyl extraction column with silica gel. It has the weak polar stationary phase and anion exchanger, through weak anion exchange (aqueous solution) or polarity adsorption (non-polar organic solution) to reach the effect, therefore has a dual role. When preparation with nonpolar solutions, such as n-hexane, it can form hydrogen bonds with molecules with -oh, -nh or -sh, and amino PKa= 9.8;The effect of anion is weaker than that of SAX, and in PH < 7.8 aqueous solution, it can be used as a weak anion exchange agent, which can be used to remove the strong anions such as sulfonic acid in the sample.

The aminopropyl bond is strongly polar adsorbent in nonpolar organic solutions and has a weak anion-exchange retention in aqueous solution.NH<sub>2</sub> performs well in a variety of sample substrates and can be used in food, environment, pharmaceuticals and medicine.

#### Sorbent Information

Matrix: Silica

Functional Group: Ammonia propyl

Mechanism of Action: Positive phase extraction, weak anion exchange

Carbon Content: 4.5%

Particle Size: 40-75µm

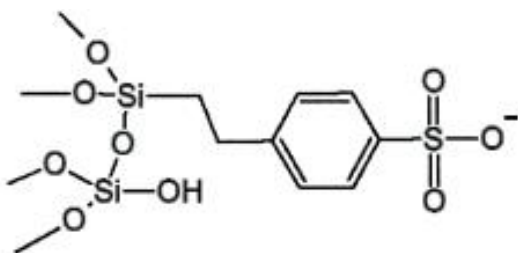
Surface Area: 200m<sup>2</sup>/g

Average Pore Size: 60Å



## SPE Cartridges Of Silica Matrix

### PRS (丙磺酸 SPE 柱)



#### Application:

Soil;Water;Body fluids(plasma/urine etc.);Food;Oil

#### Typical Applications:

Detection of pyridine drugs and their metabolites in biological matrix

Determination of malachite green, crystal violet, heyuan toxin and methylene blue and other alkaline pollutants

B&M PRS are strong cation exchange extraction column of silica gel for matrix, PRS bonding propyl sulfonic acid functional groups, acidic slightly below the SCX, has a unique new choice, is used to extract weak cation, such as pyridine, has the very high recovery rate, widely used in the sample preparation of malachite green.

The equivalent of Agilent Bond Elut PRS。

#### Sorbent Information

Matrix: Silica

Functional Group: Propyl sulfonic acid

Mechanism of Action: Ion exchange

Carbon Content: 4.5%

Particle Size: 40-75 $\mu$ m

Surface Area: 310 m<sup>2</sup> /g

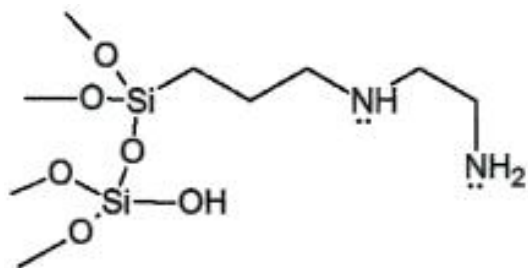
Average Pore Size: 100Å

## Order Information

Sorbents	Form	Specification	Pcs/pk	Cat. No
PRS	Cartridge	100mg/1ml	100	SPEPRS1100
		200mg/3ml	50	SPEPRS3200
		500mg/3ml	50	SPEPRS3500
		500mg/6ml	30	SPEPRS6500
		1g/6ml	30	SPEPRS61000
	Plates	1g/12ml	20	SPEPRS121000
		2g/12ml	20	SPEPRS122000
		96×50mg	96-well	SPEPRS9650
	Sorbent	96×100mg	96-well	SPEPRS96100
		384×10mg	384-well	SPEPRS38410
		100g	Bottle	SPEPRS100

## SPE Cartridges Of Silica Matrix

### PSA (N-丙基乙二胺基 SPE 柱)



The equivalent of Agilent Bond Elut PSA.

#### Application:

Soil;Water;Body fluids(plasma/urine etc.);Food;Oil

#### Typical Applications:

Pretreatment of fatty acids, polar pigments and sugars

Chelate metal ions

B&M PSA is the ethylenediamine - N-propyl extraction column with silica gel, and the PSA has two amino groups, and pKa is 10.1 and 10.9 respectively. Its selectivity is similar to that of amino. As a positive phase or anti-phase column, the polarity is stronger than the C18 and weaker than the silica gel, and the various compounds with a wide range of medium polarity or polarity have good selectivity in different systems.

PSA can be used with metal ions to extract metal ions. It is often used in the preparation of samples of agricultural residues, including organic acids, pigments, metal ions and phenols.

#### Sorbent Information

Matrix: Silica

Functional Group: Ethylenediamine - N-propyl

Mechanism of Action: Positive and negative phase extraction, ion exchange

Carbon Content: 8%

Particle Size: 50-75 $\mu$ m

Surface Area: 500 m<sup>2</sup> /g

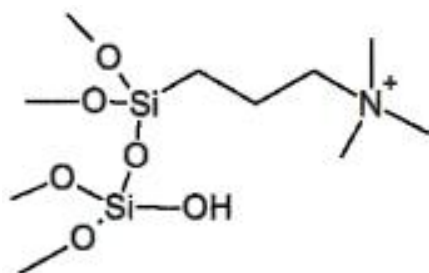
Average Pore Size: 60 $\text{\AA}$

## Order Information

Sorbents	Form	Specification	Pcs/pk	Cat. No
PSA	Cartridge	100mg/1ml	100	SPEPSA1100
		200mg/3ml	50	SPEPSA3200
		500mg/3ml	50	SPEPSA3500
		500mg/6ml	30	SPEPSA6500
		1g/6ml	30	SPEPSA61000
	Plates	1g/12ml	20	SPEPSA121000
		2g/12ml	20	SPEPSA122000
		96 $\times$ 50mg	96-well	SPEPSA9650
	Sorbent	96 $\times$ 100mg	96-well	SPEPSA96100
		384 $\times$ 10mg	384-well	SPEPSA38410
		100g	Bottle	SPEPSA100

## SPE Cartridges Of Silica Matrix

### SAX (强阴离子交换 SPE 柱)



The equivalent of Supelco Supelclean LC-SAX, Agilent Bond Elut SAX, SampliQ Si-SAX.

#### Application:

It can be used to extract the negative charge from water and non-aqueous solution, and is best suited for the extraction of weak acid Water-soluble samples, biological fluid and organic reaction matrix

#### Typical Applications:

To remove strong anions (sulfonate, inorganic ions) in samples.

Biological macromolecule desalination Organic acids, nucleic acids, nucleotides, surfactants

B&M SAX is a strong anion exchange extraction column with silica gel, which has the quaternary ammonium salt functional group. Mainly used for the extraction of weak anionic compounds, such as carboxylic acid. The strong anion exchanger can be used to extract the negative charge from water and non-aqueous solution, especially for the extraction of weak acid. It is often used to remove the strong anions (organic acids, nucleotides, nucleic acids, sulfonic acid roots, inorganic salts, etc.) in the sample, and the biological macromolecule desalination.

#### Sorbent Information

Matrix: Silica

Functional Group: Quaternary ammonium salt

Mechanism of Action: Positive phase extraction

Particle Size: 40-75 $\mu$ m

Surface Area: 510 m<sup>2</sup>/g

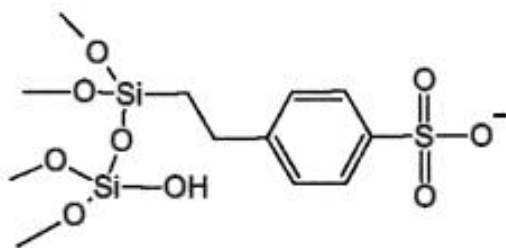
Average Pore Size: 70 $\text{\AA}$

## Order Information

Sorbents	Form	Specification	Pcs/pk	Cat. No
SAX	Cartridge	30mg/1ml	100	SPESAX130
		100mg/1ml	100	SPESAX1100
		200mg/3ml	50	SPESAX3200
		500mg/3ml	50	SPESAX3500
		200mg/6ml	30	SPESAX6200
		500mg/6ml	30	SPESAX6500
		1g/6ml	30	SPESAX61000
	Plates	1g/12ml	20	SPESAX121000
		2g/12ml	20	SPESAX122000
		96 $\times$ 50mg	96-well	SPESAX9650
Sorbent	96 $\times$ 100mg	96-well	SPESAX96100	
	384 $\times$ 10mg	384-well	SPESAX38410	
		100g	Bottle	SPESAX100

## SPE Cartridges Of Silica Matrix

### SCX (苯基磺酸强阳离子交换 SPE 柱)



The equivalent of Supelco Supelclean LC-SCX、  
Agilent Bond Elut SCX、SampIQ Si-SCX.

#### Application:

Water-soluble samples, biological fluid and organic reaction matrix

#### Typical Applications:

Used to extract organic base compounds

Used for biological macromolecular desalination

After mixing with C18, extraction of organic alkali. Antibiotics, drugs, organic alkaloids, amino acids, catecholamines, weeding agents, nucleotide, nucleoside, surfactants, etc.

B&M SCX is a strong cation exchange extraction column with silica gel as matrix, and the bond has the functional group of phenylsulfonic acid. It is used in the extraction of organic alkali or the desalination of biological macromolecules.

After mixing with C18, the extraction of organic alkali, such as organic alkali, antibiotics, drugs, amino acids, catechins, herbicides, surfactants, etc.

#### Sorbent Information

Matrix: Silica

Functional Group: Phenyl sulfonic acid

Mechanism of Action: Ion exchange

Particle Size: 40-75 $\mu$ m

Surface Area: 510 m<sup>2</sup>/g

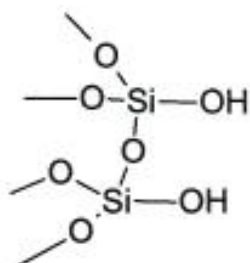
Average Pore Size: 70Å

## Order Information

Sorbents	Form	Specification	Pcs/pk	Cat. No
SCX	Cartridge	30mg/1ml	100	SPESCX130
		100mg/1ml	100	SPESCX1100
		200mg/3ml	50	SPESCX3200
		500mg/3ml	50	SPESCX3500
		200mg/6ml	30	SPESCX6200
		500mg/6ml	30	SPESCX6500
		1g/6ml	30	SPESCX61000
		1g/12ml	20	SPESCX121000
		2g/12ml	20	SPESCX122000
		Plates	96×50mg	96-well
96×100mg	96-well		SPESCX96100	
384×10mg	384-well		SPESCX38410	
Sorbent		100g	Bottle	SPESCX100

## SPE Cartridges Of Silica Matrix

### Silica (未键合硅胶 SPE 柱)



#### Application:

Food;Medicine

#### Typical Applications:

Vitamins and food additives

Non-polar organic adsorbents, oil and lipid separation

Synthetic organic compounds are separated

Natural products, plant pigments

Japanese JPMHLW official method: pesticide in food

B&M Silica is a polar extraction column with unbonded Silica gel as adsorbent. It is a weak acid and has very strong polarity. It is used for separating nonpolar, weakly polar compound, oil, etc., especially in similar structures.

The equivalent of Agilent Bond Elut Silica 和 Waters Sep-Pak Silica.

#### Sorbent Information

Matrix: Silica

Functional Group: Silicon alcohol-based

Mechanism of Action: Positive phase extraction

Particle Size: 40-75 $\mu$ m

Surface Area: 480m<sup>2</sup>/g

Average Pore Size: 60Å

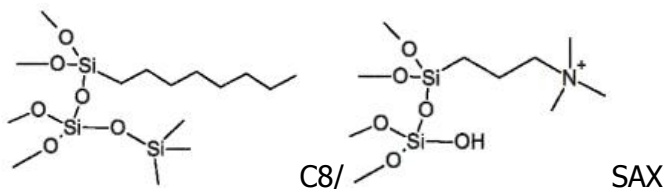
## Order Information

Sorbents	Form	Specification	Pcs/pk	Cat. No
Silica	Cartridge	100mg/1ml	100	SPESIL1100
		200mg/3ml	50	SPESIL3200
		500mg/3ml	50	SPESIL3500
		500mg/6ml	30	SPESIL6500
		1g/6ml	30	SPESIL61000
		1g/12ml	20	SPESIL121000
	Plates	2g/12ml	20	SPESIL122000
		96×50mg	96-well	SPESIL9650
		96×100mg	96-well	SPESIL96100
	Sorbent	384×10mg	384-well	SPESIL38410
		100g	Bottle	SPESIL100



## SPE Cartridges Of Silica Matrix

### C8/SAX (辛基/季铵基 SPE 柱)



#### Application:

Soil;Water;Body fluids(plasma/urine etc.);Food;Oil

#### Typical Applications:

The functional groups of C8 / SAX are composed of octyl and quaternary ammonium salts, which are combined by proportion and have a double retention function: octyl provides medium hydrophobic function and quaternary ammonium provides strong anion exchange

In the case of excessive adsorption of C18 and C8, and the ability of SAX retention to be too strong, it can be used as the extraction column of C8 / SAX mixed mode

B&M C8 / SAX is based on silicon substrate C8 and strong anion exchange (SAX) extraction column (C8 / SAX), the most suitable for purification, urine and blood acidic aqueous solution (cation) or neutral compounds, such as drugs and metabolites.

The equivalent of Agilent Bond Elut Certify 和 Phenomenex Screen-A.

#### Sorbent Information

Matrix: Silica

Functional Group: Octyl&Quaternary ammonium salt

Mechanism of Action: Reverse phase extraction, strong anion exchange

Particle Size: 40-75 $\mu$ m

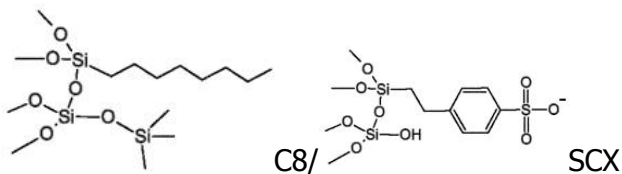
Surface Area: 510 m<sup>2</sup> /g

## Order Information

Sorbents	Form	Specification	Pcs/pk	Cat. No
C8/SAX	Cartridge	30mg/1ml	100	SPEC8SAX130
		100mg/1ml	100	SPEC8SAX1100
		200mg/3ml	50	SPEC8SAX3200
		500mg/3ml	50	SPEC8SAX3500
		200mg/6ml	30	SPEC8SAX6200
		500mg/6ml	30	SPEC8SAX6500
		1g/6ml	30	SPEC8SAX61000
		1g/12ml	20	SPEC8SAX121000
		2g/12ml	20	SPEC8SAX122000
		Plates	96 $\times$ 50mg	1
96 $\times$ 100mg	1		SPEC8SAX96100	
384 $\times$ 10mg	1		SPEC8SAX38410	
Sorbent		100g	Bottle	SPEC8SAX100

## SPE Cartridges Of Silica Matrix

### C8/SCX (辛基/磺酸基 SPE 柱)



B&M C8/SCX is the extraction column (C8/ SCX), which is composed of silica gel as matrix C8 and strong cation exchange SCX packing in combination with the optimized proportion, and provides dual retention mechanism. The C8 functional groups interact with the hydrophobic groups of the analyte, while the SCX has an interaction with the proton. Because of these strong interactions, stronger flushing conditions can be used to remove the common extracts that may interfere with UV detection or cause LC-MS ion suppression. There is no closure of the stationary phase, which can increase the interaction between the residual silyl alcohol base and the polar analyte, thus helping to enhance retention.

It is best used in purifying aqueous solutions, urine and blood alkalinity (cationic) or neutral compounds such as drugs

The equivalent of Agilent Bond Elut Certify & Phenomenex Screen-C.

#### Application:

Soil;Water;Body fluids(plasma/urine etc.);Food;Oil

#### Typical Applications:

The functional groups of C8 / SCX are composed of octyl and sulfonic acid based on the ratio bond, which have a dual retention function:the octyl provides medium hydrophobic action, and sulfonic acid base provides strong cation exchange

In the case of excessive adsorption of C18 and C8, as well as the strong retention of SCX, it can be used as the extraction column of C8 / SCX mixed mode

#### Sorbent Information

Matrix: Silica

Functional Group: Octyl, Phenyl sulfonic acid

Mechanism of Action: Reverse phase extraction, strong Cation exchange

Particle Size: 40-75 $\mu$ m

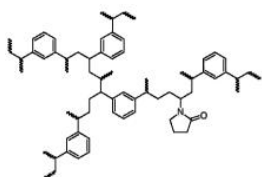
Surface Area: 510 m<sup>2</sup>/g

## Order Information

Sorbents	Form	Specification	Pcs/pk	Cat. No
C8/SCX	Cartridge	30mg/1ml	100	SPEC8SCX130
		100mg/1ml	100	SPEC8SCX1100
		200mg/3ml	50	SPEC8SCX3200
		500mg/3ml	50	SPEC8SCX3500
		200mg/6ml	30	SPEC8SCX6200
		500mg/6ml	30	SPEC8SCX6500
		1g/6ml	30	SPEC8SCX61000
		1g/12ml	20	SPEC8SCX121000
		2g/12ml	20	SPEC8SCX122000
		96 $\times$ 50mg	1	SPEC8SCX9650
Plates	96 $\times$ 100mg	1	SPEC8SCX96100	
	384 $\times$ 10mg	1	SPEC8SCX38410	
Sorbent		100g	Bottle	SPEC8SCX100

## SPE Cartridges Of Polymer Matrix

### HLB (吡咯烷酮 SPE 柱)



The equivalent of Waters Oasis HLB.

#### Application:

Soil; Water; Body fluids (plasma/urine etc.); Food

#### Typical Applications:

Body fluids (plasma, urine, etc.) in the extraction and purification of peptide drugs and metabolites and separation of oligomeric nucleotide, high-throughput biological macromolecular desalination processing high-throughput biological macromolecular desalination processing, trace organic compounds, environmental pollutants and endocrine disruptors, environmental pollutants and endocrine disruptors

Official methods of JPMHW in Japan: antibiotics in food (such as fluoroquinolones, tolycin, cephalosporin, chloramphenicol, etc.), pesticide residues (sulfonamide herbicides)

NY 5029: sulfonamide and beta-lactamide antibiotics, diazepam, estrogens, hexenestrol, tetracycline, macrocyclic lactone, nitroimidazole, acrylamide

NY/T 761.3: carbamate pesticide

HLB has a better recovery rate for non-polar, neutral and alkaline compounds, especially suitable for the treatment of complex substrates such as blood, urine and food

B&M HLB is a solid phase extraction column with N-vinyl pyrrolidone and diethylbenzene as the matrix. The surface also has hydrophilic and hydrophobic groups, which has a more balanced adsorption effect on various polar and nonpolar compounds. The adsorbent can maintain a high adsorption capacity even after balancing. This means that you can get extremely high sensitivity using simple methods. The matrix is clean, stable in pH 0-14 range, stable in a variety of organic solvents, and high adsorption capacity (3 ~10 times of C18). It is mainly used for extraction of complex biological samples (such as blood, plasma, acidic, neutral or alkaline drugs in body fluids).

#### Sorbent Information

Matrix: Polystyrene/divinyl benzene

Mechanism of Action: Ion exchange

Particle Size: 40-75 $\mu$ m

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

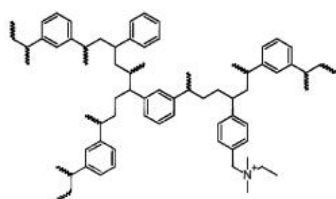
Average Pore Size: 300Å

## Order Information

Sorbents	Form	Specification	Pcs/pk	Cat. No
HLB	Cartridge	30mg/1ml	100	SPEHLB130
		60mg/1ml	100	SPEHLB160
		100mg/1ml	10	SPEHLB1100
		30mg/3ml	50	SPEHLB330
		60mg/3ml	50	SPEHLB360
		200mg/3ml	50	SPEHLB3200
		150mg/6ml	30	SPEHLB6150
		200mg/6ml	30	SPEHLB6200
		500mg/6ml	30	SPEHLB6500
		500mg/12ml	20	SPEHLB12500
	Plates	96 $\times$ 10mg	96-well	SPEHLB9610
		96 $\times$ 30mg	96-well	SPEHLB9630
		96 $\times$ 60mg	96-well	SPEHLB9660
		384 $\times$ 10mg	384-well	SPEHLB38410
Sorbent		100g	Bottle	SPEHLB100

## SPE Cartridges Of Polymer Matrix

### MAX (混合型阴离子交换 SPE 柱)



#### Application:

Soil;Water;Body fluids(plasma/urine etc.);Food

#### Typical Applications:

Acid drugs and metabolites in humoral and tissue extracts

Drug monitoring (including screening, identification, confirmatory and quantitative analysis)

Food additives and contaminants

B&M MAX is the anti-phase and strong anion exchange compound mode "water can infiltrate" polymer adsorbent. The substrate for N - vinyl pyrrolidone and divinyl benzene polymerization by certain proportion (HLB), then quaternary ammonium groups (CH<sub>2</sub>N<sup>+</sup>(CH<sub>3</sub>)<sub>2</sub>) bonding on the HLB, anion exchange and reverse phase two adsorption mode, stable within pH0-14, and good water infiltration. It has high selectivity and sensitivity to Acid compounds and It can overcome the limitations of traditional silicone matrix mixed solid extraction adsorbent.

The equivalent of Hopes MAX.

#### Sorbent Information

Matrix: Polystyrene-Diethylbenzene polymer

Functional Group: Quaternary ammonium salt

Mechanism of Action: Ion exchange

Particle Size: 40-75μm

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

Average Pore Size: 60Å

Ion exchange capacity: 1meg/g

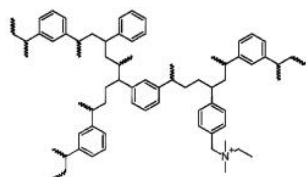
## Order Information

Sorbents	Form	Specification	Pcs/pk	http://www.bm-ls.com Cat.No
MAX	Cartridge	30mg/1ml	100	SPEMAX130
		60mg/1ml	100	SPEMAX160
		100mg/1ml	10	SPEMAX1100
		30mg/3ml	50	SPEMAX330
		60mg/3ml	50	SPEMAX360
		200mg/3ml	50	SPEMAX3200
		150mg/6ml	30	SPEMAX6150
		200mg/6ml	30	SPEMAX6200
		500mg/6ml	30	SPEMAX6500
	500mg/12ml	20	SPEMAX12500	
	Plates	96×10mg	96-well	SPEMAX9610
		96×30mg	96-well	SPEMAX9630
		96×60mg	96-well	SPEMAX9660
Sorbent	384×10mg	384-well	SPEMAX38410	
	100g	Bottle	SPEMAX100	

<http://www.bm-ls.com>

## SPE Cartridges Of Polymer Matrix

### MCX (混合型阳离子交换 SPE 柱)



B&M MCX is the anti-phase and cationic exchange composite model of polymer adsorbents, which have both cation exchange and anti-phase adsorption mode, and have good water infiltrability. The substrate clean, stable in the pH range 0 to 14, stability in organic solvent, high specific surface area, exchange capacity is big, the alkaline compound with high selectivity and sensitivity, especially suitable for milk, the detection of melamine in food and feed.

#### Sorbent Information

Matrix: Polystyrene-Diethylbenzene polymer

Functional Group: Sulfo

Mechanism of Action: Ion exchange

Particle Size: 40-75 $\mu$ m

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

Ion exchange capacity: 1meg/g

The equivalent of Waters Oasis MCX & Varian Plexa PCX.

#### Application:

Soil;Water;Body fluids(plasma/urine etc.);Food;Medicine

#### Typical Applications:

Melamine detection in food, milk and feed

Determination of malachite green and crystal violet residues in aquatic products

Alkaline drugs in humoral and tissue extracts and their metabolites, drug monitoring (screening, identification, confirmatory and quantitative analysis), insecticides and herbicides

MCX is a hybrid strong cation exchange adsorbent that is obtained from the high crosslinked PS/DVB surface of the sulfonate bond, and has the dual retention properties of the inverse and strong cation exchange.

Good retention of alkaline substances

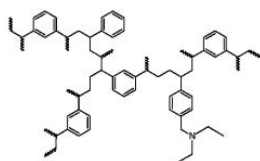
## Order Information

Sorbents	Form	Specification	Pcs/pk	Cat. No
MCX	Cartridge	30mg/1ml	100	SPEMCX130
		60mg/1ml	100	SPEMCX160
		100mg/1ml	10	SPEMCX1100
		30mg/3ml	50	SPEMCX330
		60mg/3ml	50	SPEMCX360
		200mg/3ml	50	SPEMCX3200
		150mg/6ml	30	SPEMCX6150
		200mg/6ml	30	SPEMCX6200
		500mg/6ml	30	SPEMCX6500
		500mg/12ml	20	SPEMCX12500
	Plates	96 $\times$ 10mg	96-well	SPEMCX9610
		96 $\times$ 30mg	96-well	SPEMCX9630
		96 $\times$ 60mg	96-well	SPEMCX9660
		384 $\times$ 10mg	384-well	SPEMCX38410
Sorbent		100g	Bottle	SPEMCX100



## SPE Cartridges Of Polymer Matrix

### WAX (混合型阴离子交换 SPE 柱)



The equivalent of Waters Oasis WAX.

#### Application:

Soil;Water;Body fluids(plasma/urine etc.);Food

#### Typical Applications:

Acid drugs and metabolites in humoral and tissue extracts,

Drug monitoring (including screening, identification, verification and quantitative analysis),

Food additives and contaminants

B&M WAX is the anti-phase and anion exchange compound mode "water can infiltrate" polymer adsorbent, It has anion exchange and anti-phase adsorption mode, and has good water infiltrability. The matrix is clean, stable in the pH 0-14 range, stable in organic solvents, higher than surface area, large exchange capacity, and adsorption of all kinds of polar and non-polar compounds.

#### Sorbent Information

Matrix: PS/DVB

Functional Group: Amino modified

Mechanism of Action: Ion exchange

Particle Size: 40-75 $\mu$ m

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

Average Pore Size: 50Å

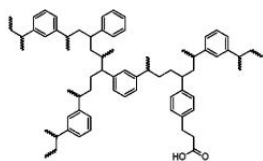
Ion exchange capacity: 0.3meg/g

## Order Information

Sorbents	Form	Specification	Pcs/pk	Cat. No
WAX	Cartridge	30mg/1ml	100	SPEWAX130
		60mg/1ml	100	SPEWAX160
		100mg/1ml	10	SPEWAX1100
		30mg/3ml	50	SPEWAX330
		60mg/3ml	50	SPEWAX360
		200mg/3ml	50	SPEWAX3200
		150mg/6ml	30	SPEWAX6150
		200mg/6ml	30	SPEWAX6200
		500mg/6ml	30	SPEWAX6500
	500mg/12ml	20	SPEWAX12500	
	Plates	96×10mg	96-well	SPEWAX9610
		96×30mg	96-well	SPEWAX9630
		96×60mg	96-well	SPEWAX9660
Sorbent	384×10mg	384-well	SPEWAX38410	
	100g	Bottle	SPEWAX100	

## SPE Cartridges Of Polymer Matrix

### WCX (阳离子交换 SPE 柱)



The equivalent of Waters Oasis WCX.

#### Application:

Soil;Water;Body fluids(plasma/urine etc.);Food

#### Typical Applications:

Acid drugs and metabolites in humoral and tissue extracts, drug monitoring (including screening,

identificationconfirmatory and quantitative analysis), food additives and contaminants, etc

WCX based on large diameter of PS/DVB matrix, the carboxyl modified hybrid weak cation exchange adsorbent, the benzene ring has strong hydrophobic effect,carboxyl provides weak cation exchange capacity, suitable for weak cationic compounds extraction

Pre-treatment of ammonium.It is a kind of weak cation exchange, mixed type, water and infiltrating polymer adsorbent, stable in the range of ph 0 ~ 14.

WCX has all the advantages of an HLB.Using WCX's stable and high selective solid-phase extraction method, it can monitor, confirm and quantify the strong alkaline compounds such as quaternary ammonium in various sample matrix.

#### Sorbent Information

Matrix: Polystyrene-Diethylbenzene polymer

Functional Group: Carboxyl modified

Mechanism of Action: Ion exchange

Particle Size: 40-75 $\mu$ m

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

Average Pore Size: 300Å

Ion exchange capacity: 0.3meg/g

## Order Information

Sorbents	Form	Specification	Pcs/pk	Cat. No
WCX	Cartridge	30mg/1ml	100	SPEWCX130
		60mg/1ml	100	SPEWCX160
		100mg/1ml	10	SPEWCX1100
		30mg/3ml	50	SPEWCX330
		60mg/3ml	50	SPEWCX360
		200mg/3ml	50	SPEWCX3200
		150mg/6ml	30	SPEWCX6150
		200mg/6ml	30	SPEWCX6200
		500mg/6ml	30	SPEWCX6500
		500mg/12ml	20	SPEWCX12500
	Plates	96×10mg	96-well	SPEWCX9610
		96×30mg	96-well	SPEWCX9630
		96×60mg	96-well	SPEWCX9660
		384×10mg	384-well	SPEWCX38410
Sorbent		100g	Bottle	SPEWCX100

## Alumina(A/B/N)Alumina solid phase extraction column/SPE column

Alumina is a typical lewis acid, The aluminum atom center lacks two electrons. It has strongly polar adsorbent, similar to that of silicone, There are three high activity levels of acidity, alkalinity and neutrality; Alumina also has a special effect on the  $\pi$  electrons of aromatic hydrocarbons, It is better than silicone in high pH conditions. The main retention mechanisms are lewis acid/base action, polarity and ion exchange.

**Acid alumina** The lewis acid properties of alumina-A (pH=4.5) were enhanced, This kind of adsorbent has better retention for the rich electron compounds. In addition, when pretreatment with acidic solution, the adsorbent has weak cationic properties, the surface is more likely to retain neutral and negatively charged substances (such as electroneutral or acidic anions), Can't keep a positive charge. The weak ion exchange property also makes it easier to retain the negative charge material.

**Basic alumina** The surface of the Alumina-B(pH=10) is favored to retain either positive or hydrogen - bonded materials. Aluminum oxide treated with alkaline solution has anionic properties and cationic exchange function. In addition, although the surface has the characteristics of lewis base, it can be retained for the electron sample, such as neutral amine compounds. The ability is much lower for neutral and acidic alumina. In addition, strong hydrogen bond can be found on the alumina-b, so the effect of the polar cationic sample is also obvious.

**Neutral alumina** Alumina-N(pH=7.5) is also a strongly polar adsorbent. Under the condition of high pH, alumina is more stable than that of the unbonded functional group. Finer particles ensure good extraction efficiency, so a small size cylindrical bed (50mg) is the most commonly used product. The adsorbent is electrically neutral and tends to retain rich electronic compounds such as aromatic and fatty amines. At the same time, there is also the ability to retain compounds containing electronegative groups such as oxygen-containing, phosphorous and sulfur atoms. Alumina-N can be used for extraction and separation of polar or non-polar substances in water-soluble and non-aqueous samples.

### Product advantages:

- ★ Product quality is stable, good reproducibility, load relative standard deviation (RSD) < 5%.
- ★ The packing is clean and there is no blank background interference.
- ★ The recovery rate is high, and the recovery rate of add the sample 10~100ppm is the best range of 95%~105%.
- ★ Product cost performance is among the best products in the world.

### Application scope:

- ★ Soil;Oil;Body fluids (plasma/urine etc.);Food;Drug etc.

### Typical application:

- ★ Petroleum, synthetic raw oil distillates, synthetic organic compounds. (N)
- ★ Sudan red, malachite green, vitamins, antibiotics, aromatic oils, enzymes, glycosides and hormones, etc. (N)
- ★ Separation of radioactive compounds, isotope generators. (A, B)
- ★ The phospholipids, steroids, catecholamine. (B)
- ★ Food/feed additives. (A, N)
- ★ Pesticides, herbicides, separation of pollutants. (N, B)
- ★ Non-polar organic adsorbents, oil and lipid separation
- ★ Synthetic organic compounds are separated.
- ★ Natural products, plant pigments.
- ★ Japanese JPMHLW official method: pesticide in food.
- ★ AOAC and EPA methods.

### Quality commitment:

- ★ We ensure that every product is qualified, adopt strict quality control standard and carry out every batch inspection.
- ★ Ensure that every product has no blank interference, and the sample recovery rate is superior to that of the state, reaching the highest level of the same kind of products.

### Service commitment:

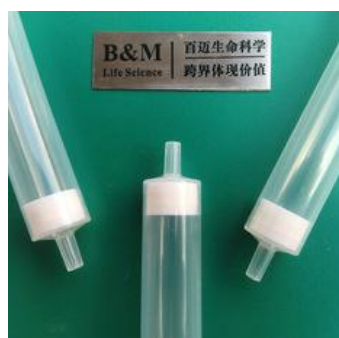
- ★ We provide professional technical support for free.

# Order Information

Sorbents	Form	Specification	Pcs/pk	Cat. No
Alumina A (ALA)	Cartridge	100mg/1ml	100	SPEALA1100
		200mg/3ml	50	SPEALA3200
		500mg/3ml	50	SPEALA3500
		500mg/6ml	30	SPEALA6500
		1g/6ml	30	SPEALA61000
		1g/12ml	20	SPEALA121000
		2g/12ml	20	SPEALA122000
	Plates	96×50mg	96-well	SPEALA9650
		96×100mg	96-well	SPEALA96100
		384×10mg	384-well	SPEALA38410
Sorbent	100g	Bottle	SPEALA100	
Sorbents	Form	Specification	Pcs/pk	Cat. No
Alumina B (ALB)	Cartridge	100mg/1ml	100	SPEALB1100
		200mg/3ml	50	SPEALB3200
		500mg/3ml	50	SPEALB3500
		500mg/6ml	30	SPEALB6500
		1g/6ml	30	SPEALB61000
		1g/12ml	20	SPEALB121000
		2g/12ml	20	SPEALB122000
	Plates	96×50mg	96-well	SPEALB9650
		96×100mg	96-well	SPEALB96100
		384×10mg	384-well	SPEALB38410
Sorbent	100g	Bottle	SPEALB100	
Sorbents	Form	Specification	Pcs/pk	Cat. No
Alumina N (ALN)	Cartridge	100mg/1ml	100	SPEALN1100
		200mg/3ml	50	SPEALN3200
		500mg/3ml	50	SPEALN3500
		500mg/6ml	30	SPEALN6500
		1g/6ml	30	SPEALN61000
		1g/12ml	20	SPEALN121000
		2g/12ml	20	SPEALN122000
	Plates	96×50mg	96-well	SPEALN9650
		96×100mg	96-well	SPEALN96100
		384×10mg	384-well	SPEALN38410
Sorbent	100g	Bottle	SPEALN100	

## SPE Cartridges Of Other Adsorptive Matrix

### BaP (苯并芘 SPE 柱)



Benzopyrene (BaP), also known as 3, 4-Benzopyrene, is a common high activity indirect carcinogen, which is one of the three recognized carcinogenic substances in the world. According to the standard of Chinese national GB2716-2005 edible vegetable oil hygienic standard, the safety limit of benzene and pyrene in edible plant oil products is not more than 10 micrograms per kilogram. Therefore, its content detection is very important.

B&M BaP has excellent recovery and reproducibility. It can meet the requirement of the detection of Benzopyrene, Ensure the accuracy and stability of the results and improve the efficiency of

### Sorbent Information

Mechanism of Action: Polarity effect & Ion exchange

### Application:

Soil;Water;Body fluids(plasma/urine etc.);Food

### Typical Applications:

Detection of BaP in oil products

Detection of BaP in meat products such as barbecue, frying and smoking

## Order Information

Sorbents	Form	Specification	Pcs/pk	Cat. No
BaP	Cartridge	100mg/1ml	100	SPEBaP1100
		200mg/3ml	50	SPEBaP3200
		500mg/3ml	50	SPEBaP3500
		500mg/6ml	30	SPEBaP6500
		1g/6ml	30	SPEBaP61000
		1g/12ml	20	SPEBaP121000
	Plates	2g/12ml	20	SPEBaP122000
		96×50mg	96-well	SPEBaP9650
		96×100mg	96-well	SPEBaP96100
	Sorbent	384×10mg	384-well	SPEBaP38410
100g		Bottle	SPEBaP100	

## SPE Cartridges Of Other Adsorptive Matrix

### Florisil (硅酸镁 SPE 柱)

B&M B&M Florisil is the adsorbent florisol-mgo SiO<sub>2</sub> of silicone bonded magnesium oxide, which consists of three components: silicon dioxide (84%), magnesium oxide (15.5%) and sodium sulfate (0.5%). Similar to silica gel, the adsorbent is the adsorbent of strong polarity, high activity and weak alkalinity. The polar compounds can be extracted

from nonpolar solutions to adsorb low polarity and intermediate-polarity compounds from non-aqueous solutions. Florisil's granule fillers can handle large bulk samples more quickly, so when the sample is more viscous, it can be used instead of the silica gel column.

In addition, in the use of alumina column, if the lewis acid of alumina has interference with the extract, it can replace alumina product with Florisil.

#### Application:

Soil;Water;Body fluids(plasma/urine etc.);Food;Oil

#### Typical Applications:

An official method of pesticide extraction for AOAC and EPA in USA

Japanese JPMHLW official method "pesticide extraction in

Food" Polychlorinated biphenyls extraction in insulating oil

For the purification and separation of pesticide residues, the organic chlorine pesticides and hydrocarbons can be separated Separation of nitrogen compounds and antibiotic substances

The necessary solid phase extraction column for the NY761 analysis method

#### Sorbent Information

Matrix: Florisil

Mechanism of Action: Positive phase extraction

Particle Size: 150-250µm

## Order Information

Sorbents	Form	Specification	Pcs/pk	Cat. No
Florisil	Cartridge	100mg/1ml	100	SPEFL1100
		200mg/3ml	50	SPEFL3200
		500mg/3ml	50	SPEFL3500
		500mg/6ml	30	SPEFL6500
		1g/6ml	30	SPEFL61000
	Plates	1g/12ml	20	SPEFL121000
		2g/12ml	20	SPEFL122000
		96×50mg	96-well	SPEFL9650
	Sorbent	96×100mg	96-well	SPEFL96100
		384×10mg	384-well	SPEFL38410
		100g	Bottle	SPEFL100

## SPE Cartridges Of Other Adsorptive Matrix

### G25 柱 (SPE 专用柱)



B&M G25 desalination column is a classical dextran and epoxy chloropropane crosslinking medium. The molecular sieve is used to remove the small molecules and to remove salt and replace the buffer. The molecular size of the gel-filtration layer is used to control the small molecule through the medium, so as to achieve the purpose of separation and purification.

It is a substance that can remove molecular weight less than 5KD from nucleic acid and protein solution, such as ethanol, salt, fluorescent substance, sugar, etc.

The G25 desalination column is increasingly being used to remove salt and small molecules from the laboratory to industrial scale.

#### Application:

Desalination of biological samples

#### Typical Applications:

Desalination of DNA molecules and proteins

Purification of other biological molecules

#### Product features

The columns of the G25 desalted purifying column adopt polypropylene material, tolerant to acid-base and most organic solvents;

The sieve plate adopts ultra-high molecular weight polyethylene material without introducing other impurities.

Highly selective;

The coarse grain velocity is faster, the fine grain velocity is slower and the resolution is higher.

The purification time is short, the buffer liquid consumption is low.

## Order Information

Sorbents	Form	Specification	Pcs/pk	Cat. No	
G25	Cartridge	0.2ml/1ml	100	SPEG2510002	
		0.8ml/3ml	50	SPEG2530008	
		2ml/5ml	30	SPEG255002	
		3ml/5ml	30	SPEG255003	
		2ml/6ml	30	SPEG256002	
		3ml/6ml	30	SPEG256003	
		4ml/12ml	20	SPEG2512004	
		6ml/12ml	20	SPEG2512006	
		Sorbent		100g	Bottle



## SPE Cartridges Of Other Adsorptive Matrix

### GCB (石墨化碳黑 SPE 柱)

B&M Carb-GCB (graphite-carbon black) consists of non-porous flaky molecules with aromatic positive six-membered ring structures, and is positively charged. There is a dual retention mechanism of reverse and ion exchange, which has Both non-polar compounds (such as organochlorine pesticides) can be retained and strongly polar compounds (such as

surfactants) can be retained.

Carb- GCB, because it is flaky material, has no pores, so the extraction speed is fast, and the adsorption capacity is greater than that of silica gel.

The equivalent of Agilent Bond Elut Carbon.

#### Sorbent Information

Matrix: Graphitized Carbon Black

Mechanism of Action: Positive phase extraction

Particle Size: 100-400mesh

Surface Area: 100m<sup>2</sup> /g

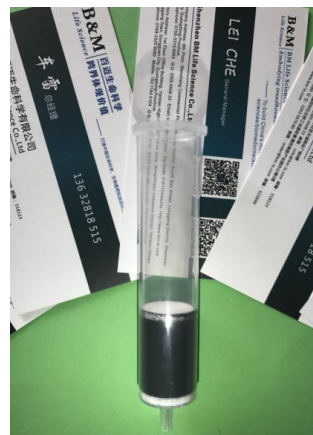
#### Application:

Soil;Water;Body fluids(plasma/urine etc.);Food

#### Typical Applications:

GCB has very strong affinity to the planar molecule, very suitable for a lot of the extraction and purification of organic matter, especially suitable for separation and removing all kinds of substrates such as surface water and pigment of fruits and vegetables (such as chlorophyll and carotenoid), sterol, phenol, chloroaniline, organochlorine pesticides, carbamate, triazine herbicide, etc

GCB was widely used in agricultural residue analysis, especially in the pretreatment of samples with high pigment content such as fruits and vegetables. Data show that the graphitized carbon black SPE also extracts more than 200 kinds of agricultural residues in food, such as organochlorine, organophosphorus, nitrogen and carbamate pesticides

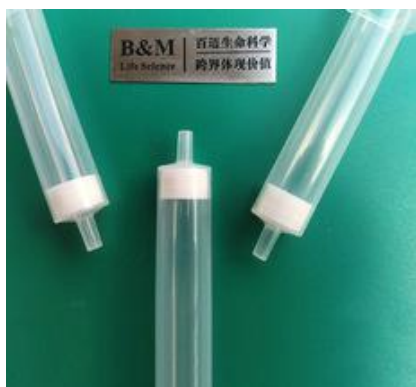


## Order Information

Sorbents	Form	Specification	Pcs/pk	Cat. No
GCB	Cartridge	100mg/1ml	100	SPEGCB1100
		200mg/3ml	50	SPEGCB3200
		500mg/3ml	50	SPEGCB3500
		500mg/6ml	30	SPEGCB6500
		1g/6ml	30	SPEGCB61000
		1g/12ml	20	SPEGCB121000
	Plates	2g/12ml	20	SPEGCB122000
		96×50mg	96-well	SPEGCB9650
		96×100mg	96-well	SPEGCB96100
	Sorbent	384×10mg	384-well	SPEGCB38410
100g		Bottle	SPEGCB100	

## SPE Cartridges Of Other Adsorptive Matrix

### 聚酰胺柱 (SPE 专用柱)



#### Application:

Soil;Water;Body fluids(plasma/urine etc.);Food

#### Typical Applications:

Used for extraction of tannins, chlorophyll, humic acid and pharmacological activities of terpenoid, flavonoids, gallic acid, catechin, protocatechuic acid and A phloroglucinol is used to extract aromatic carboxylic acid and keeping the irreversible benzoquinone nitro aromatic compounds

B&M polyamide column used in accordance with the inverse mechanism, through the compound hydroxyl groups with strong hydrogen bonds between amides groups of the resin, adsorption from aqueous solution or methanol solution polar compounds (- OH groups, especially the phenolic compounds), which used for extraction of tannins, chlorophyll, humic acid and pharmacological activities of terpenoid, flavonoids, gallic acid, catechin, protocatechuic acid and A phloroglucinol is used to extract aromatic carboxylic acid and keeping the irreversible benzoquinone nitro aromatic compounds

#### Sorbent Information

Mechanism of retention: invert phase

Sample matrix compatibility: aqueous solution or methanol

Polyamide Resin: granularity: 50-160mesh; Surface pH:

## Order Information

Sorbents	Form	Specification	Pcs/pk	Cat. No
聚酰胺柱 polyamide	Cartridge	100mg/1ml	100	SPEPOL1100
		200mg/3ml	50	SPEPOL3200
		500mg/3ml	50	SPEPOL3500
		500mg/6ml	30	SPEPOL6500
		1g/6ml	30	SPEPOL61000
		1g/12ml	20	SPEPOL121000
	Plates	2g/12ml	20	SPEPOL122000
		96×50mg	96-well	SPEPOL9650
		96×100mg	96-well	SPEPOL96100
	Sorbent	384×10mg	384-well	SPEPOL38410
100g		Bottle	SPEPOL100	

## SPE Cartridges Of Other Adsorptive Matrix

### 偶氮染料检测柱 (SPE 专用柱)

The special column of B&M azo dye detection is treated by special process of diatomaceous earth. Designed special research and development, high purity, uniform particle size, distribution capacity increased by 50%, to help our customers efficient and reliable test textile samples, protect the health of consumers, safeguard the legitimate rights and interests of consumers.

#### Sorbent Information

Particle Size: 40—80 mesh

Surface Area: 40-70 m<sup>2</sup>/g



#### Application:

Textile samples, clothing and other azo dye tests

#### Typical Applications:

The dyes used in textile dyeing are mainly azo compounds, which are decomposed into fatty amines or aromatic amines under reductive conditions. The aromatic amine produced by partial azo dyes is a carcinogen or potential carcinogen, so it has been banned in China, the us and the European Union. Our company special azo dye test column by the special research and development design, to help our customers efficient and reliable test textile samples, protect the health of consumers, safeguard the legitimate rights and interests of consumers

## Order Information

Sorbents	Form	Specification	Pcs/pk	Cat. No
偶氮染料检测柱	Cartridge	14.5g/60ml	50	ODZ60145
Azo	Sorbent	100g	Bottle	ODZ100

## SPE Cartridges Of Other Adsorptive Matrix

### 椰子壳活性炭 SPE 柱

#### Sorbent Information

Matrix: Active carbon

Mechanism of Action: Positive phase extraction

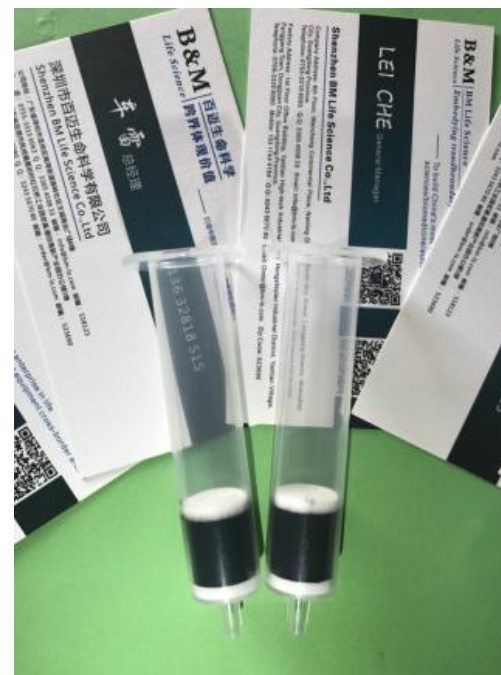
Particle Size: 80-120 mesh

#### Application:

Soil;Water;Body fluids(plasma/urine etc.);Food

#### Typical Applications:

Coconut shell activated carbon is used in EPA521/EPA 522 method, which is also widely used in water decolorization, deodorization, removal of organic matter, residual chlorine, nitro and so on



## Order Information

Sorbents	Form	Specification	Pcs/pk	Cat. No
椰子壳活性炭 Coconut shell activated carbon	Cartridge	100mg/1ml	100	SPECC1100
		200mg/3ml	50	SPECC3200
		500mg/3ml	50	SPECC3500
		500mg/6ml	30	SPECC6500
		1g/6ml	30	SPECC61000
		1g/12ml	20	SPECC121000
	2g/12ml	20	SPECC122000	
Plates		96×50mg	96-well	SPCC9650
		96×100mg	96-well	SPECC96100
		384×10mg	384-well	SPECC38410
Sorbent		100g	Bottle	SPECC100

## SPE Cartridges Of Mixed Matrix

### GCB/NH<sub>2</sub> (石墨化碳黑/氨基 SPE 柱)

of pesticide detection.

The equivalent of Waters Sep-Pak Carbon Black/Amino.

#### Sorbent Information

Carb-GCB

Particle Size: 100–400 mesh

Surface Area: 100 m<sup>2</sup>/g

NH<sub>2</sub>

Carbon Content: 4.5 %

Particle Size: 40-75um

Surface Area: 200 m<sup>2</sup>/g

Average Pore Size: 60Å

#### Application:

Soil;Water;Body fluids(plasma/urine etc.);Food

#### Typical Applications:

Carb-GCB/NH<sub>2</sub> is used to remove pigments, sterols, fatty acids and organic acids in the food system. very suitable for food (vegetable, fruit, meat, etc.) pesticide residue detection

B&M Carb-GCB/NH<sub>2</sub> (graphite-carbon black/amino) double SPE composite column focuses on the advantages of GCB and NH<sub>2</sub>, which can remove the pigment, sterol and fatty acids in the food components such as interference, is very suitable for food, vegetables, fruits, meat, etc.) used in pesticide residue detection, especially some of Japan's positive list



## Order Information

Sorbents	Form	Specification	Pcs/pk	Cat. No	
GCB/NH <sub>2</sub>	Cartridge	250mg/250mg/3ml	50	SPEGCBNH3500	
		500mg/500mg/6ml	30	SPEGCBNH6500	
		500mg/500mg/12ml	20	SPEGCBNH121000	
		2g/12ml	20	SPEGCBNH122000	
	Plates	96×25mg/25mg	96-well	SPEGCBNH962525	
		96×50mg/50mg	96-well	SPEGCBNH96100	
		384×5mg/5mg	384-well	SPEGCBNH38410	
	Sorbent		100g	Bottle	SPEGCBNH100

## SPE Cartridges Of Mixed Matrix

### GCB/PSA (石墨化碳黑/乙二胺基-N-丙基 SPE 柱)



#### Sorbent Information

**Carb-GCB/PSA**  
**Matrix:** Active carbon/Silica  
**Functional Group:** Ethylenediamine -N- propyl  
**Mechanism of Action:** Positive phase extraction ,Ion exchange

#### Carb-GCB

**Particle Size:** 100–400mesh  
**Surface Area:** 100 m<sup>2</sup> /g

#### PSA

**Carbon Content:** 8%  
**Particle Size:** 50-75μm  
**Surface Area:** 500 m<sup>2</sup> /g  
**Average Pore Size:** 60Å

B&M Carb-GCB (graphite-carbon black)/PSA (ethylene diamine - n-propyl) double SPE composite column has the same retention capacity as GCB/NH<sub>2</sub>, which is suitable for the purification of samples of pesticide residue detection. PSA has more a secondary amine than NH<sub>2</sub>, so the ion exchange capacity is larger and can be used as a complexation ligand for some metal ions, providing a different selectivity than GCB/NH<sub>2</sub>. The equivalent of Waters Sep-Pak Carbon Black/PSA.

#### Application:

Soil;Water;Body fluids(plasma/urine etc.);Food

#### Typical Applications:

Carb - GCB/PSA is used to remove the pigment in the food system, sterol, fatty acids and organic acids, etc. especially suitable for more pesticide residues in food detection, including fruits, vegetables, meat, aquatic products, grains, and dairy products, etc. The effect of PSA removing fatty acids (including oleic acid, palmitate, linoleic acid, etc.) can be as high as 99%, which greatly reduces the matrix effect in GC analysis.

## Order Information

Sorbents	Form	Specification	Pcs/pk	Cat. No
GCB/PSA	Cartridge	250mg/250mg/3ml	50	SPEGCBPSA3500
		500mg/500mg/6ml	30	SPEGCBPSA6500
		500mg/500mg/12ml	20	SPEGCBPSA121000
		2g/12ml	20	SPEGCBPSA122000
	Plates	96×25mg/25mg	96-well	SPEGCBPSA962525
		96×50mg/50mg	96-well	SPEGCBPSA96100
		384×5mg/5mg	384-well	SPEGCBPSA38410
Sorbent		100g	Bottle	SPEGCBPSA100



## Detection of Mycotoxins Cartridges Series

★Flow rate: 1d/s; ★ Recovery : 85-110%; ★Strong specificity & high sensitivity; ★Environment & Safety

### Immunoaffinity detection Cartridges for Total aflatoxin/AflatoxinB1/M1

Aflatoxin is a kind of carcinogenic substance, such as aspergillus aspergillus and fungus, which is also a highly toxic substance. Rice, peanut, wheat and other cereals and their by-products are the main sources of aflatoxin.. At the same time, due to the metabolism of aflatoxin B1 by animal feed to produce aflatoxin M1, it still has a strong toxicity and carcinogenicity, therefore, aflatoxin also widely exists in the milk, blood and tissue such as medium, into the human body will may cause serious consequences, and even life threatening. So, testing is also critical.

B&M aflatoxin detection special column series mainly is the total aflatoxin/aflatoxin B1/M1 immuno-affinity detection special column

#### Detection principle

The purification principle of Aflatoxin test for special column is the immune reaction between antigen antibody. Containing aflatoxin monoclonal antibody was fixed on the test column of solid phase support, samples containing aflatoxin extracts by aflatoxin testing special column, will combine with antibodies, form the antigen-antibody complexes, after water washed out to go unless the target material.Finally, eluting with eluent, collect eluting fluid, use HPLC to detect the content of aflatoxin.

#### Application:

Soil;Water;Body fluids(plasma/urine etc.);Food

#### Typical Applications:

It is used for the purification of aflatoxin in samples with complex matrix and low limit、Quantitative analysis

of TLC/HPLC/GC/lc-ms/EIA;

Aflatoxin (B1 / M1) in food and feed samples for testing cereals, snacks, nuts and infants



## Order Information

Sorbents	Form	Specification	Pcs/p k	Cat. No
Total aflatoxin detection Cartridge		1mL	25	ASCT1001
Total aflatoxin detection Cartridge		3mL	20	ASCT1003
Aflatoxin B1 detection Cartridge	Cartridge	1mL	25	ASCB1001
Aflatoxin B1 detection Cartridge		3mL	20	ASCB1003
Aflatoxin M1 detection Cartridge		1mL	25	ASCM1001
Aflatoxin M1 detection Cartridge		3mL	20	ASCM1003
Empty column for affinity chromatography		1mL, Two pieces of hydrophilic Frits	100	ACC001
Empty column for affinity chromatography		3mL, Two pieces of hydrophilic Frits	50	ACC003



## Detection of Mycotoxins Cartridges Series

★Flow rate: 1d/s; ★Recovery : 85-110%; ★Strong specificity & high sensitivity; ★Environment & Safety

### Immunoaffinity detection Cartridges for Vomiting toxins (deoxyricoxanol)

Vomiting toxins (deoxyricoxanol) belong to a single - end spore family of mycosis, which is produced by certain scythe fungi. Vomiting toxins throughout in wheat, corn and other cereals, content is usually mg/Kg level, due to their high cytotoxic and immunosuppressive properties, have very strong toxicity and carcinogenicity, strayed into the human body will may cause serious consequences, and even life threatening. So, testing is also critical.

B&M vomit toxin detection special column series is mainly used to detect the immuno-affinity and special column of the bacillenol. The column can be selective adsorption of the sample solution vomiting toxins (deoxidized snow sickle enol), and its corresponding purification effect, a column after purification, the sample can be directly for HPLC detection.

<http://www.bm-ls.com>

### Detection principle

The purification principle of the special column is the immune response between antigens. Antibody connections within the cylinder, sample after extraction, filtration, slow vomiting toxins through special column, will combine with antibodies, form the antigen-antibody complexes, after water washed out to go unless the target material. In the end, eluting with eluting liquid, collect eluting liquid, use HPLC to detect the content of vomit toxin.

### Application:

Grain, feed, food, etc.

### Typical Applications:

It is used to purify the vomit toxin in samples with complex matrix and limited requirements. Quantitative analysis of TLC/HPLC/GC/lc-ms/EIA;

Test grain, corn flour, feed raw materials, fermented feed and other food and feed samples the deoxidized snow - scyloxanol



## Order Information

Sorbents	Form	Specification	Pcs/pk	Cat. No
DON detection Cartridge	Cartridge	1mL	25	DON-IAC0001
DON detection Cartridge		3mL	20	DON-IAC0003
Empty column for affinity chromatography		1mL, Two pieces of hydrophilic Frits	100	ACC001
Empty column for affinity chromatography		3mL, Two pieces of hydrophilic Frits	50	ACC003

<http://www.bm-ls.com>

## Detection of Mycotoxins Cartridges Series

★Flow rate: 1d/s; ★ Recovery : 85-110%; ★Strong specificity & high sensitivity; ★Environment & Safety

### Immunoaffinity detection Cartridges for Ochratoxin

Ochratoxin is a secondary metabolite formed by fungi of aspergillus and penicillium, which is a potent kidney toxin and liver toxin and is widely used in various foods. Grains and their by-products are the main source of ochratoxin. Animal experiments show that acute or chronic poisoning can occur after ingesting feed contaminated with the toxin. Food and feed that prevent contamination of ochratoxin A directly or indirectly into the human food chain, It is very important to strengthen the detection of ochratoxin A.

B&M ochratoxin detection special column series mainly is ochratoxin immune affinity testing special column. The column can selectively adsorb the ochratoxin in the sample solution, thus the purification effect of the column can be targeted, and the sample can be tested directly by HPLC after the column is purified.

#### Detection principle

The purification principle of ochratoxin detection special column is the immune response between antigen antibody. The monoclonal antibody containing ochratoxin is fixed in the solid phase support of the detection column, the sample extract containing ochratoxin was used to detect the special column through ochratoxin, It binds to the antibody, forms an antigen antibody complex, and then washes it with water to go to the target material. Finally, eluting with the eluent, collect the elution fluid and use HPLC to detect the contents of ochratoxin.

#### Application:

Grain; feed; food; drinks, etc.

#### Typical Applications:

It is used for the purification of ochratoxin in the sample of low matrix complex and limited requirements. It is used for the purification of ochratoxin in the sample of low matrix complex and limited requirements. Quantitative analysis of TLC/HPLC/GC/lc-ms/EIA;

It can be quantitatively tested for ochratoxin in grain, feed, flour, beer, wine and beverage.



## Order Information

Sorbents	Form	Specification	Pcs/pk	Cat. No
OTA detection Cartridge	Cartridge	1mL	25	OT-IAC0001
OTA detection Cartridge		3mL	20	OT-IAC0003
Empty column for affinity chromatography		1mL, Two pieces of hydrophilic Frits	100	ACC001
Empty column for affinity chromatography		3mL, Two pieces of hydrophilic Frits	50	ACC003

## Detection of Mycotoxins Cartridges Series

★Flow rate: 1d/s; ★ Recovery : 85-110%; ★Strong specificity & high sensitivity; ★Environment & Safety

### Immunoaffinity detection Cartridges for T2 toxins

T2 toxins are a kind of mycotoxin produced by a variety of sickle bacteria. The main pollution of large wheat, corn and other food crops and their products constitute a great harm to human health and animal husbandry. T2 toxin mainly affects the blood, liver, kidney, pancreas, muscle and lymphocyte function, T2 toxin poisoning after general performance for anorexia, vomiting, diarrhea, the stagnation of production, such as nerve dysfunction, in serious cases, even life threatening. So, testing is also critical.

B&M T2 toxin detection special column series mainly is T2 toxin immune affinity testing special column. This column can selectively adsorb the T2 toxin in the sample solution, so as to make a specific purification effect, the sample can be tested directly by HPLC after the column is purified.

### Detection principle

The purification principle of T2 toxin detection special column is based on the immune response between antigen antibody. Contain detection T2 toxin monoclonal antibody was fixed to the column of solid phase support, samples containing T2 toxin extract specific column by T2 toxin detection, can combine with antibodies, form the antigen-antibody complexes, after water washed out to get rid of the target material. Finally, eluting with eluent, collecting eluting fluid, use HPLC to detect the content of T2 toxin.

### Application:

Soil; Body fluid (plasma /urine); Food, etc.

### Typical Applications:

Used for purification of T2 toxins in samples with complex matrix and low limit requirements. Quantitative analysis of TLC/HPLC/GC/lc-ms/EIA;

Used for testing T2 toxins in food and feed samples such as grains, snacks, nuts and infants



## Order Information

Sorbents	Form	Specification	Pcs/pk	Cat. No
T2 toxins detection Cartridge	Cartridge	1mL	25	T2-IAC0001
T2 toxins detection Cartridge		3mL	20	T2-IAC0003
Empty column for affinity chromatography		1mL, Two pieces of hydrophilic Frits	100	ACC001
Empty column for affinity chromatography		3mL, Two pieces of hydrophilic Frits	50	ACC003

## Detection of Mycotoxins Cartridges Series

★Flow rate: 1d/s; ★ Recovery : 85-110%; ★Strong specificity & high sensitivity; ★Environment & Safety

### Immunoaffinity detection Cartridges for Zearaleaone

Zearaleaone, also known as f-2 toxin, is a metabolite of corn gibberellin, which has a strong reproductive toxicity and teratogenic effect. It can cause the animal to take the oestrogen, causes the animal to infertile or abortion, the influence to the poultry, pig, the cow and the sheep is bigger, brings big economic loss to the animal husbandry. The consequences of straying into the human body can be serious, so testing is crucial.

The series of B&M corn gibberenone test series mainly is the F-2 toxin immune affinity detection special column. The column can selectively adsorb the F-2 toxin in the sample solution, thus the purification effect of the column can be targeted, and the sample can be tested directly by HPLC after the column is purified.

#### Detection principle

The purification principle of the special column for the detection of red mildew is an immune response between antigens.

Monoclonal antibodies containing the detection of gibberenone were fixed in the solid phase support of the detection column.

The sample extract containing the corn gibberenone was used to detect the special column by the corn gibberenone, which was combined with the antibody to form the antigen antibody complex and then washed with water to go to the target material. In the end, eluting with eluting liquid, collecting eluting fluid, using HPLC to detect the content of gibberenone.

#### Application:

Cereals; feed; food; drinks, etc.

#### Typical Applications:

It is used to purify the corn gibberenone in the complex matrix and the low limit of the sample. Quantitative analysis of TLC/HPLC/GC/lc-ms/EIA;

Qualitative and quantitative determination of the residual amount of gibberenone in cereal, beer and feed samples.



## Order Information

Sorbents	Form	Specification	Pcs/pk	Cat. No
Zearalenone detection Cartridge	Cartridge	1mL	25	ZEN-IAC0001
Zearalenone detection Cartridge		3mL	20	ZEN-IAC0003
Empty column for affinity chromatography		1mL, Two pieces of hydrophilic Frits	100	ACC001
Empty column for affinity chromatography		3mL, Two pieces of hydrophilic Frits	50	ACC003

## Detection of Mycotoxins Cartridges Series

★Flow rate: 1d/s; ★ Recovery : 85-110%; ★Strong specificity & high sensitivity; ★Environment & Safety

## Immunoaffinity detection Cartridges for Fumonisin

The Fumonisin is a fungal toxin produced by scythes, there are currently 28 known derivatives, One of the most common and in-depth studies is the FB1. It has been found that corn and its products, such as animal feed, are easily contaminated by FB1. FB1 is the strongest in Fumonisin and has a serious toxicological effect on many animals. Studies have shown that FB1 white horse can cause softening of the brain disease, swine pulmonary edema syndrome, in addition, still can induce human esophageal cancer and liver cancer, gastric cancer and other diseases, the animal husbandry and human health hazards. So, testing is also critical.

The main series of B&M toxin detection special column is the immuno-affinity detection and special column of FB1 (FB1). This column can selectively adsorb the vomatoxin B1 (FB1) in the sample solution, thus the purification effect of the column can be targeted, and the sample can be tested directly by HPLC after the column is purified.

### Detection principle

The purification principle of the special detect Fumonisin column is the immune response between antigens. Monoclonal antibodies containing the test of Fumonisin were fixed in the solid phase support of the detection column. The sample extract containing Fumonisin is used to detect the special column of the Fumonisin, which can be combined with the antibody to form the antigen antibody complex, which is then washed with water to go to the target material. Finally, eluting with eluent, collect eluent, use HPLC to detect the content of Fumonisin.

### Application:

Corn; feed; edible oil, etc.

### Typical Applications:

It is used for the purification of Fumonisin in substrates complex and low limit. Quantitative analysis of TLC/HPLC/GC/LC-MS/EIA;

It can qualitatively and quantitatively measure the residual amount of Fumonisin in corn, feed, edible oil and other samples



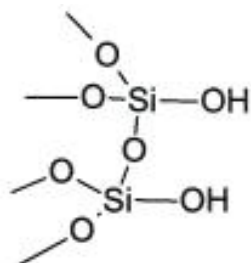
## Order Information

Sorbents	Form	Specification	Pcs/pk	Cat. No
Fumonisin detection Cartridge	Cartridge	1mL	25	FB-IAC0001
Fumonisin detection Cartridge		3mL	20	FB-IAC0003
Empty column for affinity chromatography		1mL, Two pieces of hydrophilic Frits	100	ACC001
Empty column for affinity chromatography		3mL, Two pieces of hydrophilic Frits	50	ACC003

<http://www.bm-ls.com>

## Other Special Cartridges Series

### SPE For Honey Testing



#### Application:

Food; Drugs; Drink; Honey, etc.

#### Typical Applications:

Vitamin and food additives and honey testing

Non-polar organic adsorbents, oil and lipid separation

Synthetic organic compounds are separated

Natural products, plant pigments

Japanese JPMHLW official method: pesticide in food

B&M honey testing special column is the polar extraction column with non-bonded silica gel as adsorbent. The imported material filler is adopted and evaluated through authoritative organization. The column is weakly acidic and has a strong polarity. Used for separating nonpolar, weakly polar compound, oil, etc., especially in similar structures.

#### Sorbent Information

Matrix: Silica

Functional Group: Silanol

Mechanism of Action: Positive phase extraction

Particle Size: 40-75 $\mu$ m

Surface Area: 480m<sup>2</sup>/g

Average Pore Size: 60Å

## Order Information

Sorbents	Form	Specification	Pcs/pk	Cat. No
Honey Testing	Cartridge	200mg/500mg/200mg/6ml	30	SPEFM6900
	Sorbent	100g	Bottle	SPEFM100



## Other Special Cartridges Series

### SPE For Leather decolorizing

B&M leather decolorizing column is the polar extraction column with silica gel as adsorbent. The more surface silicone functional groups provide additional polar interaction. Non-polar compounds are extracted by hydrophobic action.

At the same time, the polar interaction of alkaline compounds is enhanced.

The column is reserved for most organic compounds and is very selective and can be used as the extraction of polar and nonpolar compounds. It is a universal solid phase extraction column.

#### Application:

Food; Drugs; Drink; Honey, etc.

#### Typical Applications:

Used for extraction of tannins, chlorophyll, humic acid and pharmacological activities of terpenoid, flavonoids, gallic acid, catechin, protocatechuic acid and A phloroglucinol is used to extract aromatic carboxylic acid and nitrate for the of leather products

#### Sorbent Information

Mechanism of retention: invert phase

Sample matrix compatibility: aqueous solution or methanol

Resin: granularity: 100-200 mesh; Surface pH: 4.5-7.5,

density: 0.2-0.3cm<sup>3</sup>/g, water content: < 5%.

## Order Information

Sorbents	Form	Specification	Pcs/pk	Cat. No
Leather decolorizing	Cartridge	100mg/1ml	100	SPEPT1100
		200mg/3ml	50	SPEPT3200
		500mg/3ml	50	SPEPT3500
		500mg/6ml	30	SPEPT6500
		1g/6ml	30	SPEPT61000
	Plates	1g/12ml	20	SPEPT121000
		2g/12ml	20	SPEPT122000
		96×50mg	96-well	SPEPT9650
	Sorbent	96×100mg	96-well	SPEPT96100
		384×10mg	384-well	SPEPT38410
		100g	Bottle	SPEPT100



## Other Special Cartridges Series

### SPE For Sudan Red Testing

B&M Sudan red testing special column adopts a strong polar adsorbent filler. In high pH conditions, it is more stable than the unbonded silicone gel. Finer particles ensure better extraction efficiency, which has an electrically neutral surface and is biased towards preserving rich electronic compounds such as aromatic and fatty amines. At the same time, there is also the ability to retain compounds containing electronegative groups such as oxygen-containing, phosphorous and sulfur atoms.

The product can be used for extraction separation of polar or non-polar substances in water-soluble and non-aqueous samples.

#### Application:

Soil;Oil;Body fluids (plasma/urine etc.);Food etc.

#### Typical Applications:

Petroleum, synthetic petroleum distillates, synthetic organic compounds, Sudan red, malachite green, vitamins, antibiotics, aromatic oils, enzymes, glycosides and hormones, etc

Food/feed additives, pesticides, herbicides, separation of pollutants.

AOAC and EPA methods.

## Order Information

Sorbents	Form	Specification	Pcs/pk	Cat. No
Sudan Red Testing	Cartridge	100mg/1ml	100	SPESD1100
		200mg/3ml	50	SPESD3200
		500mg/3ml	50	SPESD3500
		500mg/6ml	30	SPESD6500
		1g/6ml	30	SPESD61000
	Plates	1g/12ml	20	SPESD121000
		2g/12ml	20	SPESD122000
		96×50mg	96-well	SPESD9650
	Sorbent	96×100mg	96-well	SPESD96100
		384×10mg	384-well	SPESD38410
		100g	Bottle	SPESD100



**Tip extraction/purification/enrichment SPE** is a spear pipetting device with function is applied to extraction/purification/enrichment biological samples or the Tip of SPE, objective product pipetting spear top add some C4 / C18 / silicon powder/magnetic beads/ProtingA (G) agarose gel and so on packing, used for primer/genomic DNA plasmid PCR products/peptide protein/antibodies to target product/filter/extraction/desalting/purification/enrichment.

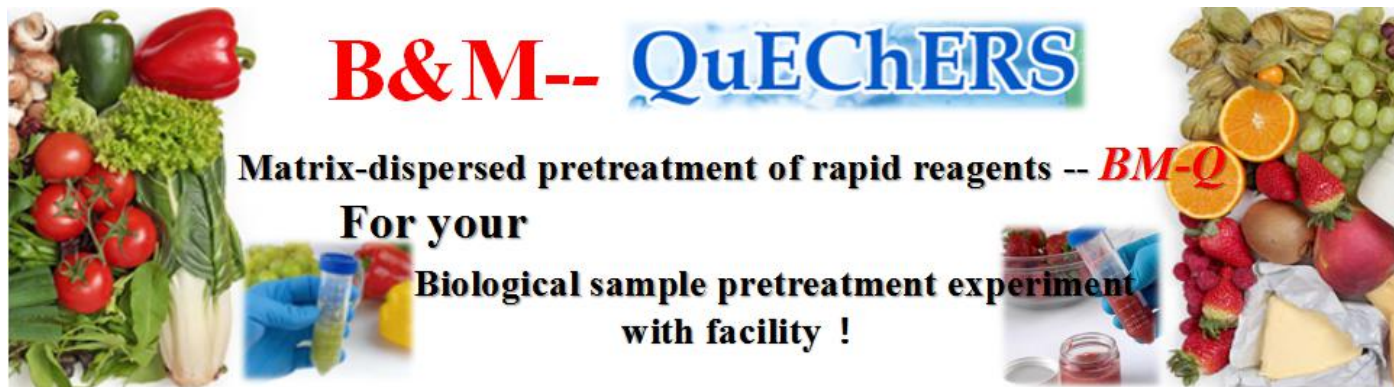


**Product features**

- ★ Domestic initiative to fill the domestic gap, with independent intellectual property rights, completely replace the import products;
- ★ High throughput: processing 1-384 biological samples at a time;
- ★ Ultramicro: The gun head (optional) of 10ul-5ml pipettes was fitted, and the sample size was processed from 5ul- 4ml;
- ★ Low cost: It can easily complete the process of biological samples by relying on the pipettes, without the need for large centrifuges, vacuum pumps and negative pressure devices to save equipment costs;
- ★ Super convenient :The operation is simple and convenient, and the operation can be completed only by using a liquid pipe-sucking liquid;
- ★ Diversified product diversification: The gun filler can be packed with C4/C18/ silica powder/magnetic bead/ProtingA (G) agarose gel, etc.Specifications: 10ul, 100ul, 200ul, 500ul, 1ml, 5ml, etc;
- ★ Automatization: This Tip SPE can be used for the electric power of the brown gun and cooperate with our company's activated carbon filter, so we can complete all the operation steps on the fully automatic workstation, so that we can achieve the goal conveniently and quickly!

## Tip SPE Order Information

Sorbents	Spec. (ul)	Elution Volume (ul)	Packing (/box)	Cat. No
C18	10	2-10	12	C18Tip001012
	10	2-10	96	C18Tip001096
	100	5-100	12	C18Tip010012
	100	5-100	96	C18Tip010096
	200	10-200	12	C18Tip020012
	200	10-200	96	C18Tip020096
	1000	100-1000	12	C18Tip100012
	1000	100-1000	96	C18Tip100096
	5000	500-5000	12	C18Tip500012
	5000	500-5000	96	C18Tip500096
Magnetic Beads	10	2-10	12	CZTip001012
	10	2-10	96	CZTip001096
	100	5-100	12	CZTip010012
	100	5-100	96	CZTip010096
	200	10-200	12	CZTip020012
	200	10-200	96	CZTip020096
	1000	100-1000	12	CZTip100012
	1000	100-1000	96	CZTip100096
	5000	500-5000	12	CZTip500012
	5000	500-5000	96	CZTip500096
Silica	10	2-10	12	SilTip001012
	10	2-10	96	SilTip001096
	100	5-100	12	SilTip010012
	100	5-100	96	SilTip010096
	200	10-200	12	SilTip020012
	200	10-200	96	SilTip020096
	1000	100-1000	12	SilTip100012
	1000	100-1000	96	SilTip100096
	5000	500-5000	12	SilTip500012
	5000	500-5000	96	SilTip500096
SCX	10	2-10	12	SCXTip001012
	10	2-10	96	SCXTip001096
	100	5-100	12	SCXTip010012
	100	5-100	96	SCXTip010096
	200	10-200	12	SCXTip020012
	200	10-200	96	SCXTip020096
	1000	100-1000	12	SCXTip100012
	1000	100-1000	96	SCXTip100096
	5000	500-5000	12	SCXTip500012
	5000	500-5000	96	SCXTip500096
ProA	200	5	12	PATip2005
	200	20	12	PATip20020
	1000	20	12	PATip100020
	1000	80	12	PATip100080
	5000	100	12	PATip5000100
	5000	400	12	PATip5000400
ProG	200	5	12	PGTip2005
	200	20	12	PGTip20020
	1000	20	12	PGTip100020
	1000	80	12	PGTip100080
	5000	100	12	PGTip5000100



QuEChERS (Quick, Easy, being inexpensive, Effective, Rugged and Safe) is internationally in recent years developed a kind of latest fast sample preparation techniques for agricultural products detection. It was first developed by M Anastassides of the United States department of agriculture (2003), and after extensive verification and improvement, the QuEChERS method was formally put forward. QuEChERS preparation methods of SPE pesticide residues upgrade version, it is similar to the SPE purification effect, but the processing step is more concise, possesses the characteristics of time saving, high efficiency, economy and gradually accepted by the general analysis of workers. Using QuEChERS kit, only a few simple steps are required to complete the sample preparation of multi-category and multi-residue pesticide analysis.

BM - Q series product is the best step of Shenzhen BM Life Science based on the development of the QuEChERS rapid processing products, a series of sample can be used in detect pesticide residues, veterinary drug residue detection, food additives, detection and other fields. This kind of product can be used many, many different kinds of adsorbent, such as BM - GCB depigmentation, BM - PSA to remove protein and organic acids, BM - NH<sub>2</sub> removal of organic acid, BM - WCX purify alkaline substances, BM - C18 remove fat and other organic matter, alumina remove fat, anhydrous magnesium sulfate removal of moisture. In addition, by adding some buffer salts, it can help to better extract the drugs. A variety of collocation methods can be adopted to adapt to different pretreatment needs.

#### BM-Q series features:

- ★ **High rate of recovery of drugs:** a satisfactory recovery rate for most of the highly polar pesticides.
- ★ **Wide range of applications:** for analysis of a variety of samples.
- ★ **Process simplicity:** the method is simple, the operation steps are small, and the effect of human factors on the accuracy of the method can be reduced, while the laboratory efficiency can be improved and the laboratory workflow can be improved.
- ★ **The results are reliable:** the core raw materials are from the same supplier, and the consistency and stability of the target are more reliable.
- ★ **Product environmental protection:** the solvent consumption is little, clean environmental protection, after adding solvent, can seal the container immediately, reduce the harm to the operator.

#### Process description:

##### Sample processing:

To ensure the uniformity of the sample. Before use, the solid samples such as fruits and vegetables should be chopped and homogenated, and the sample of vegetables and fruits is usually 10-15g, and the homogenation of high speed tissue homogenation machine (RPM 11000 r/min-24000 r/min).

Step 1: sample extraction:

Measured amount of the broken sample is in the BM-Q extraction tube, added the suitable organic solvents to the BM-Q extraction tube, and the homogenizing or ultrasonic extraction was used to purify the liquid.

Step 2: purification

According to the sample, select the suitable BM-Q purifying pipe, and then add the extract to the purifying tube, shake well and mix well, and centrifuge the liquid concentration or direct sample detection. After a clean tube purification, the complex matrix can continue to purify the cleaning fluid to achieve the ideal purifying effect.

#### Notes:

When sample join of purge line, anhydrous magnesium sulfate may have a fever and gas occurrence, Suggestions of vibration wave after a period of time after open the centrifuge tube deflated to vibration wave and other operations.

When the water containing large amount of water is added to the purifying pipe containing magnesium sulfate, please add the solvent before adding the sample to prevent the result of the caking of the sample and the magnesium sulfate.

Please pay attention to the sealing of the product. When the product is unpacked, it can be sealed in sealed bag or stored in a dry or ventilated place.

**Problems existing in the original QuEChERS method:**

In the acid medium (orange), relatively alkaline pesticide recovery rate is low; Even in the neutral matrix, alkaline sensitive pesticides are degraded.

**Solutions:**

In the process of analyzing the acidic medium (orange) to join in the extract HAC and NaAc mixture, can maintain pH solution system between 4 to 5, so as to solve the problem of alkaline pesticide recovery is affected.

**BM-QuEChERS Order Information**

*A sample preparation method, proposed by Anastassiades in 2003, has been widely used in the detection of food, environmental water samples and soil contaminants. The products of our company are applicable to the Chinese agriculture department, NY/T, AOAC and eu EN.*

Suitable for NY/T 1380-2007 蔬菜、水果中 51 中农药多残留的测定 气相色谱-质谱法				
NO	Description	Specification	Packing	Cat. No
1	Sodium acetate Extraction tube:	50ml	25 pcs/pk	BM-Q050020
	6g MgSO <sub>4</sub>			
	1.5g C <sub>2</sub> H <sub>3</sub> NaO <sub>2</sub>			
2	PSA/C18 Purification tube:	15ml (Recommended sample processing amount 2-6ml)	50 pcs/pk	BM-Q015026
	100mg PSA			
	100mg C18			
	300mg MgSO <sub>4</sub>			
Suitable for the AOAC 2007.01 method in the United States				
NO	Description	Specification	Packing	Cat. No
3	Acetic acid extraction tube:	50ml	25 pcs/pk	BM-Q050020
	6g MgSO <sub>4</sub>			
	1.5g C <sub>2</sub> H <sub>3</sub> NaO <sub>2</sub>			
4	PSA Purification tube1:	2ml (Recommended sample processing amount 1ml)	100 pcs/pk	BM-Q002031
	50mg PSA			
	150mg MgSO <sub>4</sub>			
5	PSA Purification tube2:	15ml (Recommended sample processing amount 6ml)	50 pcs/pk	BM-Q015031
	400mg PSA			
	1200mg MgSO <sub>4</sub>			
6	PSA/C18 Purification tube1:	2ml (Recommended sample processing amount 1ml)	100 pcs/pk	BM-Q002033
	50mg PSA			
	50mg C18			
	150mg MgSO <sub>4</sub>			
7	PSA/C18 Purification tube2:	15ml (Recommended sample processing amount 8ml)	50 pcs/pk	BM-Q015033
	400mg PSA			
	400mg C18			
	1200mg MgSO <sub>4</sub>			
8	PSA/C18/GCB Purification tube1:	2ml (Recommended sample processing amount 1ml)	100 pcs/pk	BM-Q015040
	50mg PSA			
	50mg C18			
	50mg GCB			
	150mg MgSO <sub>4</sub>			
9	PSA/C18/GCB Purification tube2:	15ml (Recommended sample processing amount 6ml)	50 pcs/pk	BM-Q015041
	400mg PSA			
	400mg C18			
	400mg GCB			
	1200mg MgSO <sub>4</sub>			

Suitable for the EU EN 15662 method				
NO	Description	Specification	Packing	Cat. No
10	Citric acid extraction tube:	50ml	25 pcs/pk	BM-Q050010
	4g MgSO <sub>4</sub>			
	1g NaCl			
	0.5g C <sub>6</sub> H <sub>6</sub> Na <sub>2</sub> O <sub>7</sub> ·1.5H <sub>2</sub> O			
	1g Na <sub>3</sub> C <sub>6</sub> H <sub>9</sub> O <sub>9</sub>			
11	PSA Purification tube1:	2ml (Recommended sample processing amount 1ml)	100 pcs/pk	BM-Q002030
	25mg PSA			
	150mg MgSO <sub>4</sub>			
12	PSA Purification tube2:	15ml (Recommended sample processing amount 6ml)	50 pcs/pk	BM-Q015022
	150mg PSA			
	900mg MgSO <sub>4</sub>			
13	PSA/GCB Purification tube1:	15ml (Recommended sample processing amount 6ml)	50 pcs/pk	BM-Q015020
	150mg PSA			
	15mg GCB			
	900mg MgSO <sub>4</sub>			
14	PSA/GCB Purification tube2:	15ml (Recommended sample processing amount 6ml)	50 pcs/pk	BM-Q015024
	150mg PSA			
	45mg GCB			
	900mg MgSO <sub>4</sub>			
15	PSA/C18 Purification tube1:	2ml (Recommended sample processing amount 1ml)	100 pcs/pk	BM-Q002032
	25mg PSA			
	25mg C18			
	150mg MgSO <sub>4</sub>			
16	PSA/C18 Purification tube2:	15ml (Recommended sample processing amount 6ml)	50 pcs/pk	BM-Q015032
	150mg PSA			
	150mg C18			
	900mg MgSO <sub>4</sub>			

该系列产品百迈生命科学完全实现粉末自动化分配、装填和包装，能实现自动化、规模化、批量化生产，同时接受客户个性化定制，欢迎广大新老客户来电咨询，洽谈合作，共谋发展！

This series of products can fully realize the automatic distribution, loading and packing of powder, realize the automation, scale and mass production, and accept the personalized customization.

Welcome the new and old customers to inquire, discuss cooperation and seek common development!

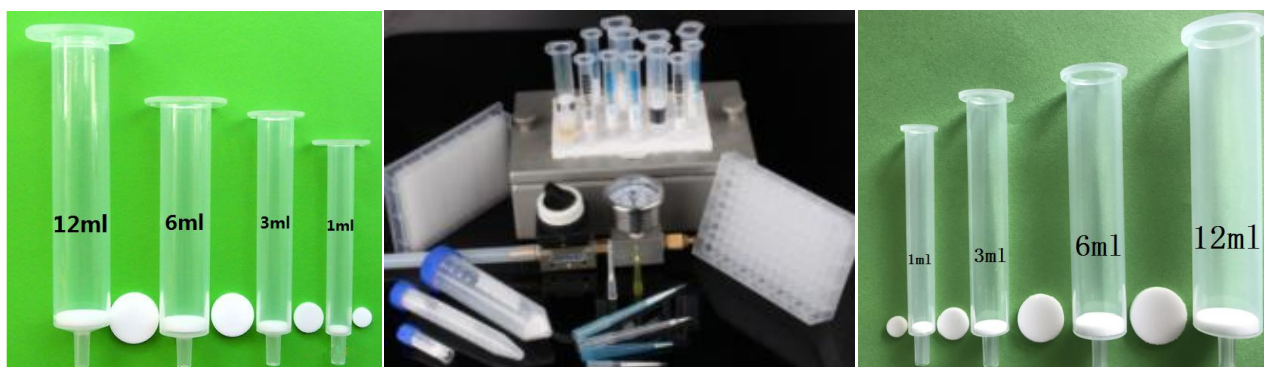


## Supporting Series For SPE 配套柱管/筛板系列

★ Column/Tube/Plates Series (1/3/6/12ml Column & 96/384 Well Plates -----For Preprocessing of biological samples

B&M Life Science is committed to the development of innovative solutions to biological samples. To provide innovative solutions and one-stop services for life science and biomedical samples, including supporting instruments, reagents and consumables.

Provide various specifications of water/hydrophobic/hydrophobic/filter core/filter and supporting column. It includes all kinds of ultra-pure SPE sieve plate, function sieve plate, cartridge filter core, water enclosed filter element, heterotype filter core and filter, needle filter, sample bottle and related supporting tools, etc.



有沿 SPE 空柱

SPE 柱配套固相萃取仪

无沿 SPE 空柱

## Order Information

Cat. No	Product Name	Specification	Description	Packing
BM0304001	Empty Column For SPE	1mL	每套含 1 个空柱管和 2 个配套筛板，筛板为疏水性，孔径 20um（可选择）	500pcs/pk
BM0304002	Empty Column For SPE	3mL		200pcs/pk
BM0304003	Empty Column For SPE	6mL		100pcs/pk
BM0304004	Empty Column For SPE	10mL		100pcs/pk
BM0304005	Empty Column For SPE	12mL		100pcs/pk
BM0304006	Empty Column For SPE	20mL		100pcs/pk
BM0304007	Empty Column For SPE	30mL		50pcs/pk
BM0304008	Empty Column For SPE	60mL		50pcs/pk
BM0304009	Empty Column For SPE	300mL		10pcs/pk
BM0304010	Series Column For SPE	1mL		1000pcs/pk
BM0305001	Empty Column For AC	1mL	含 1 个空柱管、上下盖和 2 个筛板，筛板为亲水性，孔径 50um（可选）	500pcs/pk
BM0305002	Empty Column For AC	3mL		200pcs/pk
BM0305003	Empty Column For AC	6mL		100pcs/pk
BM0305004	Empty Column For AC	12mL		100pcs/pk
BM0305005	Empty Column For AC	30mL		50pcs/pk
BM0305006	Empty Column For AC	60mL		50pcs/pk
BM0305007	Empty Column For AC	300mL		10pcs/pk
BM0306001	96 Well Plates For Filtration / Extraction	1.5ml	1 Plate & 2 Frits	10pcs/pk
BM0306002	96 Well Plates For Filtration / Extraction	2ml	1 Plate & 2 Frits	10pcs/pk
BM0306003	384 Well Plates For Filtration / Extraction	100ul	1 Plate & 2 Frits	10pcs/pk
	Personalization Custom	Custom	Custom	Custom

<http://www.bm-ls.com>

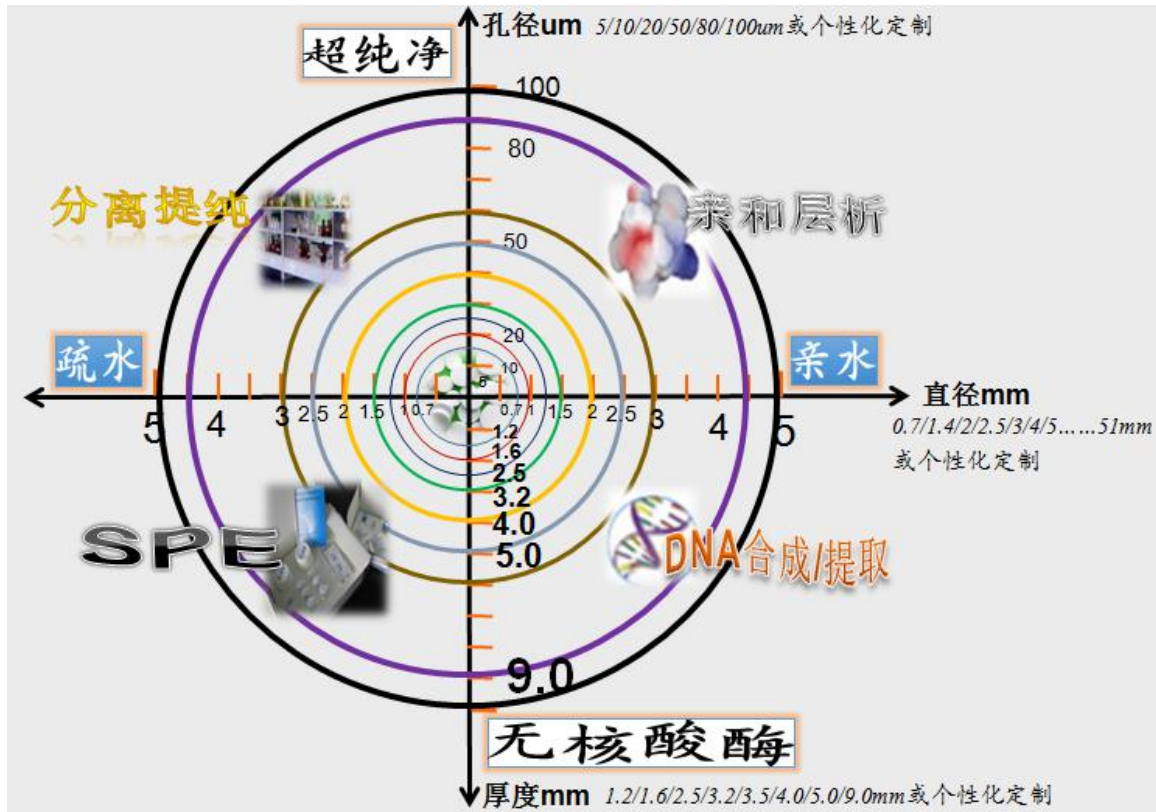


# 过滤器材-筛板/滤芯/滤片

★ 筛板系列 (UHMWPE/PP/PTFE/棉质等亲水/疏水筛板) -----生物样本前处理配套的各种筛板/滤芯/滤片  
 Frits/Filter Series (Hydrophilicity/Hydrophobicity Frits Of UHMWPE/PP/PTFE/Cotton) -----For Preprocessing of biological samples

百迈生命科学提供全规格的各种筛板/滤芯/滤片, 所有尺寸均接受客户个性化定制!

BM life science provides all kinds of frits/filter in full specifications, all dimensions accept customer personalized customization!



## Order Information

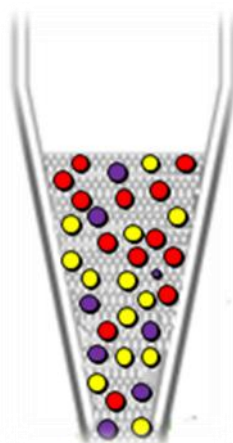
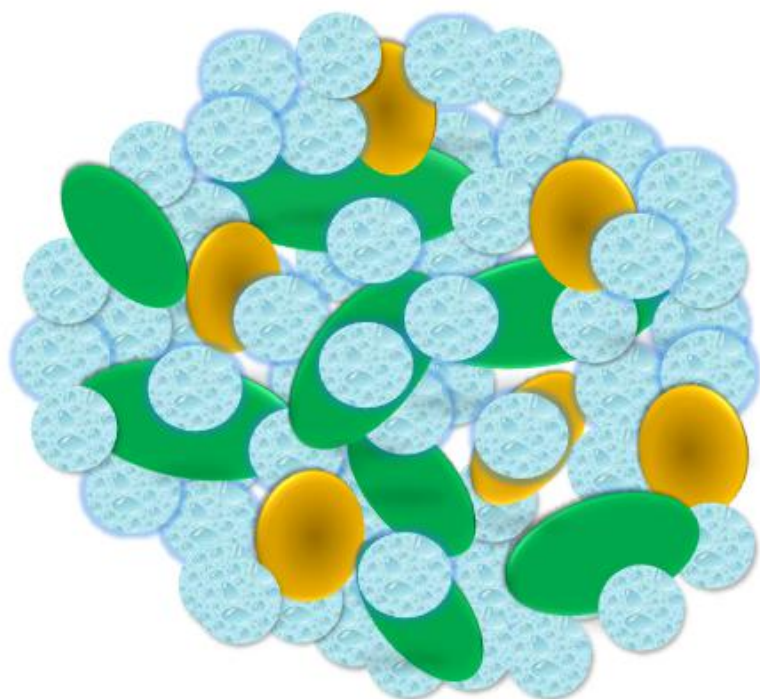
Cat. No	Type	Description	Specification & Packing				
			Diameter	Thickness	Pore Size	Spec.	pcs/pk
HF036-25-50	Hydrophobic Frits	For DNA synthesis	3.6mm	2.5mm	50um		1000
HF041-16-20	Hydrophobic Frits	For DNA synthesis	4.1mm	1.6mm	20um		1000
HF041-25-20	Hydrophobic Frits		4.1mm	2.5mm	20um		1000
HF058-16-20	Hydrophobic Frits	For 1ml SPE	5.8mm	1.6mm	20um	1ml	1000
HF070-16-20	Hydrophobic Frits	For 2ml Spin Column	7.0mm	1.6mm	20um	2ml	1000
HF071-16-02	Hydrophobic Frits		7.1mm	1.6mm	2um		1000
HF072-12-20	Hydrophobic Frits		7.2mm	1.2mm	20um		1000
HF072-16-02	Hydrophobic Frits		7.2mm	1.6mm	2um		1000
HF072-16-20	Hydrophobic Frits	For 2ml Spin Column	7.2mm	1.6mm	20um	2ml	1000
HF074-16-05	Hydrophobic Frits		7.4mm	1.6mm	5um		1000
HF074-16-20	Hydrophobic Frits		7.4mm	1.6mm	20um		1000
HF083-16-20	Hydrophobic Frits		8.3mm	1.6mm	20um		1000

HF090-16-05	Hydrophobic Frits		9.0mm	1.6mm	5um		1000
HF090-16-20	Hydrophobic Frits	For 3ml SPE	9.0mm	1.6mm	20um	3ml	1000
HF090-25-20	Hydrophobic Frits	For 3ml SPE	9.0mm	2.5mm	20um	3ml	1000
HF091-16-20	Hydrophobic Frits	For 3ml SPE	9.1mm	1.6mm	20um	3ml	1000
HF091-25-20	Hydrophobic Frits	For 3ml SPE	9.1mm	2.5mm	20um	3ml	1000
HF093-25-20	Hydrophobic Frits	For 3ml SPE	9.3mm	2.5mm	20um	3ml	1000
HF101-16-20	Hydrophobic Frits	For DNA synthesis	10.1mm	1.6mm	20um		1000
HF105-16-20	Hydrophobic Frits	For DNA synthesis	10.5mm	1.6mm	20um		1000
HF125-25-20	Hydrophobic Frits	For 6ml SPE	12.5mm	2.5mm	20um	6ml	1000
HF127-25-20	Hydrophobic Frits	For 6ml SPE	12.7mm	2.5mm	20um	6ml	1000
HF130-16-20	Hydrophobic Frits	For 6ml SPE	13.0mm	1.6mm	20um	6ml	1000
HF130-16-50	Hydrophobic Frits	For 6ml SPE	13.0mm	1.6mm	50um		1000
HF130-25-20	Hydrophobic Frits	For 6ml SPE	13.0mm	2.5mm	20um	6ml	1000
HF130-25-50	Hydrophobic Frits		13.0mm	2.5mm	50um		1000
HF151-25-20	Hydrophobic Frits	For 10ml SPE	15.1mm	2.5mm	20um	10ml	1000
HF158-25-20	Hydrophobic Frits	For 12ml SPE	15.9mm	2.5mm	20um	12ml	1000
HF162-25-20	Hydrophobic Frits	For 12ml SPE	16.2mm	2.5mm	20um	12ml	1000
HF197-16-20	Hydrophobic Frits	For 12ml SPE	19.7mm	1.6mm	20um	20ml	1000
HF197-25-20	Hydrophobic Frits	For 12ml SPE	19.7mm	2.5mm	20um	20ml	1000
HF197-32-10	Hydrophobic Frits	For 12ml SPE	19.7mm	3.2mm	10um	20ml	1000
HF221-25-20	Hydrophobic Frits	For 12ml SPE	22.1mm	2.5mm	20um	30ml	1000
HF228-25-20	Hydrophobic Frits	For 30/50ml SPE	22.8mm	2.5mm	20um	30ml/50ml	1000
HF240-25-20	Hydrophobic Frits	For 50ml SPE	24.0mm	2.5mm	20um	50ml	1000
HF264-25-20	Hydrophobic Frits	For 60ml SPE	26.4mm	2.5mm	20um	60ml	1000
HF292-16-50	Hydrophobic Frits	For flash Column	29.2mm	1.6mm	50um	flash Column	1000
HF296-25-20	Hydrophobic Frits	For flash Column	29.6mm	2.5mm	20um	flash Column	1000
HF380-25-20	Hydrophobic Frits	For flash Column	38.0mm	2.5mm	20um	flash Column	1000
HF495-16-50	Hydrophobic Frits	For 300ml SPE	49.5mm	1.6mm	50um	300ml	1000

# 功能筛板/滤芯/滤片

功能筛板/滤芯/滤片，是一款将功能填料（如聚合物 PS/C4/C18/硅粉/磁珠/ProtingA(G)琼脂糖凝胶等）镶嵌到 PE 筛板/滤芯/滤片中加工而成的。该功能筛板/滤芯/滤片因填料的不同分别可以用来做引物/基因组 DNA/质粒/PCR 产物/多肽/蛋白/抗体等目标产物的过滤/提取/脱盐/纯化/浓缩。

**Functional screen/filter core/filter**, is a functional filler (such as polymer PS/C4/C18/ magnetic bead/ProtingA (G) agarose gel, etc.) into PE sieve plate/filter core/fillet. Function of the sieve plate/filter/filter due to the difference of packing can be respectively used for primer/genomic DNA plasmid PCR products/peptide protein/antibodies to target product/filter/extraction/desalting/purification/enrichment.



我公司正在利用该工艺，研发无筛板 SPE 系列产品，欢迎广大新老客户洽谈合作！

Our company is using this process, developing the non-sieve plate SPE series products, and welcome the new and old customers to negotiate and cooperate!

# Syringe Filters

Syringe filter is a quick, convenient and reliable filter tool used routinely in the laboratory. Because they don't need to change the membrane and filter cleaning, it's eliminating the complex and time-consuming preparation. It is widely used in the sample pre filtration, removal of particles, aseptic filtration of liquids and gases. It is the preferred method to filter small samples before loading into HPLC and GC, and it is often used with disposable syringe. The filter diameter is 4mm ~ 50mm, and the processing capacity is from 0.5ml ~ 200ml.



We can provide OEM service according to customer demand. The batch difference is very little. There is a strict quality control SOP from raw materials to production to outbound delivery. It ensures the maximum product quality and usage. Common membranes of various specifications are available: PES/PTFE/Nylon/MCE/GF/PVDF/CA etc. The pore size is from 0.1um to 5um; The OD is 4mm/13mm/17mm/25mm/30mm/47mm etc.

## Product Features

Membrane Material	Main Performance
<b>Nylon</b>	①Resistance to strong alkali and organic solvent, Natural hydrophily; ②No infiltration is required before use; ③Uniform pore, Good mechanical strength; ④Thread interface design.
<b>MCE</b>	①High porosity and good intercepting effect; ②Not resistant to strong acids, strong alkali solutions and most organic solvents; ③Most suitable for filtration of aqueous solutions; ④Unique Thread interface design.
<b>CA</b>	①Natural hydrophily; ②Low protein adhesion, suitable for aqueous solution treatment; ③Nitrate free, suitable for groundwater filtration; ⑤Uniform bore structure; ⑥Extensive aperture select; ⑦Keep the collection of granular cells.
<b>PES</b>	①High solvent recovery and little residue; ②High capacity; ③Extremely high microbial filtration capacity; ④Unique Thread interface design; ⑤Low protein adsorption, low

	dissolution.
<b>PVDF</b>	①Hydrophobic film, non - moisture absorption, easily steady weight;②Heat resistance and repeated heat pressure disinfection;③Resistant to chemical corrosion and oxidation.
<b>PTFE</b>	①Excellent chemical resistance;②Resistant to high temperature, strong acid and strong alkali, with strong hydrophobicity;③Hydrophilic film and hydrophobic film can be provided to meet different liquid filtration requirements.
<b>GF</b>	①Natural hydrophobicity;②Large Flux;③Carrying large dirty matter; ④Good mechanical strength.
<b>Application</b>	1. Removal of protein precipitate and dissolution assay;2.Analysis of beverage and food and analysis of biofuels;3.Sample pretreatment; 4. Environmental monitoring and analysis;5. Analysis of pharmaceutical and pharmaceutical products;6. Liquid phase gas chromatography sample preparation and specific QC analysis; 7. Gas filtration and fluid detection.

## product specification

Syring filter	Membrane Material	Diameter(mm)	Pore Size(um)
Nylon	Nylon	13, 25, 33	0.22, 0.45,0.8
MCE	MCE	13, 25, 33	0.22, 0.45,0.8
CA	CA	13, 25, 33	0.22, 0.45
PES	PES	13, 25, 33	0.22, 0.45,0.8
PVDF	PVDF	13, 25, 33	0.22, 0.45,0.8
PTFE	PTFE	13, 25, 33	0.22, 0.45,0.8
GF	GF	13, 25	0.7,1.0
PP	PP	13, 25, 33	0.22, 0.45

## Ordering information

Cat.#	description (Membrane Material/Diameter/Pore Size/Solvent compatibility)	Qty.
BM-NL-130-22	Nylon/Φ13mm/0.22μm/Organic	100/box
BM-NL-130-45	Nylon/Φ13mm/0.45μm/Organic	100/box
BM-NL-130-80	Nylon/Φ13mm/0.8μm/Organic	100/box
BM-NL-250-22	Nylon/Φ25mm/0.22μm/Organic	100/box

BM-NL-250-45	Nylon/Φ25mm/0.45μm/Organic	100/box
BM-NL-250-80	Nylon/Φ25mm/0.8μm/Organic	100/box
BM-NL-330-22	Nylon/Φ33mm/0.22μm/Organic	100/box
BM-NL-330-45	Nylon/Φ33mm/0.45μm/Organic	100/box
BM-NL-330-80	Nylon/Φ33mm/0.8μm/Organic	100/box
BM-MCE-130-22	MCE/Φ130mm/0.22μm/Aqueous	100/box
BM-MCE-130-45	MCE/Φ130mm/0.45μm/Aqueous	100/box
BM-MCE-130-80	MCE/Φ130mm/0.8μm/Aqueous	100/box
BM-MCE-250-22	MCE/Φ250mm/0.22μm/Aqueous	100/box
BM-MCE-250-45	MCE/Φ250mm/0.45μm/Aqueous	100/box
BM-MCE-250-80	MCE/Φ250mm/0.8μm/Aqueous	100/box
BM-MCE-330-22	MCE/Φ330mm/0.22μm/Aqueous	100/box
BM-MCE-330-45	MCE/Φ330mm/0.45μm/Aqueous	100/box
BM-MCE-330-80	MCE/Φ330mm/0.8μm/Aqueous	100/box
BM-CA-130-22	CA/Φ130mm/0.22μm/Aqueous	100/box
BM-CA-130-45	CA/Φ130mm/0.45μm/Aqueous	100/box
BM-CA-250-22	CA/Φ250mm/0.22μm/Aqueous	100/box
BM-CA-250-45	CA/Φ250mm/0.45μm/Aqueous	100/box
BM-CA-330-22	CA/Φ330mm/0.22μm/Aqueous	100/box
BM-CA-330-45	CA/Φ330mm/0.45μm/Aqueous	100/box
BM-PES-130-22	PES/Φ13mm/0.22μm/Aqueous	100/box
BM-PES-130-45	PES/Φ13mm/0.45μm/Aqueous	100/box
BM-PES-130-80	PES/Φ13mm/0.8μm/Aqueous	100/box
BM-PES-250-22	PES/Φ25mm/0.22μm/Aqueous	100/box
BM-PES-250-45	PES/Φ25mm/0.45μm/Aqueous	100/box
BM-PES-250-80	PES/Φ25mm/0.8μm/Aqueous	100/box
BM-PES-330-22	PES/Φ33mm/0.22μm/Aqueous	100/box



BM-PES-330-45	PES/Φ33mm/0.45μm/Aqueous	100/box
BM-PES-330-80	PES/Φ33mm/0.8μm/Aqueous	100/box
BM-PVDF-130-22	PVDF/Φ13mm/0.22μm/Organic	100/box
BM-PVDF-130-45	PVDF/Φ13mm/0.45μm/Organic	100/box
BM-PVDF-130-80	PVDF/Φ13mm/0.8μm/Organic	100/box
BM-PVDF-250-22	PVDF/Φ25mm/0.22μm/Organic	100/box
BM-PVDF-250-45	PVDF/Φ25mm/0.45μm/Organic	100/box
BM-PVDF-250-80	PVDF/Φ25mm/0.8μm/Organic	100/box
BM-PVDF-330-22	PVDF/Φ33mm/0.22μm/Organic	100/box
BM-PVDF-330-45	PVDF/Φ33mm/0.45μm/Organic	100/box
BM-PVDF-330-80	PVDF/Φ33mm/0.8μm/Organic	100/box
BM-PTFE-130-22	PTFE/Φ13mm/0.22μm/Organic	100/box
BM-PTFE-130-45	PTFE/Φ13mm/0.45μm/Organic	100/box
BM-PTFE-130-80	PTFE/Φ13mm/0.8μm/Organic	100/box
BM-PTFE-250-22	PTFE/Φ25mm/0.22μm/Organic	100/box
BM-PTFE-250-45	PTFE/Φ25mm/0.45μm/Organic	100/box
BM-PTFE-250-80	PTFE/Φ25mm/0.8μm/Organic	100/box
BM-PTFE-330-22	PTFE/Φ33mm/0.22μm/Organic	100/box
BM-PTFE-330-45	PTFE/Φ33mm/0.45μm/Organic	100/box
BM-PTFE-330-80	PTFE/Φ33mm/0.8μm/Organic	100/box
BM-GF-250-046	GF/Φ25mm/0.46μm/Aqueous	100/box
BM-GF-250-080	GF/Φ25mm/0.8μm/Aqueous	100/box
BM-PP-**-**	pp/Φ**mm/**μm/Organic,Please ring for assistance	100/box
BM-MET-130	Metal/Φ13mm/Replaceable membrane	1/box
BM-MET-250	Metal/Φ25mm/Replaceable membrane	1/box
Other specifications or Materials.Please ring for assistance		

# Sample Vials

BM Life Science Sample Vials manufactured from borosilicate glass and meets ASTM Type I Class A and USP Type I standards, which improves your laboratory productivity by reducing costs and saving time. These products considerably reduce the risk of analytical test results compromising by ghost peaks, damaged needles or dislodged septa, decreasing analysis failures and sample reruns. BM Life Science offers Type I, 51-expansion glass vials and Type -2, 33-expansion glass vials.



## Product Feature

- ★ High quality glass Type I, 51-expansion glass (clear and amber) and Type -2, 33-expansion glass (only clear).
- ★ Computerized camera system for quality control throughout the manufacturing process to test critical dimensions.
- ★ Pre-packs including 100 vials and caps for ease and convenience in ordering.
- ★ Vials and caps and septa also available separately.
- ★ Meet standards set by governing bodies.
- ★ Tightest dimensional tolerances industry.

## Product Application

1. Compatible with a wide range of Thermo HPLC and GC instruments;
2. Amber Vial is good for compound sample storage in the chemical industry, pharmaceutical industry and scientific research laboratory.

## Product specification:

Sample Vials are available in three closure types: jaw, snap and screw cap, each closure has its advantages.

Cap	Seal	Comment
Jaw	Excellent seal	Requires tools
Snap	Moderate seal	Fast,no tools,some cap cracking
Scrw	Excellent seal	Universal

## Ordering information

Cat.NO.	Discription	Specification (ml)	Size (OD*H mm)	Pcs/pk
<b>8mm,8-425 sample Vials</b>				
BM1-A11	Clear vial,with screw top	2	11.6x32	100pcs
BM1-A21	Brown vial,with screw top	2	11.6x32	100pcs
<b>Caps &amp; Septa for 8-425 sample Vials</b>				
BM1-B1	Red PTFE/White silicone septa +Black cap with 5.5mm hole,for 8-425 screw top Vial			100pcs
BM1-B2	Red PTFE/White silicone septa +Black cap without hole,for 8-425 screw top Vial			100pcs
<b>9mm,9-425 sample Vials</b>				
BM2-A11	Clear vial,with screw top	2	11.6x32	100pcs
BM2-A21	Brown vial,with screw top	2	11.6x32	100pcs
<b>Caps &amp; Septa for 9-425 sample Vials</b>				
BM2-B1	Red PTFE/White silicone septa +Blue cap with 6mm hole,for 9-425 screw top Vial			100pcs
BM2-B2	Red PTFE/White silicone septa +Blue cap without hole,for 9-425 screw top Vial			100pcs
<b>10mm,10-425 sample Vials</b>				
BM3-A11	Clear vial,with screw top	2	11.6x32	100pcs
BM3-A21	Brown vial,with screw top	2	11.6x32	100pcs
<b>Caps &amp; Septa for 10-425 sample Vials</b>				
BM3-B1	Red PTFE/White silicone septa +Black cap with 7mm hole,for 10-425 screw top Vial			100pcs
BM3-B2	Red PTFE/White silicone septa +Black cap without hole,for 10-425 screw top Vial			100pcs
<b>11mm, sample Vials</b>				

BM4-A11	Clear vial,with jaw top	2	11.6x32	100pcs
BM4-A21	Brown vial,with jaw top	2	11.6x32	100pcs
<b>Caps &amp; Septa for 2ml sample Vials</b>				
BM4-B1	Red PTFE/White silicone septa +Silver aluminum cap with 5.5mm hole,for jaw top Vial			100pcs
BM4-B2	Red PTFE/White silicone septa +Silver aluminum cap without hole,for jaw top Vial			100pcs
<b>11mm, sample Vials</b>				
BM4-A11	Clear vial,with snap top	2	11.6x32	100pcs
BM4-A21	Brown vial,with snap top	2	11.6x32	100pcs
<b>Caps &amp; Septa for 2ml sample Vials</b>				
BM5-B4	White PTFE/Red silicone septa +Blue cap with 6mm hole,for 2ml snap top Vial			100pcs
BM5-B5	White PTFE/Red silicone septa +Blue cap without hole,for 2ml snap top Vial			100pcs
<b>13mm ,13-425 sample Vials</b>				
BM6-A11	Clear vial,with screw top	4	15x45	100pcs
BM6-A21	Brown vial,with screw top	4	15x45	100pcs
<b>Caps &amp; Septa for 13-425 sample Vials</b>				
BM6-B1	White PTFE/Red silicone septa +Black cap with 8.5mm hole,for 13-425 screw top Vial			100pcs
BM6-B2	White PTFE/Red silicone septa +Black cap without hole,for 13-425 screw top Vial			100pcs
<b>18mm ,18-400 Headspace Vials</b>				
BM8-A11	Clear vial,screw top,Headspace Vials	10	22.5x46	100pcs
BM8-A12	Clear vial,screw top,Headspace Vials	20	22.5x75.5	100pcs
<b>Caps &amp; Septa for Headspace Vials</b>				
BM8-B1	Blue PTFE/White silicone septa +Silver aluminum cap with 8mm hole,for 10ml/20ml screw top Vial			100pcs
BM8-B2	Red PTFE/White silicone septa +Aluminum cap with 8mm hole,for 10ml/20ml screw top Vial			100pcs
BM8-B3	White PTFE/White silicone septa +Aluminum cap with 8mm hole,for 10ml/20ml screw top Vial			100pcs
<b>20mm,Headspace Vials</b>				
BM10-A11	Clear vial,jaw top,Headspace Vials	10	22.5x46	100pcs
BM10-A21	Clear vial,jaw top,Headspace Vials	20	22.5x75.5	100pcs

<b>Caps &amp; Septa for 20mm, Headspace Vials</b>			
BM10-B1	White PTFE/White silicone septa +Silver aluminum cap with 10mm hole,for 10ml/20ml jaw top Vial		100pcs
BM10-B2	Nature PTFE/Nature silicone septa +Silver aluminum cap with 10mm hole,for 10ml/20ml jaw top Vial		100pcs
BM10-B3	White PTFE/Blue silicone septa +Silver aluminum cap with 10mm hole,for 10ml/20ml jaw top Vial		100pcs
BM10-B4	Nature PTFE/Yellow silicone septa +Silver aluminum cap with 10mm hole,for 10ml/20ml jaw top Vial		100pcs
BM10-B5	Nature PTFE/Blue silicone septa +Silver aluminum cap with 10mm hole,for 10ml/20ml jaw top Vial		100pcs
<b>24-400 Vials</b>			
BM12-A11	Clear vial,screw top	20	100pcs
BM12-A21	Clear vial,screw top	20	100pcs
BM12-A31	Brown vial,screw top	40	100pcs
BM12-A41	Brown vial,screw top	40	100pcs
<b>Caps &amp; Septa for 24-400 Vials</b>			
BM12-B1	Nature PTFE/Nature silicone septa +Black cap with hole,for 24-400 screw top Vial		100pcs
BM12-B2	Nature PTFE/Nature silicone septa +Black cap without hole,for 24-400 screw top Vial		100pcs
	<b>Please consult other specifications</b>		



**Shenzhen BM Life Science**, automation equipment, take the market as the guidance, cater to the demand in the field of life science, biological medicine industry, is committed to all kinds of automation equipment research and development in line with market demand, help customers improve production technology, improve production efficiency, reduce operating costs, increase enterprise management enterprise core competitiveness, accelerate the industrialization of the industry, and promote the development of the industry!

#### **Automatic labelling machine**

It is a fully automatic labeling machine specially designed for enterprises in the field of life science. It belongs to non-standard custom equipment, which is suitable for 1.5ml centrifuge tubes and 2ml flexible pipe labels.

#### **The automatic injection of sample splitter is labeled with the label**

The device is designed for life science in vitro diagnostic reagents manufacturing enterprises tailored a fully automatic sample (powder), liquid, marking, labeling, screw cap, printing, all-in-one, belong to the non-standard customized equipment, suitable for separated type 2 ml tube cover can add sample (powder) of the stand pipe, fluid, labeling, cover, and plate.

#### **Filter cartridge head/extraction column / 96-hole automatic loading machine**

It is a fully automatic non-standard equipment specially designed for the production of cartridge head, SPE column and various 96 orifice plate, which is used to improve production efficiency and product quality.

#### **Semi-automatic column machine for centrifugal column**

It is a semi-automatic equipment designed for the batch loading of centrifugal column for 2ml nucleic acid. It is used to improve the loading efficiency and product batch stability.

#### **Automatic/semi-automatic liquid transfer device gun head arrangement box machine**

It is a fully automatic/semi-automatic equipment designed for the bulk assembly of the pipe-head bulk assembly, which is used to improve the efficiency and quality of the box and avoid pollution.

#### **Public security criminal investigation automatic FTA card/blood filter paper perforating plate machine**

Is designed for the public security forensic field design and development of a fully automatic/semi-automatic FTA card/blood filter plate punching equipment, can be used in the FTA card/blood filter paper, and some of the difficult and dangerous for examination of quantitative punch, sampling, and automatically fills in the PCR to 96 hole board, without human intervention, to avoid pollution and improve the efficiency of punch, for large-scale screening and criminal detection, DNA for library provides great convenience.

#### **12/24/48/96/384 solid phase extraction equipment**

It is a high flux extraction, separation, purification and enrichment purpose product of form a complete set of equipment, mainly used in biological samples, sample food testing, chemical analysis, sample pretreatment, extraction, separation, desalination and concentration), etc.

#### **Full automatic SPE/QuEChERS powder packing spray machine**

Is designed for chemical analysis, food, environmental, clinical testing and design of an automatic/semi-automatic powder integration of distribution, filling, packaging, printing equipment, used to improve the SPE column/QuEChERS filled packaging printing efficiency and quality, avoid cross contamination.





## SPE柱/板OEM/ODM及其他个性化定制服务

### SPE 柱/板/QuEChERS OEM/ODM 及其他个性化定制服务

OEM/ODM For SPE Cartridge&Plates/QuEChERS/other customized services.

百迈生命科学基于自身成熟的 **SPE/QuEChERS** 产品线和生产平台，开展各种 **SPE 柱/板/QuEChERS** 的代工服务。

BM life science is based on the mature SPE/QuEChERS product line and production platform, and carries out various SPE&Plates/QuEChERS OEM services.



#### BM Life Science, provide:

OEM/ODM For SPE Cartridge/Plates; 各类 SPE 柱 OEM/ODM 服务;

OEM/ODM For Tip SPE ;Tip SPE (微量枪头提取 SPE) OEM/ODM 服务;

OEM/ODM For 96/384 Well Plate;96/384 孔 SPE 板 OEM/ODM 服务;

OEM/ODM For QuEChERS; 各类 QuEChERS 产品 OEM/ODM 服务;

Semi-automatic SPE columns packing equipment customization; 半自动 SPE 柱装柱设备定制;

Automatic SPE column packing equipment customization; 全自动 SPE 柱装柱设备定制;

Automatic QuEChERS powder dispensing packaging equipment customization; 全自动 QuEChERS 粉末分配包装设备定制;

Personalized customization of SPE related supporting products; SPE 类相关配套产品个性化定制;

SPE related products or projects; SPE 类相关产品或项目合作开发;

SPE overall solution collaborative development. SPE 类整体解决方案合作开发。

Calls, consultations and cooperation welcomed!

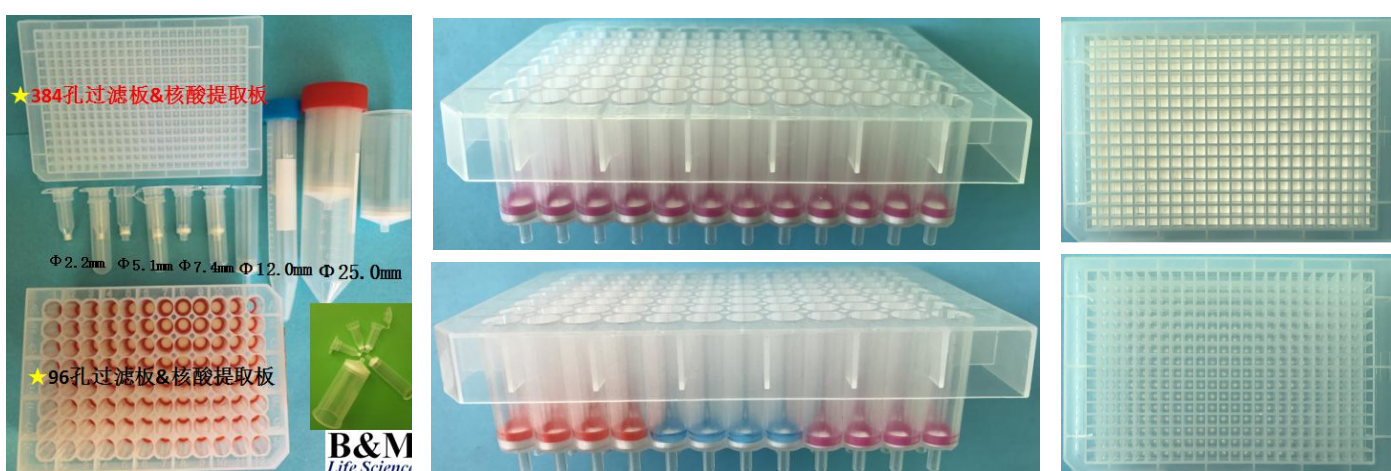
欢迎广大新老客户来电咨询，洽谈合作！

# Nucleic Acid Extraction Column & Plate

**Nucleic acid extraction column** (DNA small/medium/large column) is assembled by outer tube + inner tube + silica gel membrane + compression ring. It is used for pretreatment of DNA, such as genome, chromosome, plasmids, PCR products, plastic recycling products, RNA and other biological samples, to achieve the separation, extraction, purification and enrichment of target products.

**The filter/extract column** is assembled from the filter tube and the extraction column. The filter tube is processed by filter paper and is used for solid liquid separation, solid impurities such as cell debris, particulate matter filtration; The extraction column is equipped with solid phase extraction filler for the purpose of separation, extraction, purification and enrichment.

**96/384 hole nucleic acid extraction plate** is a high - flux nucleic acid extraction and separation of the supporting materials, mainly used for primer desalination, enrichment, nucleic acid extraction and separation and other work. It can conveniently and quickly dispose of 96 and 384 biological samples, which will serve as the purpose of the separation, extraction, concentration, desalination, purification and recovery of 96/384 biological samples.



## Product features:

- ★ **Less liquid:** 2ml centrifugal column silicone film diameter is low to 2mm and the volume of elution is low to 10ul.
- ★ **Various specifications:** 0/1/1.5/2/15/30/50ml optional bulk volume, to meet different experimental needs.
- ★ **Various functions:** nucleic acid extraction column/plate has versatility, which can be used to filter and can be used for extraction.
- ★ **Patented product:** 384 hole filter plate for patent, which is the first commercial new product in China.
- ★ **High cost performance:** centrifugal tube /96&384 hole filter and collection plate and other consumables, for our own r&d, injection molding production, using the supporting materials will make customers lower cost.
- ★ **The unique innovation:** Functional materials and PE premix, through unique sintering process, make multi-purpose multi-purpose functional filter/sieve plate/filter for life science and biomedical research. Using this technique, silica gel -filter/sieve plate/filter with nucleic acid extraction can be used to extract DNA.

**This series of products accept customer personalized customization, welcome all new and old customers to inquire, discuss cooperation, seek common development!**

## Order Information

Specification	Describe	Extracting amount (ug)	Pcs/pk	Cat. No
2ml	Small plasmid extract column	0-20	100	DNA002001
	Genome extraction column	0-20	100	DNA002002
	Small RNA extraction column	0-20	100	DNA002003
	Small rubber recovery column	0-20	100	DNA002004
	PCR product purification column	0-20	100	DNA002005
15ml	Medium filter tube		50	DNA015001
	Medium Plasmid extract column	0-100	20	DNA015002
20ml	Medium filter tube		50	DNA020001
25ml	Filter tube		50	DNA025001
30ml	Large & medium sized filter tubes		50	DNA030001
	Medium & Large Plasmid extract column	0-200	10	DNA030002
50ml	High lift filter tube		10	DNA050001
	Plasmid large extraction column	0-500	10	DNA050002
60ml	High lift filter tube		10	DNA060001
300ml	Plasmid oversize column	0-500	10	DNA300001
2ml	96 hole filter plate		1	DNA096001
	96-hole extraction plate	0-20	1	DNA096002
100ul	96-hole PCR plate(Transparent hemline)	0.1ml	10	PCR09601001
100ul	384 hole filter plate		1	DNA384001
	384 hole extraction plate	0-20	1	DNA384002

# The advantages of BM Life Science

## R&D team

### Professional R&D team:

► In life science, biology, medicine, instruments and equipment, automation technology, machinery and electronics, hardware, software, optical flow, modelling design has domestic r&d talents and rich experience in research and development. With more than 10 r&d personnel, the project is experienced.

## Experience in industry

### Rich experience in industry background:

► In the field of life science, Our biological macromolecular synthesis (DNA&RNA, Gene, Peptide, Antibody), nucleic acid extraction, Gene sequencing, molecular diagnosis, immune diagnosis, personalized therapy and drug use; Microbial culture, biological fermentation, drug synthesis and drug screening in biological medicine; We have many years of experience in the field of automation equipment, such as man-machine system, photoelectric tracking, design and development, etc., and have many mature products to market.

## The key technology

### Mastering key technologies:

- **Multiple fluorescence composite amplification techniques:** single tube amplification of 27 STR sites or 50 SNP sites.
- **Multi-site analysis and detection techniques:** single tube detection of nearly 30 STR sites, nearly 50 SNP sites, capable of detecting as many as 22 viruses at a time.
- **Convenient type ultramicro biological sample extraction and separation technology:** using liquid move with multi-function spear to Oligo/genomic DNA plasmid PCR products/peptide/protein/antibodies to target product trace, ultramicro and a large number of filter/extraction/desalting/purification enrichment
- **One-time suction head and sample technology:** 2ul-1ml, CV< 2%; Application for patent technology, to the bubble, blood clots, liquid level, air tightness, suction head congestion to realize the precision detection and alarm.
- **Needle - type system:** 5ul- 10ml, CV< 5%, no cross contamination, automatic flushing function.
- **Microscope-powder distribution technology:** unique powder distribution technology was used to allocate a range of 15ug-10g with a margin of error of  $\pm 5\%$ .
- **Unique sintering process,** functional materials and PE blends, and after special sintering process, producing multi-functional multi-purpose more specifications of the filter sieve plate/filter function, used in life science and biomedical research.
- **Leading sintering technology:** the minimum filter core of sintering is 0.35mm in diameter and 0.5mm in thickness, which is the "most in the world".
- **Life science and biological medicine industrial automation technology:** automation instrument equipment is introduced into the field of life science and biological medicine, will be a large number of highly educated from heavy repetitive work, let them most of the energy into the endless r&d, for more thinking and research.

## Received the honor

### Invention patent:

- ★ A fully automatic FTA card punching and assembling ;
- ★ A kind of filter core screen filter plate automatic high-speed punching machine;
- ★ A fully automatic centrifuge tube/can be used to label the spline with the spline;
- ★ A pillar tube gas resistance measuring instrument;
- ★ A type of innovative microdna synthesis with 96 plate CPG carrier;
- ★ A trace 384 hole synthesis extraction filter multifunction board

### Utility model patent:

- ★ A kind of filter core screen filter plate automatic high-speed punching machine;
- ★ A fully automatic liquid displacement filter cartridge cartridge box machine;
- ★ A semi-automatic dry moisture resistance measuring instrument;
- ★ A automatic gas resistance measuring instrument;
- ★ A handheld punch;
- ★ A small DNA synthesis column, patent No. : CN206328366U;
- ★ An innovative Tip SPE
- ★ An innovative non-baffle-type SPE column,
- ★ A type of innovative microdna synthesis with 96 plate CPG carrier;
- ★ A micro 384 hole synthesis extraction filter multifunction plate, patent No. : CN206454663U

►►► *In the field of life sciences and biological medicine, the high school students have created one and another miracle in the world through the brains of wisdom and the hands of hard work. However, China's life science and biomedical fields are not highly automated, In the lab, a lot of Master and doctor, still in the spear head, wash the plate, pick the clone, do the transformation; In the company, a lot of colleges, undergraduate students were doing the cycle, the same repetitive work of simplicity, real pure handmade, let them put down the "live" in the hands of a, the limited channel your energy into something more meaningful, more thinking, innovation, this is the first of the mai life science have to do a meaningful thing!*





# Shenzhen BM Life Science Co.,Ltd.

Abbreviation **BM Life Science**



**Company Address:** 8th Floor, Wencheng Commercial Plaza, Nanling District, South Bay Street, Longgang District, Shenzhen City, Guangdong Province.

**Yian Industrial City:** 2th Floor, No 45, YEE ON IND. City, Yantian Village, Fenggang Town, Dongguan City, Guangdong Province.

**Hongshiqiao Factory:** 2th Floor Office Building, Langda (ZongWei) industrial Zone, Hongshiqiao industrial District, Yantian Village, Fenggang Town, Dongguan City, Guangdong Province.

Tel : +86-755-3315 6063      +86-769-3320 8080

Mob : +86-136 32 818 515      +86-186 8007 5371

Q Q: 5497 555 43      1464909685      3305 4508 33

E-mail : [info@bm-ls.com](mailto:info@bm-ls.com)    [order@bm-ls.com](mailto:order@bm-ls.com)    [sales@bm-ls.com](mailto:sales@bm-ls.com)

Zip Code : 518123 ( Shenzhen ) 523690 ( Dongguan )

Web : <http://www.bmspd.com>、 <http://www.bmdls.com>、 <http://www.bm-ls.com>