

**Guangzhou Lvyuan Water Purification Equipment Co., Ltd.**

Add: No.4, Shijiaoju Street, Xinzao Town, Panyu Dist.,

Guangzhou,Guangdong, China(Mainland) 511436

Production base: Building B1, Longteng Community,

Wanxiu High-tech Zone, Wuzhou, Guangxi, China

Tel: 020-34460508

Website: [www.lysinterfilter.com](http://www.lysinterfilter.com)

**广州滤源过滤器材有限公司**

GUANGZHOU LVYUAN WATER PURIFICATION EQUIPMENT CO.,LTD.

**ISO9001 International Quality Management Certification: SW22020341ROS**

**National High-tech Enterprise Certification: GR202244011871**



# COMPANY INTRODUCTION



Founded in 2009, Guangzhou Lvyuan Water Purification Equipment Co., Ltd. is a high-tech enterprise dedicated to the research of sintering mechanism and process, and to the production of many kinds of filter elements. Related products have obtained the authoritative certification of EU CE, ROHS and SGS.

Lvyuan's key products include ultra-high molecular polyethylene (UHMWPE), high density polyethylene (HDPE), polyamide (PA), polytetrafluoroethylene (PTFE), polypropylene (PP) and other sintered filter elements. There're various shapes: filter tubes, filter cartridges, filter columns, filter rods, filter plates, filter sheets, filter balls, filter cups, and other customized special-shaped porous element. They're widely used in water purification, sewage treatment, air dust filtration, oil filtration, fuel filtration, sensor protection filtration, also used in fluidization, aeration, liquid and odor storage, muffler, watercolor pen refill, drip irrigation water refill, flowerpot water absorption Sticks or absorbent brackets, liquid mosquito coils, aquarium air diffuser etc., pipette tip filters in the medical field, humidification bottle diffuser filters, oxygen generator filters, self-sealing filters, etc. OEM and ODM customized services are provided. Products are sold in more than fifty countries and regions.

Lvyuan strictly implements the standards of ISO9001 international quality management system. We pursue higher quality products, provide customers with more professional and thoughtful services, and create greater value.



# CERTIFICATION



# PRODUCTION EQUIPMENT



# Laboratory Equipment



Material Analysis Chromatography



Electron Microscope



Molecular weight detector



Dielectric detector



Pore Analyzer



Enzyme Tester

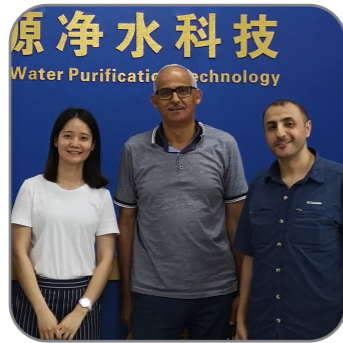


Hydrophilic Tester



Air Permeability Detector





## Customer Testimonials

We are committed to serving global customers, and our customers are in more than 30 countries and regions, including the United States, Britain, France, Thailand, Argentina, Russia, Germany, Japan, India, Italy, Canada, and Switzerland, etc.

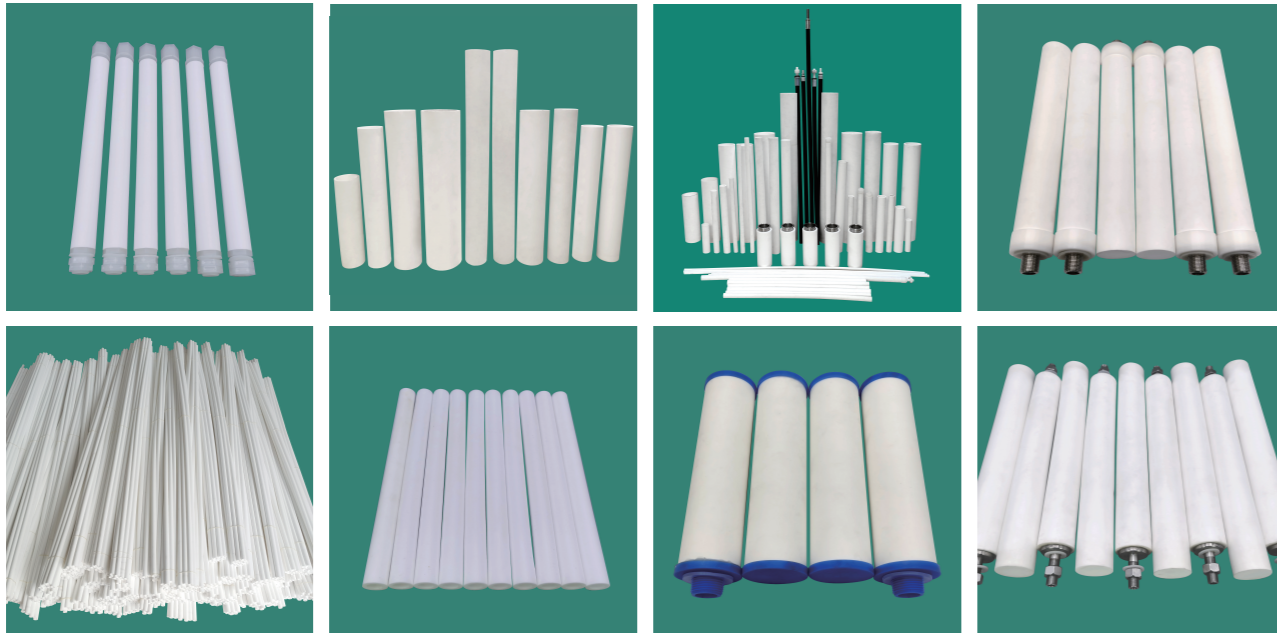
# LVYUAN CONTENT

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## PE SINTERED FILTER ELEMENT FOR WATER, OIL, AIR AND DUST FILTRATION



### PRODUCT PERFORMANCE

- Material properties:** PE with UHMWPE as the main medium has the characteristics of non-toxic, tasteless, no foreign matter dissolution, and biochemical safety.
- Chemical properties:** PE filter media has excellent corrosion resistance, and can withstand various non-strong oxidizing acids, Alkali resistance, aldehyde resistance, aliphatic hydrocarbon resistance, radioactive radiation resistance, etc., excellent chemical properties, and good resistance to organic solvents. Below 80°C it can resist ester ketone, ether and other organic solvents;
- Temperature resistance:** the highest Saturated steam temperature can reach 130°C, long-term continuous use does not exceed 80°C;
- Mechanical properties:** good toughness and strength, impact resistance, not easy to damage,
- Filtration performance:** Filtration accuracy range (0.2-200 microns), high filtration efficiency, controlling the initial pressure can effectively remove solid particles above 0.2 microns
- Physical properties:** The specific gravity of the medium is light, and the theoretical specific gravity is around 0.5-0.7g/ml ;
- Regeneration performance:** The capillary pores of PE media have the elasticity of microscopic expansion, and can be efficiently reversed and regenerated by water pressure, air pressure or water-air pressure. Ensure that it can use the acid solution of appropriate concentration to chemically dissolve and regenerate the blockage, so that the filtration performance of the medium can be restored to the original state, and the service life of the quality can be improved;
- Processing performance:** Secondary processing can be carried out by turning, milling, planing, ironing, hot-melt welding, bonding, etc.;
- Basic characteristics:** It is manufactured by a special sintering process, in which plastic particles are heated to its surface until soft, and melts on the contact surface while approximately retaining its original shape. The resulting shaped body has open continuous pores, the size and number of which depend on the sintering conditions and the size selection of the polymer particles.

## PE SINTERED FILTER ELEMENT FOR WATER, OIL, AIR AND DUST FILTRATION

### PRODUCT FEATURE

1. Large flow: high porosity (around 50%) ensures greater fluid flow per unit area;
2. Smooth surface: smooth surface, impurities are not easy to stick, backwashing is easy and thorough, and can be reused;
3. Strong anti-fouling ability: high filtration accuracy makes it difficult for impurities to remain in the filter body, and can press the sludge to a water content of 70%;
4. Excellent cost performance: the filter element has excellent comprehensive performance and high cost performance, and is suitable for water treatment, environmental protection sewage treatment, reclaimed water reuse, chemical product filtration and other working conditions with large flow;
5. Resistance to strong acid and strong alkali corrosion, Resistance to various high temperature and strong corrosive chemical raw materials filtrations, and resistance to dissolution of organic solvents;
6. Excellent strength and wear resistance ensure its service life;
7. The surface of outer light makes it difficult for impurities to stick together,
8. Good toughness, the filter element is not easy to break;
9. No threshing phenomenon;
10. Strong pressure resistance.

### APPLICATION

PE sintered microporous filter element can be used as a filter medium for heterogeneous phase separation (solid-liquid, gas-solid, gas-liquid, liquid-liquid) in a physical sense.

- Used for solid-liquid separation:** the application of clarification filtration or filter plate filtration, the filtration efficiency of solid particles above 0.2 microns can reach more than 99.7%.
  - Application in the field of pharmaceuticals and food:** such as the filtration of liquid medicine for injections in the production of injections in the pharmaceutical industry and the filtration of bottled water for washing injections; Separation and filtration of tetracycline production; fine filtration of corn oil, soybean oil, rapeseed oil and other edible oils.
  - Application in the field of environmental protection water treatment:** such as the purification and filtration of heavy metal salts in electroplating solutions and industrial heavy metal wastewater in the electroplating industry, and the wastewater containing cadmium, copper, chromium, nickel, lead, etc., is chemically treated and then filtered through PE microporous tubes. Emission, filtration and recycling of coal-containing wastewater, flue gas water liquid desulfurization filtration, dry dust recovery, purification and filtration of electro dialysis water;
  - Application in chemical industry:** precision filtration of liquid products, liquid raw materials and liquid intermediates in chemical production, such as precision filtration of various acids, alkalis, salts and most organic solvents, acid and sulfur filtration in chemical fiber production, brine filtration in the production of chlor-alkali industry, activated carbon filtration in glyphosate production, filtration of barium sulfate and potassium hydroxide in metallurgical plants, photosensitive film production, and can also be used as plate and frame filter press, after centrifuge and other precision filter.
  - Application in the field of non-ferrous metals:** such as nickel chloride, cobalt chloride, nickel oxalate, cobalt carbonate, nickel carbonate and other non-ferrous metals during the preparation of non-ferrous metals, such as decalcification and iron filtration of pickling solution, and filtration and washing of crystallization solution.



## PE SINTERED FILTER ELEMENT FOR WATER, OIL, AIR AND DUST FILTRATION

### 2. For gas-solid, gas-liquid separation:

Used for the filtration of ammonia gas separation dust, water droplets and oil droplets in melamine production; compressed air purification and filtration; air separation dust filtration in watch production; in short, it can be used for purification and filtration of various gases to separate solids, oil droplets and water droplets, etc. .

### 3. Used for liquid-liquid separation:

(1) It can be used to filter foreign matter such as oil droplets in water. After filtering, the oil content in wastewater is only about 2ppm, which is much lower than the national standard.

(2) Used as a liquid dispersion bubbler: the porous PE pipe body is an ideal gas bubbler; it can be used as an air or ozone dispersion bubbler in a sewage biochemical treatment system; an air bubbler in a mine beneficiation system, Gas dispersion bubbler in gas absorption operation; it has been used in wastewater treatment and beneficiation systems at home and abroad.

(3) As a gas muffler: porous PE pipe is an excellent gas muffler.

### 4. Other uses:

- (1) Porous PE pipe or plate can be used as a support for reverse osmosis and ultrafiltration membranes.
- (2) The porous PE plate can be used as the separator of the dielectric tank.
- (3) The porous PE plate can be used as a gas distributor (fluidization plate) in the airflow conveying of powdery materials.
- (4) Porous PE pipe can be used as gas diffuser and aeration.
- (5) Porous PE sticks or sheets can be used as liquid storage and scent diffusion (perfume and liquid mosquito coils).
- (6) Porous PE pipe can be used as air diffuser and oxygenation for aquarium fish tanks.
- (7) The porous PE filter can be used as a watercolor pen tip.
- (8) Porous PE filter can be used as flower pot water absorbing rod, flower pot water absorbing support frame
- (9) The porous PE filter can be used as a temperature sensor, smoke detection, and online monitor protector.

## INSTRUCTIONS

Porous PE pipe or plate can be used for vacuum filtration, pressure filtration or gravity filtration. In order to use this product well, the following points must be mastered:

1. Correct selection of filtration parameters (optimum filtration pressure difference, filtration speed and filtration area, etc.), therefore, a small test to determine the design parameters must be carried out in advance.
2. According to the requirements for filtration in production and the characteristics of porous PE media, the mechanical structure of the filter should be correctly designed.
3. There must be certain operating procedures during use, especially at least 5-10 minutes of low-pressure 0.3-0.5 kg/m<sup>2</sup> filtration at the start-up stage. It is forbidden to reach the normal operating pressure as soon as it is started, otherwise the capillary pores will be blocked too quickly, which will significantly reduce productivity.
4. The porous PE filter should be equipped with a certain volume of air bags (one air bag can be used for several filters) for back blowing slag removal and back blowing regeneration. The back blowing pipeline should be thicker and the back blowing valve Ball valves or cocks should be used, the blowback speed should be fast, and the blowing time should not be long, generally no more than 1 second, otherwise the compressed air will be wasted.
5. According to the characteristics of different materials, different regeneration operation procedures should be formulated.

## PE SINTERED FILTER ELEMENT FOR WATER, OIL, AIR AND DUST FILTRATION

## PARAMETERS

1. Working temperature: UHMWPE ≤ 80°C, PA ≤ 120°C
2. Working pressure: 0.1MPa-0.6MPa
3. Filtration accuracy: 0.2μm to 200μm

**\*LVYUAN currently has PE filter elements of the following size:**

Existing sizes as follows (micron rate and joints can be customized)											
NO.	OD (mm)	ID(mm)	L (mm)	NO.	OD (mm)	ID(mm)	L (mm)	NO.	OD (mm)	ID(mm)	L (mm)
01	14	10	11	19	35.7	6	114	37	78	60	750
02	15.9	9.7	30	20	38	20	1000	38	78	64	1200
03	16.6	12.6	17.4	21	38	25	1000	39	78	70	1000
04	18	10	67.5	22	40	33	1000	40	80	69	1000
05	19	15	450	23	45.5	39	96	41	100	80	1000
06	19.5	12.5	2000	24	47	33	1200	42	118	83	1030
07	20	10	1000	25	50	20	200	43	125	105	600
08	20	16.5	211	26	50	35	1000	44	125	105	900
09	20	16.5	1000	27	50	38	1000	45	142	100	1000
10	25.4	19	1100	28	50	40	1000	46	142	120	1000
11	26	16	350	29	57	43	1200	47	150	125	1000
12	27	22	120	30	60	35	1000	48	165	125	1000
13	30	15	1000	31	61	50	70.5	49	180	150	1000
14	30	20	1000	32	63	35	1000	50	195	155	1000
15	30	24	70	33	63	55	254	51	200	160	1000
16	31.5	10.5	500	34	65	35	1000	52	240	210	1000
17	32.6	25	60.5	35	70	58	500	53	300	270	1000
18	34	27	28	36	70	56	1200	-	-	-	-

**\*More specifications and styles can provide non-standard customization.**



## POROUS PE SINTERED MUFFLER, SILENCER

### AN SERIES SILENCER DESCRIPTION

In the process of modern industrial production and the use of pneumatic equipment, the muffler can effectively reduce the noise of pneumatic equipment, and can provide the best balance between noise reduction and acceptable back pressure in the pneumatic system. In general, mufflers come in a wide range of sizes to fit most standard valves, and have robust integrated threads to ensure easy assembly to pneumatic equipment.

### AN SERIES SILENCER PERFORMANCE

In terms of materials, porous plastic mufflers have many advantages over metal mufflers: significantly reduced weight, greatly improved corrosion resistance, capable of filtering finer particles and aerosols, more durable, assembly speed and cost advantages.

### AN SERIES SILENCER PARAMETERS

Installation method: threaded connection and quick connection

Interface size: M5X0.8", 1/8", 1/4", 3/8", 1/2", 3/4", etc.

Filter pore size: 10-75µm

#### \*Small resin type/external thread type series performance

Model	Effective area mm <sup>2</sup>	Sonic conductance C [dm <sup>3</sup> /(s·bar)]	Recommended flow m <sup>3</sup> /min(ANR)	Weight g
AN05-M5	5	1	0.4or less	0.5
AN10-01	10	2	0.8or less	1
AN15-02	15	3	1.0or less	2.5
AN20-02	35	7	3.0or less	4
AN30-03	60	12	5.0or less	5.5
AN40-04	90	18	8.0or less	8.5

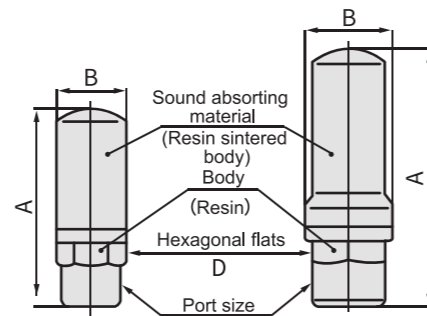


#### \*Dimension/Construction/Parts

Dimensions(mm)

Model	Port size R, NPT	A	B	C
AN05-M5	M5X0.8	15	6.5	-
AN10-01	1/8	23	11	-
AN15-02	1/4	32	16	14
AN20-02	1/4	45	16.5	14
AN30-03	3/8	58.5	20	17
AN40-04	1/2	68	24	21

**Remark: No hexagonal part in AN05 and AN10, it's round part.**



## POROUS PE SINTERED MUFFLER, SILENCER

### U-SHAPE SERIES MUFFLER INFORMATION

Filtration accuracy: 10-75µm

Applicable fluids: water/oil/compressed air/hydraulic, pneumatic and hydraulic power devices and other general fluids

Working pressure: 0bar(0MPa)~10bar(1.0MPa)

Working temperature: -15°C~+100°C

Connecting pipes: hoses and general joints



### U-SHAPE SERIES MUFFLER MAIN ADVANTAGE

Size from M5-1"

Wide Fluid Compatibility

Strong mechanical properties

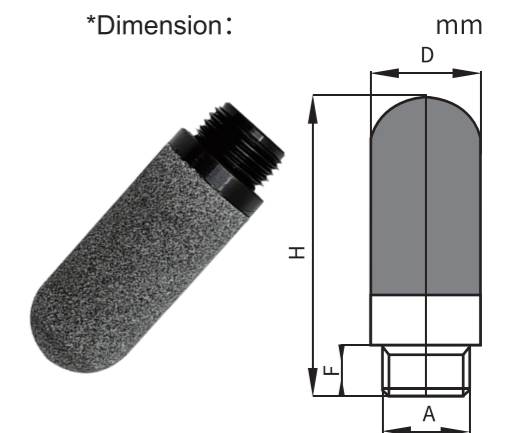
Standard & Bayonet

All materials are silicone free

#### \*U-SHAPE SERIES MUFFLER SELECTION:

Dimensions				
A	F	H	D	Packing Qty
M5	4	23	6.5	10
1/8	6	34	12.5	10
1/4	7	42.5	15.5	10
3/8	11.5	67.5	18.5	10
1/2	11	78	23.5	10
3/4	15.5	130	38.5	5
1"	19.5	160	49	5

\*Dimension:





## POROUS PE SINTERED SILENCER, MUFFLER

### PRODUCT DESCRIPTION


The plastic shell muffler, built-in muffler, and one-piece muffler are sintered with ultra-high molecular weight polyethylene, which can quickly attenuate the high-speed airflow discharged from the equipment, achieve the effect of suppressing noise, and maintain good air permeability at the same time. Used in solenoid valves, vacuum generators, air compressors and other pneumatic equipment.

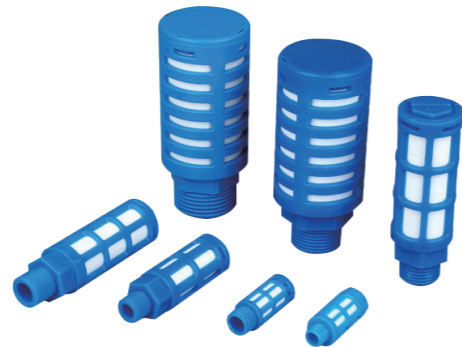
### MAIN ADVANTAGE

The main forms of vent exhaust mufflers are anti-spray compound muffler and small hole muffler. And has the following advantages:

- 1.It adopts all-steel reinforced structure, which can withstand long-term discharge under high pressure without changing its shape.
- 2.The multi-layer structure can adapt to the concentrated noise reduction of high, medium and low frequencies, and can meet the requirements of high flow rate noise reduction.
- 3.The separate drainage structure of the muffler can meet the requirement that the pipe does not collect water, and at the same time, it can also absorb the vertical and horizontal thermal displacement of the exhaust pipe to ensure the hot state of the exhaust pipe.

When the user installs it according to the requirements, the total noise reduction can reach 30~42 decibels. The noise reduction effect meets the requirements of the "Industrial Enterprise Noise Hygienic Standard".

Blue Plastic Silencer	Thread Comparison Table
	1/8
	1/4
	3/8
	1/2
	3/4
	G1



#### \*Plastic Outer Case Series

Muffler Thread Comparison Table				
Model	BSP	Standard Nominal	External Thread Diameter (mm)	Internal Thread Diameter (mm)
LY-01	G1/8	DN6	9.5±0.2	8.8±0.2
LY-02	G1/4	DN8	12.5±0.3	11.5±0.3
LY-03	G3/8	DN10	16.2±0.3	15.3±0.3
LY-04	G1/2	DN15	20.3±0.3	19.5±0.3
LY-06	G3/4	DN20	25.7±0.5	24.0±0.5
LY-10	G1	DN25	32.5±0.5	30.5±0.5

**\*More specifications and styles can provide non-standard customization.**

## BATTERY EXPLOSION-PROOF DISC

### PRODUCT DESCRIPTION

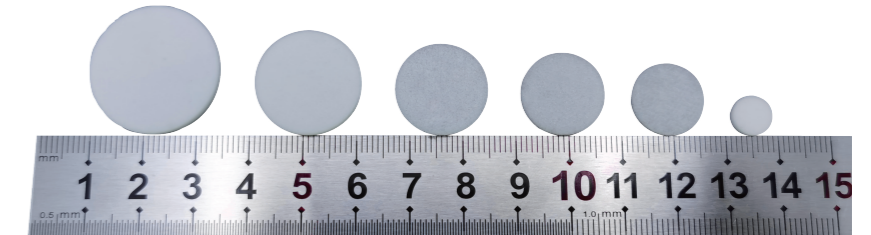
Battery explosion-proof plate is strictly in accordance with the People's Republic of China mechanical industry standard JB/T13623-2019 lead-acid battery exhaust, gas filter device technical specifications. Products with PE or PP powder sintered without scientific ratio, with high strength, uniform aperture, good air permeability and so on.

### PRODUCT PERFORMANCE

The main indicators of the battery air filter are air permeability, hydrophobicity, and acid resistance. The main function of air permeability is that no air pressure will be generated during the charging process of the battery. The air filter will release the gas through its own micropores to prevent the battery from exploding. Hydrophobicity means that water droplets drop on the surface of the air filter to form a ball, which cannot be deformed in one minute and cannot penetrate into the air filter.

### TECHNICAL PARAMETERS

Working temperature: PE/PP ≤ 80°C  
 Working pressure: 0.1Mpa-0.6Mpa  
 Filtration precision: 10µm-30µm



#### \*Existing specifications

Diameter (mm)	Thickness (mm)	Diameter (mm)	Thickness (mm)	Diameter (mm)	Thickness (mm)
10	3	18	3.1	15	3
4	3	9.8	3	12	3
13	3	8	2.5	8.8	2.2
5	3.5	14.45	4	17	3.2
12.6	3.2	25	3	20	3.2
16.2	3.5	16	2.5	16	5.5
23	1.6	13	3.4	6.1	3
8.5	3	16.1	2.65	8.5	2



## VACUUM FEEDER FILTER ELEMENT

### PRODUCT DESCRIPTION

The PE sintered vacuum feeder filter element is sintered with ultra-high molecular polyethylene raw materials. It is sintered and formed through scientific formula. It has a compact structure, light weight, it can withstand high filtration pressure, and the pore diameter of the filter element is the same inside and outside, and it is easy to blow back and remove slag, it has good corrosion resistance to acid and alkali solvents.

### PRODUCT PERFORMANCE

It is mainly used for dust interception on the feeding machine and suction machine. The precision can be selected from 0.5 to 10 $\mu$ m, and the filtering effect is good. There are stainless steel rods in the middle of the filter element of some specifications to connect the joints on both sides, making the joints at both ends more stable. Uniform pore size distribution, strong acid and alkali resistance, good mechanical properties, strong resistance to organic solvent erosion, automatic or manual recoil slag removal method can be used, solid particles can be recovered by dry slag removal, and the filter element does not need to be replaced frequently. Advantages such as low cost of use.



### SPECIFICATIONS

- Precision range: 0.5-10 $\mu$ m
- Length range: 120mm-200mm-300mm-400mm-500mm-600mm
- Common diameter:  $\phi$ 50  $\phi$ 60
- Thread connection specification: M20-M22-M26-M30
- Nuts: Single or Double
- Working temperature: PE $\leq$ 80 $^{\circ}$ C
- Working pressure: 0.1MPa-0.6MPa

#### \*Existing Specification

Name	Diameter/ID	Length(mm)	Pore size( $\mu$ m)	Remark
Vacuum Feeder Filter Element	50/35	120	0.5-10	M26 polypropylene material joint, SS304 center rod to strengthen and fix 2 end caps, single and double nuts, single and double O-ring gasket options, standard precision is 5 microns.
	50/35	200	0.5-10	
	50/35	300	0.5-10	
	50/35	400	0.5-10	
	50/35	500	0.5-10	
	50/35	600	0.5-10	
	60/35	300	0.5-10	M30 polypropylene material connector, double screw cap and included 1pcs of gasket.
	60/35	400	0.5-10	
60/35	500	0.5-10		

**\*More specifications and styles can provide non-standard customization.**

## PE SINTERED PLATE, PE SINTERED DISC

### PRODUCT DESCRIPTION

The fluidized plate and filter plate are made of ultra-high molecular weight polyethylene or Polypropylene material through high-temperature and high-pressure sintering, there are two shapes: round and square or other shapes. They can be customized according to customer requirements. Because of its fixed shape (free choice) and uniform pore size, it is often used as a gas distribution plate in powder operations. It plays a decisive role in the control of gas distribution, the transmission and fluidization of powder materials, and is used in industrial processes. It has a very wide range of applications; it is used as a supporting plate for dispersing porous solids in liquid-solid separation (ion exchange columns, chromatography columns, etc.). In addition, polymer composite materials have the characteristics of antistatic voltage, so filter plates are also widely used in electrostatic powder spraying, electrostatic generator barrels and fluidized bed devices. The surface of the filter plate is sprayed with PTFE coating, penetrates into the matrix of the polymer filter plate, and forms an ultra-fine micro porous structure with it, so that the filter plate has good chemical stability, large filtration area, high pore precision, uniform airflow distribution, and low resistance loss. Small size, superior flow air distribution performance and so on.

### PRODUCT PERFORMANCE

Uniform distribution of filter pore size, good fluidity, resistant to strong acid, alkali, salt and most organic solvents, easy to back flush, high regeneration efficiency.

The temperature resistance of PE material is 80 $^{\circ}$ C, and the temperature resistance of PA material is 120 $^{\circ}$ C. It is non-toxic, tasteless, and has no medium shedding. It has excellent mechanical properties and is not easy to damage. The raw material meets the requirements of GMP and FDA, does not use adhesives, and has a wide range of chemical compatibility.

### TECHNICAL PARAMETERS

- Working temperature: PE $\leq$ 80 $^{\circ}$ C
- Working pressure: 0.1MPa-0.6MPa
- Filtration precision: 0.2 $\mu$ m-100 $\mu$ m

#### \*Existing Specification

Round disc				Rectangular filter plate/disc			Square filter plate	
Diameter (mm)	Thickness (mm)	Diameter (mm)	Thickness (mm)	Length (mm)	Width (mm)	Thickness (mm)	Diameter (mm)	Thickness (mm)
250	3	90	5	170	85	5	280	3
240	1.7	89.5	5	157	85.5	5	150	2
143	6.35	89	1.65	108	237	1.5	142	3.2
125	3.3	-	-	-	-	-	-	-

**Note: In addition to the above molded pieces, the largest size can be customized 1800\*1200mm, and the thinnest thickness is 3-35mm. This range of sizes can be made.**





## APPLICATION OF PE SINTERED PRODUCTS IN LIFE



### PRODUCT PERFORMANCE

- Uniform pore size distribution and good fluidity.
- Resistant to strong acids, alkalis, salts and most organic solvents.
- PE fragrance tablets have the characteristics of hydrophilicity, fast liquid absorption and high liquid storage.
- Non-toxic, tasteless, no medium shedding, superior mechanical properties, not easy to damage raw material meets GMP, FDA requirements, does not use adhesives, has a wide range of chemical compatibility.

### PRODUCT DESCRIPTION

The application of PE sintered products in the field of life, the First category: fragrance absorbing tablets, aroma-therapy sticks, water-absorbing rings, and fragrance-diffusing balls; the Second category: painted pen tips; the Third category: aquarium foamers; the Fourth category: flowerpot water-absorbing sticks /Support frame: Fifth category: liquid mosquito coil; Sixth category: headset/microphone filter element; Seventh category: coffee machine filter element; Eighth category: sweeper filter element.

## APPLICATION OF PE SINTERED PRODUCTS IN LIFE

\*PE Fragrance Tablets Existing Specification:

OD(mm)	ID (mm)	Thickness (mm)	OD(mm)	ID (mm)	Thickness (mm)	OD(mm)	ID (mm)	Thickness (mm)
12	4	27	28	11	10	42	16	5
15.5	8.5	10.5	30	6.5	7	42	20	6
17	8	4.5	30	7	8	42	20	8
18.5	5	5	30	9.5	9.5	45	4	8.5
19	6.5	4	30	11	2	45	15	8
20	3	5.3	30	11	6.5	45	25	6
20	4	4	30	11	7.5	46	35	4
20	5	5	30	15	5	46	37	10
20	6	5.5	30	27	8	47	28	6.5
20	6.5	4	31	7.5	5	48	13	5
20	7	2.6	31	10	6.5	48	28	3
20	7.5	4	31	11	2.2	48	33	5
20	10	2.5	32	12	7.5	48	37	3.5
20	11	6	32	13	8	48	38	12
21	7.5	5	33	15	5	50	10.5	6
22	7.5	5	33	24	5	50	16	10
22	13.5	8	34	6	10	50	27	7.5
22.5	12.5	5	34	21	4	50	33	5
23	7.5	5.5	35	4.5	7	50	36	5
24	6.5	5	35	5	13	51	15	10
24	7	4.5	35	6	6.5	52	25	7
24	9	8	35	9	8.5	53	45	7.5
24	9.5	4	35	22	4	53.5	35	25
24	9.5	6	35	27	4	54	36	5.5
26	6	3.5	37	7	4	55	25	5
26	11	3	37	26	7	55	26	12
26	12	4	38	6	4.5	55	28	5
26.5	8	5	42	10	5	55	32	4
27	7.5	7	42	10	9	57	12.5	5
27	8	5	42	11.5	9.5	60	10	6
27.5	4	12.5	42	12	5	62	48	11
28	7	6	42	14	6	62	52	4.5
28	8.5	8	42	15.5	10	63	26	6
-	-	-	33	13.5	4	80	10	60

**\*More specifications and styles can provide non-standard customization.**



## APPLICATION OF PE SINTERED PRODUCTS IN LABORATORY (PIPETTOR FILTER ELEMENT)



### PRODUCT DESCRIPTION

Pipette filter using medical grade ultra-high molecular weight polyethylene as raw material. It is processed by a unique process and has hydrophobicity. The hydrophobic filter creates a strong barrier to aerosols and liquids, eliminating potential sample and pipette cross-contamination that could affect results.

### SPECIAL FUNCTION TIP

#### DOUBLE LAYER PIPETTE TIPS

The filter element for double-layer tips is suitable for pipetting work with special requirements for pollution protection in molecular biology and cell biology, especially for infectious and dangerous sample operations such as pathogenic microorganisms and viruses.

#### ACTIVE CARBON PIPETTE TIPS

Activated carbon tip filter element has a better effect of adsorbing active substances than ordinary tip filter element. On the surface of the UHWM-PE material particles of the ordinary filter element, the porous activated carbon with high activity is staggered. The activated carbon filter element can not only break the aerosol, but also better break the active molecule. The filter element is conductive, and the liquid level can be easily designed control.

#### SELF-SEALING TIP FILTERS

Triple Guarantee:

Personnel safety guarantee: reduce the spread of harmful samples and protect the health of operators. Sample safety guarantee: prevent cross-contamination between samples and contamination of impurities inside the pipette, ensure that the samples meet the requirements of subsequent experiments (no DNase/RNase, no PCR inhibitors, etc.), and minimize sample loss. Equipment safety guarantee: avoid liquid overshoot into the pipette cavity, maintain the precision and accuracy of pipetting, and prolong the service life of the pipette.

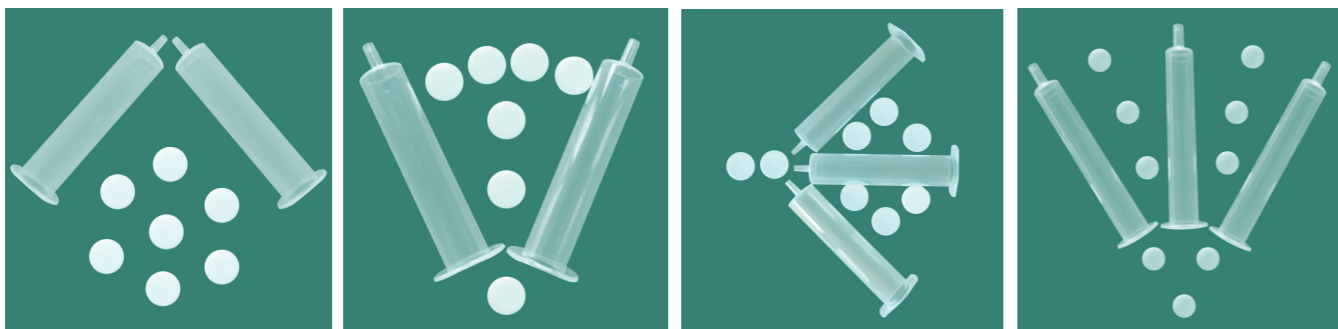
## APPLICATION OF PE SINTERED PRODUCTS IN LABORATORY (PIPETTOR FILTER ELEMENT)

\*Existing Specification

Specification					
Model	Diameter (mm)	Thickness (mm)	Pore size (μm)	Suggestion application	Package
01	1.4	1.6	10	10μL	10000PKG
02	1.4	3.5	10	10μL	10000PKG
03	1.6	3.5	10	10μL	10000PKG
04	1.8	3.5	10	10μL	10000PKG
05	2	3.5	10	20μL	10000PKG
06	2.1	3.5	10	20μL	10000PKG
07	2.2	3.5	10	20μL	10000PKG
08	2.4	3.5	10	20μL	10000PKG
09	2.5	3.5	10	20μL	10000PKG
10	2.6	3.5	10	20μL	10000PKG
11	2.8	3.5	10	20μL	10000PKG
12	3.4	3.5	10	50μL	10000PKG
13	3.5	12.5	10	5mL	10000PKG
14	3.6	3.5	10	100μL	10000PKG
15	3.8	3.5	10	100μL	10000PKG
16	4	3.5	10	200μL	10000PKG
17	4.1	3.5	10	200μL	10000PKG
18	4.3	3.5	10	200μL	10000PKG
19	4.5	3.5	10	200μL	10000PKG
20	4.7	3.5	10	200μL	10000PKG
21	4.9	3.5	10	200μL	10000PKG
22	5.1	3.5	10	200μL	10000PKG
23	6	4	10	500μL	10000PKG
24	6.1	4	10	500μL	10000PKG
25	7	4	10	1000μL	10000PKG
26	7.1	4	10	1000μL	10000PKG
27	7.2	4	10	1000μL	10000PKG
28	7.4	4	10	1000μL	10000PKG
29	4.5	3.5	10	200μL	10000PKG
30	4.7	3.5	10	200μL	10000PKG
31	4.9	3.5	10	200μL	10000PKG
32	5.1	3.5	10	200μL	10000PKG
33	7	4	10	1000μL	10000PKG
34	7.1	4	10	1000μL	10000PKG
35	7.2	4	10	1000μL	10000PKG
36	7.4	4	10	1000μL	10000PKG
37	9	4	10	5mL	10000PKG
38	14.2	4	10	10mL	10000PKG



## APPLICATION OF PE SINTERED PRODUCTS IN LABORATORY (SELECT PLATES BY APPLICATION)



### SPE/FLASH SIEVE PLATE PRODUCT OVERVIEW

The sieve plate is an important component of the solid phase extraction column/Flash Du, which plays the role of fixing the packing and controlling the flow rate. The sieve plate for Lvyuan SPE/Flash has been specially optimized, and it is world-leading in terms of flow rate control, purity, stability and solvent compatibility, and has been adopted by many well-known solid phase extraction column brands.

#### Main feature

The flow rate of the sieve plate is constant, and it will not "perforate" when multiple tubes are used in parallel. The ultra-pure raw material is selected, which is suitable for high-sensitivity analysis. The ultra-thin sieve plate with a thickness of only 1.2 mm can be used to separate different packing layers in a multi-layer SPE column. PTFE sieve plate is matched with the glass column tube, which can be used for the detection of plasticizers.

Specification							
Material	Diameter (mm)	Thickness (mm)	Suitable subject	Material	Diameter (mm)	Thickness (mm)	Suitable subject
UHMW-PE	5.8	1.6	1mlColumn pipe	UHMW-PE	23.6	2.5	30mlColumn pipe
UHMW-PE	9.0	2.5	3mlColumn pipe	UHMW-PE	26.6	2.5	60mlColumn pipe
UHMW-PE	9.1	2.5	3mlColumn pipe	UHMW-PE	49.5	2.5	300mlColumn pipe
UHMW-PE	13.0	1.2	6mlColumn pipe	UHMW-PE	6.0	1.6	1ml 96Orifice plate
UHMW-PE	13.0	1.6	6mlColumn pipe	UHMW-PE	7.0	1.6	1.5ml 96Orifice plate
UHMW-PE	13.0	2.5	6mlColumn pipe	UHMW-PE	8.3	1.6	1.5ml 96Orifice plate
UHMW-PE	15.8	2.5	12mlColumn pipe	PTFE	12.7	2.5	6ml Glass Column pipe
UHMW-PE	19.7	2.5	20mlColumn pipe	-	-	-	-

### AFFINITY CHROMATOGRAPHY (AC) COLUMN FRITS PRODUCT OVERVIEW

Affinity chromatography column sieve plate is especially suitable for affinity chromatography column with Sepharose 4B as matrix, mainly used for recombinant protein extraction, antibody purification or effective component separation.

## APPLICATION OF PE SINTERED PRODUCTS IN LABORATORY (SELECT PLATES BY APPLICATION)

Specification							
Diameter (mm)	Thickness (mm)	Pore size (μm)	DNA (mL)	Diameter (mm)	Thickness (mm)	Pore size (μm)	DNA (mL)
5.8	1.6	50	1	22.8	1.6	50	30
9	1.6	50	3	26.6	1.6	50	60
9.1	1.6	50	3	38.0	1.6	50	150
13	1.6	50	6	49.5	1.6	50	300
15.8	1.6	50	12	1-50	1.6/2.5	20/50/80	-

### OLIGONUCLEOTIDE SYNTHESIS /OLIGO SYNTHESIS FRIT PRODUCT OVERVIEW

The Lvyuan sieve plate DNA extraction can choose hydrophilic sieve plate or hydrophobic sieve plate, no DNase/RNase, no PCR inhibitor, 20μm or 50μm pore size. Hydrophobic sieve plates are mainly used for solid-liquid phase separation of bacterial lysates, which require pressurization instead of centrifugation steps; hydrophilic sieve plates are mainly used for the purification process of plasmid DNA.

Specification							
Diameter (mm)	Thickness (mm)	Pore size (μm)	DNA (mL)	Diameter (mm)	Thickness (mm)	Pore size (μm)	DNA (mL)
7	1.6	20	96well	11	1.6	20	15spin
7.2	1.2	20	2spin	19.7	1.6	50	20
7.2	1.6	20	2spin	23.6	1.6	50	30
7.4	1.2	20	2spin	24	2.5	20	50spin
7.4	1.6	20	2spin	26.6	1.6	50	60
8.3	1.6	20	96well	49.5	1.6	50	300

### SOLID PHASE SYNTHESIS PRODUCT OVERVIEW

DNA synthesis cartridges are used in single-use synthesis cartridges to immobilize expensive CPG particle bleed. The pore size of the DNA synthesis filter element needs to be optimized so that when the liquid is transported upwards, the CPG particles rise and remain in suspension, allowing the particles to mix properly.

DNA synthesis frits					
Diameter (mm)	Thickness (mm)	Pore size (μm)	Diameter (mm)	Thickness (mm)	Pore size (μm)
2.5	2.5	20	4.1	2.5	20
2.5	2.5	50	4.1	2.5	50
2.5	2.5	80	4.1	2.5	80



## APPLICATION OF PE SINTERED PRODUCTS IN LABORATORY (SELECT PLATES BY APPLICATION)

### SOLID PHASE SYNTHESIS PRODUCT OVERVIEW

Solid phase synthesis (Solid Phase Synthesis) usually refers to the reaction between active functional groups attached to a solid support (such as resin, etc.) and reagents dissolved in an organic solvent.

In solid-phase peptide synthesis, the elongation of the peptide chain is carried out on an insoluble polystyrene resin carrier. The C-terminal of the synthesized polypeptide is first reacted with chloromethyl polystyrene resin (benzyl chloride resin) to form a benzyl ester, and then the amino acids that have been protected at the amino terminal are added one by one according to the order of the primary structure of the peptide chain, so that Peptide chain elongation.

The solid-phase method is simpler than the liquid-phase method, the time is shortened, and it can be automated. It has been applied in our country's pharmaceutical industry.

Product Optional list							
Material	Diameter (mm)	Thickness (mm)	Apply for	Material	Diameter (mm)	Thickness (mm)	Apply for
UHMW-PE	2.4	2.5	Lower sieve plate	UHMW-PE	9.0	2.5	Upper sieve plate
UHMW-PE	2.5	2.5	Lower sieve plate	UHMW-PE	9.0	2.5	Lower sieve plate
UHMW-PE	2.7	3.0	Lower sieve plate	UHMW-PE	13.0	2.5	Upper sieve plate
UHMW-PE	3.9	3.0	Upper sieve plate	UHMW-PE	13.0	2.5	Lower sieve plate
UHMW-PE	4.1	2.5	Upper sieve plate	-	-	-	-

### ION CHROMATOGRAPHY PRODUCT OVERVIEW

Ion chromatography (Ion Chromatography) is one of high performance liquid chromatography (HPLC), which is a liquid chromatographic method for analyzing of anions and cations.

Compared with photometric and atomic absorption methods, the main advantage of IC is that multiple components of the sample can be detected simultaneously. It takes only a short time to obtain all the information about the anions and cations and the composition of the sample.

The sieve plate of the ion chromatography pretreatment column is similar to that of the SPE column.

### (HBA1C) FILTERS PRODUCT OVERVIEW

The filter for glycated hemoglobin (HbA1c) assay is made of PEEK and stainless steel filter with the inlay process, PEEK ensures the precision of filtration and stainless steel filter ensures the precision of filtration.

After a lot of tests, our filters can completely replace the imported products and can be matched with the mainstream HbA1c analyzers.

## APPLICATION OF PE SINTERED PRODUCTS IN LABORATORY (SELECT PLATES ACCORDING TO TECHNICAL PERFORMANCE)



### HYDROPHOBIC PLATE PRODUCT OVERVIEW

Hydrophobic screen panels are the conventional type of screen panels. The hydrophobicity of the screen panels is an inherent characteristic of UHMW-PE material.

Biological thickness: 1.2mm(1/20"); 1.6mm(1/16"); 2.5mm(1/10"); 3.2mm(1/8") or be customized

Biopore size: 5μm; 10μm; 20μm; 50μm; 80μm or be customized.

Product Optional list							
Features	Diameter (mm)	Thickness (mm)	Pore size (μm)	Features	Diameter (mm)	Thickness (mm)	Pore size (μm)
Hydrophobic	1.4	1.2	20	Hydrophobic	6.6	2.5	20
Hydrophobic	2.1	1.6	20	Hydrophobic	6.6	3.2	10
Hydrophobic	2.5	1.6	20	Hydrophobic	7.0	1.6	2
Hydrophobic	2.5	2.5	20	Hydrophobic	7.0	1.6	20
Hydrophobic	2.5	2.5	50	Hydrophobic	7.1	1.6	2
Hydrophobic	2.5	4.0	50	Hydrophobic	7.2	1.6	2
Hydrophobic	4.1	1.6	20	Hydrophobic	7.2	1.6	20
Hydrophobic	4.1	2.5	20	Hydrophobic	7.4	1.6	5
Hydrophobic	4.1	3.2	80	Hydrophobic	7.4	1.6	20
Hydrophobic	4.6	1.6	20	Hydrophobic	8.0	1.6	50
Hydrophobic	4.7	1.6	20	Hydrophobic	8.3	1.6	20
Hydrophobic	4.8	3.2	5	Hydrophobic	8.6	1.6	20
Hydrophobic	4.9	1.6	20	Hydrophobic	8.6	1.6	50
Hydrophobic	5.8	1.6	20	Hydrophobic	8.8	1.6	50
Hydrophobic	5.8	1.6	50	Hydrophobic	9.0	1.6	5
Hydrophobic	6.0	1.6	20	Hydrophobic	9.0	1.6	10
Hydrophobic	6.4	3.2	10	Hydrophobic	9.0	1.6	20
Hydrophobic	6.6	1.2	20	Hydrophobic	9.0	1.6	50
Hydrophobic	6.6	1.6	2	Hydrophobic	9.0	1.6	80
Hydrophobic	6.6	1.6	20	Hydrophobic	9.0	2.5	20
Hydrophobic	6.6	1.6	50	Hydrophobic	9.1	1.6	20

## APPLICATION OF PE SINTERED PRODUCTS IN LABORATORY (SELECT PLATES ACCORDING TO TECHNICAL PERFORMANCE)

Product Optional list							
Features	Diameter (mm)	Thickness (mm)	Pore size (μm)	Features	Diameter (mm)	Thickness (mm)	Pore size (μm)
Hydrophobic	9.1	1.6	50	Hydrophobic	15.9	2.5	20
Hydrophobic	9.1	2.5	20	Hydrophobic	16.2	2.5	20
Hydrophobic	9.3	1.6	20	Hydrophobic	19.3	2.5	20
Hydrophobic	9.3	2.5	20	Hydrophobic	19.6	3.2	10
Hydrophobic	10.1	1.6	20	Hydrophobic	19.6	3.5	10
Hydrophobic	10.5	1.6	20	Hydrophobic	19.7	1.6	20
Hydrophobic	11.0	1.6	20	Hydrophobic	19.7	2.5	20
Hydrophobic	11.0	2.5	20	Hydrophobic	22.1	2.5	20
Hydrophobic	12.2	1.6	20	Hydrophobic	22.8	1.6	50
Hydrophobic	12.4	2.5	20	Hydrophobic	22.8	2.5	20
Hydrophobic	12.5	1.6	50	Hydrophobic	23.6	1.6	20
Hydrophobic	12.5	2.5	20	Hydrophobic	23.6	2.5	20
Hydrophobic	12.7	1.6	50	Hydrophobic	24.0	2.5	20
Hydrophobic	12.7	2.5	20	Hydrophobic	26.4	2.5	20
Hydrophobic	13.0	1.6	10	Hydrophobic	27.3	3.2	5
Hydrophobic	13.0	1.6	20	Hydrophobic	29.1	1.6	20
Hydrophobic	13.0	1.6	50	Hydrophobic	29.2	1.6	20
Hydrophobic	13.0	2.5	5	Hydrophobic	29.2	1.6	50
Hydrophobic	13.0	2.5	10	Hydrophobic	29.3	1.6	20
Hydrophobic	13.0	2.5	20	Hydrophobic	29.3	1.6	50
Hydrophobic	13.0	2.5	50	Hydrophobic	29.3	1.6	80
Hydrophobic	13.2	1.6	20	Hydrophobic	29.6	2.5	20
Hydrophobic	14.2	1.6	20	Hydrophobic	38.0	2.5	20
Hydrophobic	15.1	1.6	50	Hydrophobic	49.5	1.6	50
Hydrophobic	15.1	2.5	20	Hydrophobic	51.0	2.5	20

## FUNCTIONAL PLATE PRODUCT OVERVIEW

The pore size of the DNA synthesis cartridge needs to be optimized so that the CPG particles rise and remain in suspension as the liquid is transported upwards, allowing the particles to mix properly.

Product Optional list							
Features	Diameter (mm)	Thickness (mm)	Pore size (μm)	Features	Diameter (mm)	Thickness (mm)	Pore size (μm)
DNA synthesis frits	2.5	2.5	20	DNA synthesis frits	4.1	2.5	20
DNA synthesis frits	2.5	2.5	50	DNA synthesis frits	4.1	2.5	50
DNA synthesis frits	2.5	2.5	80	DNA synthesis frits	4.1	2.5	80

## APPLICATION OF PE SINTERED PRODUCTS IN LABORATORY (SELECT PLATES ACCORDING TO TECHNICAL PERFORMANCE)

### HYDROPHILIC PLATE PRODUCT OVERVIEW

Lvyuan hydrophilic screen plate is hydrophobic ultra-high molecular weight polyethylene (UHMW-PE) material, sintered by hydrophilic agent surface modification.

Thickness: 1.6mm(1/16");2.5mm(1/10") or be customized.

Pore size: 50μm, or be customized.

Product Optional list							
Features	Diameter (mm)	Thickness (mm)	Pore size (μm)	Features	Diameter (mm)	Thickness (mm)	Pore size (μm)
hydrophilic	1.4	1.2	20	hydrophilic	9.3	1.6	50
hydrophilic	1.6	1.6	50	hydrophilic	12.5	1.6	50
hydrophilic	2.5	1.6	50	hydrophilic	12.7	1.6	50
hydrophilic	4.0	1.6	50	hydrophilic	13.0	1.6	50
hydrophilic	4.8	3.2	5	hydrophilic	15.1	1.6	50
hydrophilic	5.8	1.6	50	hydrophilic	19.7	1.6	50
hydrophilic	6.6	1.6	2	hydrophilic	22.8	1.6	50
hydrophilic	6.6	1.6	50	hydrophilic	23.6	1.6	50
hydrophilic	7.2	1.6	50	hydrophilic	27.3	2.5	50
hydrophilic	7.4	1.6	20	hydrophilic	29.2	1.6	50
hydrophilic	7.4	1.6	50	hydrophilic	29.6	2.5	50
hydrophilic	8.0	1.6	50	hydrophilic	49.5	1.6	50
hydrophilic	9.0	1.6	50	hydrophilic	51.0	1.6	50
hydrophilic	9.1	1.6	50	-	-	-	-

### POLYPROPYLENE FIBER FILTER PRODUCT OVERVIEW

Polypropylene filters are made from polypropylene fibers that are resistant to acids, bases and most organic solvents and do not adsorb most biomolecules. Polypropylene fiber filter sheets are often used for special biological applications.

Thickness 1.0mm; pore size 5μm

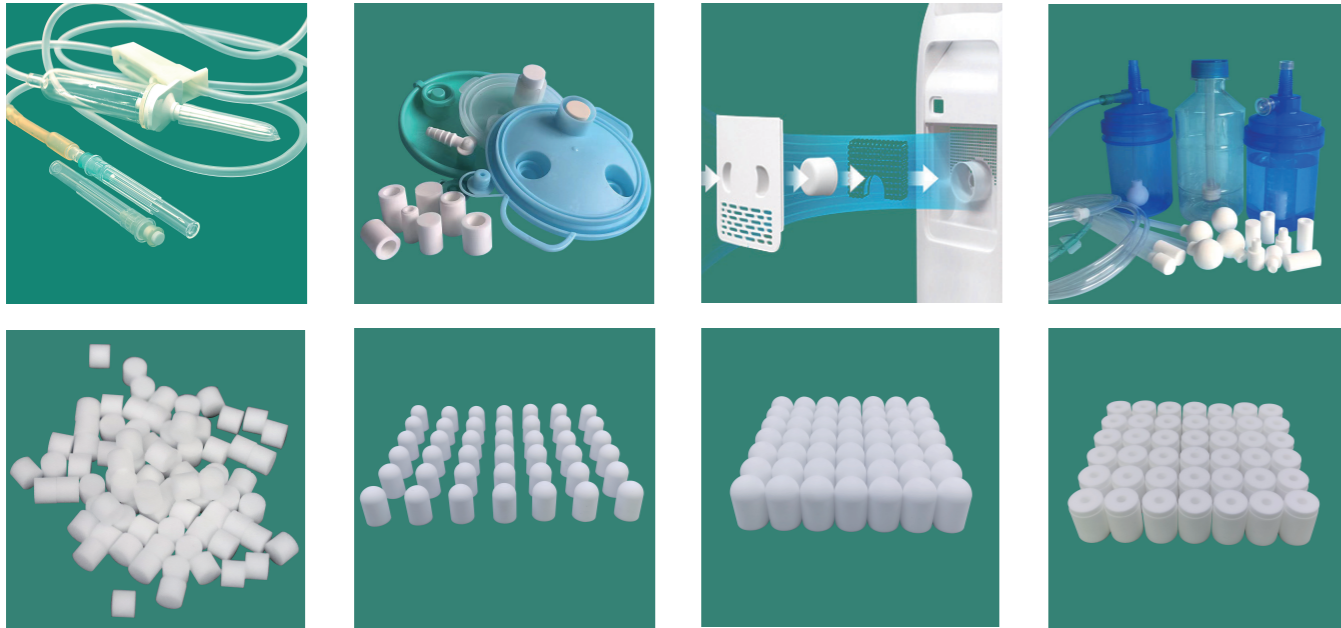
Diameter size can be customized

Lower cost than UHMWPE filter sheets in some applications

Product Optional list							
Features	Diameter (mm)	Thickness (mm)	Pore size (μm)	Features	Diameter (mm)	Thickness (mm)	Pore size (μm)
Polypropylene	6.0	-	-	Polypropylene	7.45	-	-
Polypropylene	7.2	-	-	Polypropylene	16.2	1.0	5
Polypropylene	7.8	-	-	Polypropylene	17.10	1.0	5
Polypropylene	8.0	-	-	Polypropylene	19.6	1.0	5
Polypropylene	9.0	-	-	stainless steel	4.5	1.0	2
Polypropylene	9.1	-	-	stainless steel	4.6	1.0	2
Polypropylene	12.4	-	-	-	-	-	-



## APPLICATION OF PE SINTERED PRODUCTS IN MEDICAL



### OXYGEN FILTER

It is mainly used in medical and family oxygen therapy and health care. It can be used as the filtration and purification of the exhaust of the air inlet of the oxygen generator, which greatly reduces the noise of the exhaust and meets the requirements of the flow rate and flow rate in different oxygen environments, thus maintaining the stability of the oxygen concentration and extending the service life of the oxygen generator and protecting the safety of the oxygen users.

#### Main features

Meet the flow and flow rate requirements of medical and home oxygen generators when passing through the muffler with outstanding sound and noise reduction effect

The raw material is made of medical grade ultra-high molecular weight polyethylene.

Size and structure can be adjusted and customized according to the customer's requirements.

### HUMIDIFICATION BOTTLE/MOISTURE BOTTLE/OXYGEN BOTTLE FILTER

Lvyuan humidification bottles filters are widely used in medical humidification bottles, and oxygen bottles.

The pure raw material selection and balanced filtration precision of the filter cartridge can make the oxygen divided into tiny bubbles through the PE cartridge, increasing the contact time and area, effectively ensuring that the oxygen can reach the maximum area of contact

regardless of the flow rate, thus realizing uniform, sterile and efficient humidifying, and at the same time reducing noise, which makes the patients more comfortable and at ease.

## APPLICATION OF PE SINTERED PRODUCTS IN MEDICAL

### ARTERIAL BLOOD COLLECTION DEVICE SELF-SEALING FILTER

In the arterial blood collection process, the filter source stop spill cartridge can be used with the arterial blood collection needle to simplify the blood collection process, quickly isolate the air and prevent the exchange of gas between blood and air.

### ESR TEST TUBE SELF-SEALING FILTER

Blood sedimentation (ESR) is a routine clinical testing. In clinical practice, disposable hematocrit tubes are used to measure the distance of red blood cell decline over a period of time as a basis for diagnosis of various diseases. The Lvyuan cartridge makes the ESR test more convenient.

The principle of hematocrit test The filter element is placed at the "0" scale of the hematocrit tube. When the cartridge is pressed down, the cartridge is free of water and air, allowing the blood to move up. Once it touches the blood, the cartridge will produce a self-sealing effect and the blood will no longer move up. The cartridge is left in place and the degree of blood cell drop is observed.

### INFUSION SET SELF-SEALING FILTER

Intravenous infusion is a widely used method of drug delivery in clinical practice, and it is necessary to ensure that no air is retained in the wall of the infusion set. Conventional infusion set venting is tedious and time-consuming, and the drug often spills out and causes pollution on the ground. Exposure to air (eg: antibiotics) may cause problems such as increased bacterial resistance.

The Lvyuan Self-sealing filter can greatly simplify the venting operation by cooperating with the infuser, and the one-time venting success rate is close to 100%, and can effectively prevent the drug. The success rate of one-time venting is close to 100%, and it can effectively prevent the spilling of medicine.

### CATHETER SELF-SEALING FILTER

The Lvyuan Self-sealing filter works with the indwelling needle and the indwelling needle can protect the patient's blood vessels, reduce the pain of vascular puncture, and improve the efficiency of the medical staff.

### DISPOSABLE DRAINAGE BAG SELF-SEALING FILTER

Disposable Drainage Bag Stop Spill Valves are widely used in hospitals for waste fluid handling systems.

Lvyuan disposable drainage bag stop core allows air to escape freely through the waste fluid collection bag. Once it comes into contact with the liquid, the core will produce a self-sealing effect, effectively stopping the liquid from spilling out and preventing the liquid from contaminating the instrument and the environment.

## APPLICATION OF PTFE SINTERED PRODUCTS



### PRODUCT DESCRIPTION

The surface of the cartridge is smooth, with high strength and good initiality, and the phenomenon of powder falling off will not occur, and it is extremely stable to all chemical substances. The material cartridge has a high porosity of more than 50% and uniform pore size distribution. The cartridge has the ability to resist strong acid, strong alkali, chemical corrosion, "ozone" and various solvents, and can resist high temperature up to 200 °C. It is widely used in the filtration of high-temperature gases and chemical liquids and other media.

### SPECIFICATION

Common specifications

Diameter: 10,20,25,30,35,40,45,50,60mm

Length: 5", 10", 20", 30", 40"

Filtration precision: 0.2μm-50μm ,Customization is welcomed

### PARAMETERS

Material: ultra-high polymer polytetrafluoroethylene

Application: for strong acid, strong alkali, high temperature, chemical corrosion

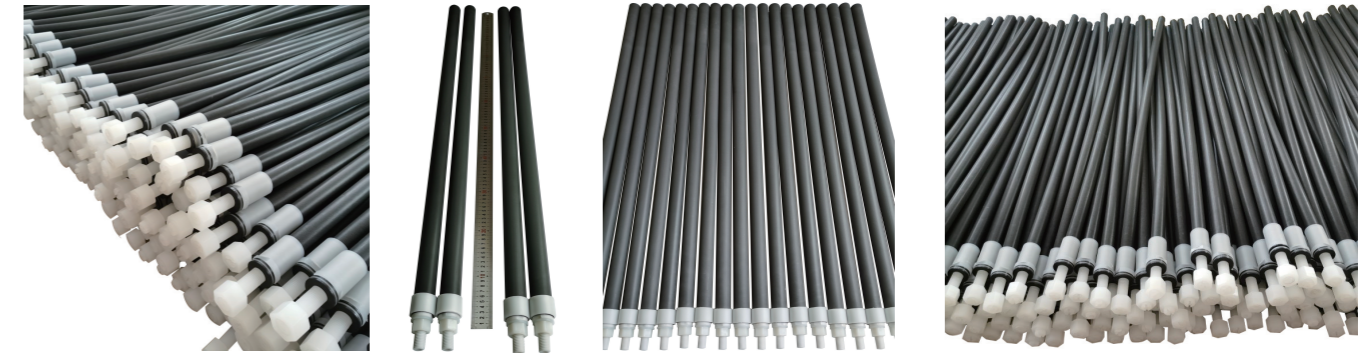
Scope of application: air, water, liquid, oil

General working pressure difference:5bar

Filtration precision: 1-100μm

Working temperature:≤200 °C

## APPLICATION OF PA SINTERED PRODUCTS



### PRODUCT DESCRIPTION

Sintered filter cartridge is made of high quality polymer polyethylene as the main raw material and carbon fiber sintered by scientific formula. It is compact, sturdy, light and can withstand high pressure, non-toxic and tasteless, and has good corrosion resistance to acid and alkali.

### SPECIFICATION

Diameter: 38mm, 48mm

Length: 1m, 1.5m, 2m

Filtration precision:0.5μm-10μm

Connector material: plastic and stainless steel

Connectpr sizes : M20,M22,M24,M26,M30.

### PARAMETERS

Resistant to the corrosion of strong acid and alkali and the dissolution of organic chemicals

Excellent strength and wear resistance to ensure its service life

Smooth surface, not easy to adhere

Back wash and Back blowing is easy, it can be reusable

Good toughness, the cartridge is not easy to break

No degranulation phenomenon, strong pressure resistance

### PA MICROPOROUS SINTERED FILTER ELEMENT/FILTER ROD REGENERATION METHOD

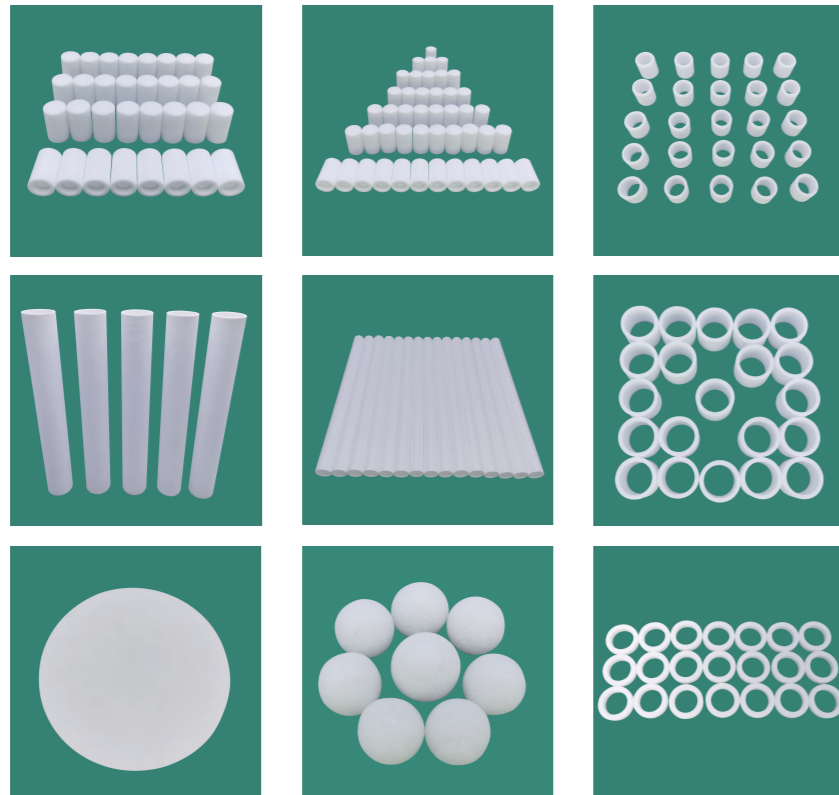
Physical method: Since the filter rod has good mechanical properties and will not rupture, 0.6Mpa compressed air can be used for back-blowing to remove slag, and the back-blowing also plays the role of capillary regeneration, but the particles accumulated in the filter layer after a long time of use will affect the filtration speed, and chemical regeneration must be carried out at this time.

Chemical method: put the blocked PA filter rod in the concentration of 5%-10% acid or broken liquid diffusion bubble, so that the micro material blocked in the filter layer neutralization, and then backwash with water or air backwash clean, the filter rod filtration effect can be restored.

**\*More specifications and styles can provide non-standard customization.**



## APPLICATION OF PP SINTERED PRODUCTS



### PRODUCT DESCRIPTION

High-quality polypropylene is used as the main raw material and sintered by scientific formula, which is compact, strong, light and can withstand high filtration pressure, and the aperture of the cartridge is the same inside and outside, so it is easy to blow back and de-flow, and has good corrosion resistance to acid and broken solvent. Polypropylene (PP) sintered products include PP sintered cartridge, PP sintered sheet and sieve plate, PP sintered filter ball, PP sintered shaped parts, etc.

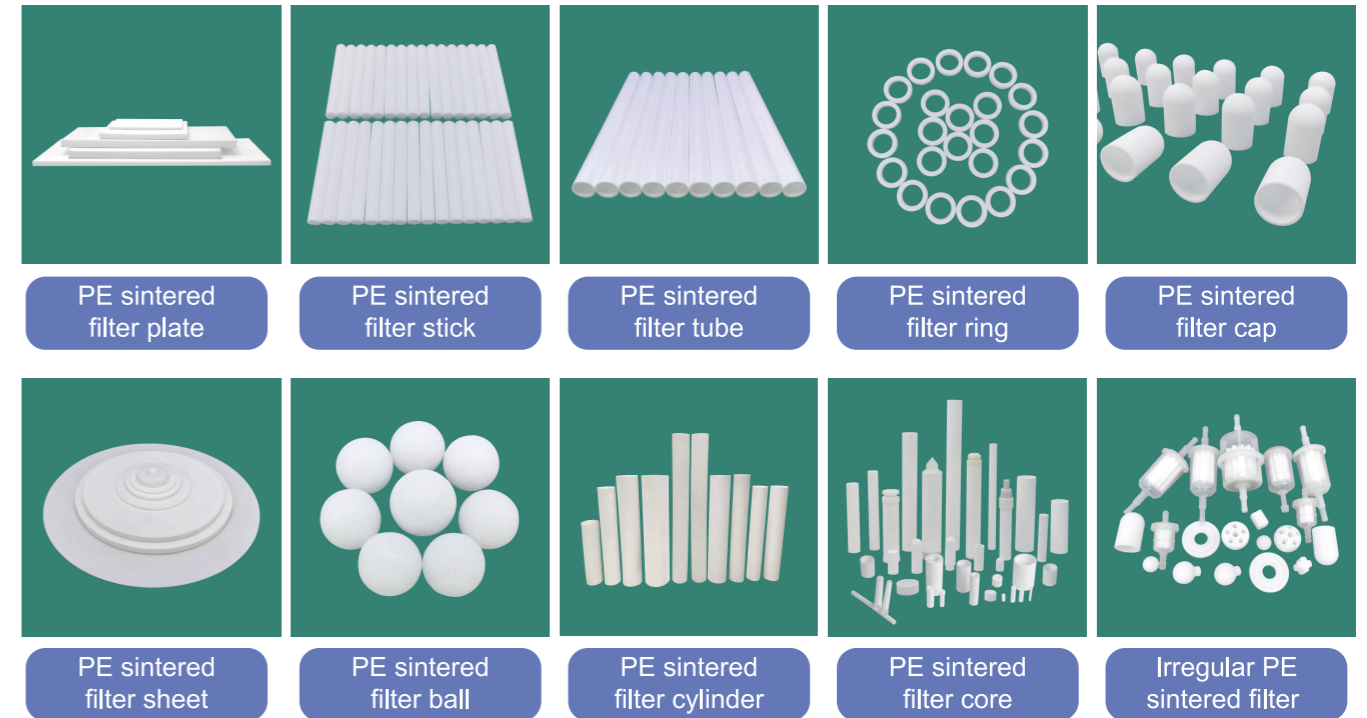
### TECHNICAL PARAMETERS

PP sintered products with uniform pore size distribution, good circulation, large flux  
Resistant to strong acid and alkali, salt and most organic solvents  
Easy to blow back, high regeneration efficiency

PP material product temperature resistance 80 °C, filtration precision 1µm a 200µm non-toxic tasteless, no media off, superior mechanical properties, not easy to damage the raw material in line with GMP, FDA requirements, no adhesive, with a wide range of chemical compatibility

**\*More specifications and styles can provide non-standard customization.**

## CUSTOMIZED SINTERED PRODUCTS



### CUSTOMIZATION OVERVIEW

Non-standard custom-made sintered filter elements, filter tubes, filter cartridges, filter rods, filter sheets, filter plates, filter caps, filter balls and various irregularly shaped filter tools in various materials such as PE, PP, PA, PTFE, etc. and various applications.

We can accept non-standard customization according to material, shape, size and color.

1. Materials include: PE, PP, PA, PTFE and other materials
2. Shape: rectangular, square, round, etc.
3. Size: specifications can be customized according to demand
4. Color: can be customized according to demand
5. Connector size or material can be customized

