



KINTEK SOLUTION

Battery Material Catalog

Contact us for more catalogs of [Sample Preparation](#), [Thermal Equipment](#), [Lab Consumables & Materials](#), [Bio-Chem Equipment](#), etc.

KINTEK SOLUTION

COMPANY PROFILE

>>> About Us

Company Profile

Kintek Solution Ltd is one technology orientated organization, team members are devoted to probing the most efficient and reliable technology and innovations in the scientific researching equipment, fields like biochemical reacting, new materials researching, heat treatment, vacuum creating, refrigerating, as well as pharmaceutical and petroleum extracting equipment.

Products & Services

Kintek Solution Ltd is headquartered in Zhengzhou, the capital city of Henan Province, China, and its core business includes the manufacture, distribution and sale of all types of scientific research equipment and laboratory consumables. The wide range of products and services covers the following main areas:

- **Sample Preparation Equipment:** We provide high-performance sample preparation equipment such as tablet presses, ball mills, vibrating sieves and tablet punching machines, which are capable of meeting a wide range of sample preparation needs and ensuring high quality experimental data and research results.
- **Thermal Equipment:** Our thermal equipment includes tube furnaces, sintering furnaces, vacuum furnaces, atmosphere furnaces, graphite furnaces, dental furnaces, rotary furnaces, and high-temperature furnaces (e.g., MPCVD, CVD, PECVD, electric rotary kilns). These facilities excel in high-temperature processing and materials synthesis, meeting a wide range of needs from basic research to industrial production.
- **Biochemical equipment:** We offer a wide range of biochemical laboratory equipment, including rotary evaporators, vacuum pumps, cold trap chillers,

heating circulators, reactors, short-range distillation equipment, sterilization equipment, and homogenizers. These equipments are widely used in the fields of chemical reaction, biological processing and pharmaceutical manufacturing.

- **Laboratory Consumables:** We supply a wide range of laboratory consumables such as fine ceramic products, electrochemical consumables, PTFE material products, high purity materials, battery materials, chemical vapor deposition materials, optical materials, thin film deposition components and glass materials. These consumables provide the necessary support for laboratories to ensure the smooth running of experimental processes.

Technological Advantages

Kintek Solution Ltd has significant technological strengths in the field of scientific research equipment and technical solutions, which enable us to stand out in a competitive marketplace and support our customers with cutting-edge technology. The following are our key technological strengths:

Advanced R&D capabilities

- **Technological Innovation:** Our R&D team is committed to exploring and developing the latest technologies to keep our equipment at the forefront of the industry through continuous technological innovation.
- **Customized solutions:** Based on the specific needs of our customers, we are able to develop and provide customized equipment to meet specific research requirements and application scenarios.
- **Cooperative R&D:** We cooperate with leading research institutes and higher education institutions around the world to carry out R&D projects on cutting-edge technologies to ensure that our technologies are always at the forefront of the industry.

High-performance equipment

- **Precision design:** Our equipment adopts advanced design concepts to ensure high precision, reliability and performance to meet the stringent requirements of scientific research and industrial applications.
- **Advanced materials:** We use high-quality materials and components to improve the durability and stability of our equipment, extend its service life and reduce maintenance costs.

Strict quality control

- Standardized production: All equipment is manufactured in accordance with international quality standards, and each production step is strictly controlled to ensure product consistency and reliability.
- Comprehensive testing: Comprehensive performance testing and quality inspection are carried out before the equipment is delivered to ensure that it meets the customer's technical specifications and operational requirements.

Comprehensive technical support

- Technical Service: Provide comprehensive technical support and after-sales service, including equipment installation, commissioning, training and maintenance, to ensure that customers can use our products efficiently.
- Rapid Response: We have established a rapid response mechanism, which can promptly solve the problems encountered by customers in the process of use and reduce equipment downtime.

Innovative technology integration

- System Integration: We integrate advanced control systems and automation technologies into our equipment to improve operational efficiency and data accuracy, and streamline operational processes.

Through these technological advantages, Kintek Solution Ltd is able to continue to provide our customers with innovative, efficient and reliable scientific research equipment and solutions to promote the continuous progress of scientific research and industrial applications.

Market position and customers

Kintek Solution Ltd is positioned in the market as a leading global provider of high-tech research equipment and solutions, specializing in biochemical reactions, new materials research, heat treatment, vacuum manufacturing, refrigeration, as well as pharmaceuticals and oil extraction. We are committed to brand leadership in research equipment by providing innovative technology and high quality equipment to meet the needs of research organizations and industrial companies in complex research and production processes.

Core Market Positioning:

- **Specialization:** We focus on high technology and scientific research, providing advanced equipment and solutions for specialized research institutes, laboratories and industrial applications.
- **High-end customers:** Our main customers include world-renowned universities, research institutes and various industrial enterprises, which usually have high requirements for equipment performance and technology.
- **Technological Innovation:** We are committed to technological innovation and customized solutions to ensure that our customers receive cutting-edge technical support to meet the ever-changing needs and challenges in the market.

Market Customer Groups:

- **Research Institutes and Universities:** including the world's leading research institutes and institutions of higher learning, who require high-performance research equipment and technical support for basic research, applied research and technology development.
- **Industrial companies:** covering a wide range of industries such as pharmaceuticals, oil extraction, new materials manufacturing and electronic materials production, these companies rely on reliable equipment and solutions to ensure product quality and productivity during production.
- **Laboratories and test centers:** organizations that provide laboratory services and quality testing, requiring accurate laboratory equipment and instruments for sample analysis and testing.
- **Technology Development Companies:** Companies that specialize in the development and application of new technologies and have a high demand for innovative equipment and technical solutions to support their R&D projects and technology validation.

Through clear market positioning and customer groups, we are committed to promoting scientific and technological progress, supporting the innovation and development of our global customers, and continuing to provide high-quality products and services to the market.

Team Introduction

The team at Kintek Solution Ltd is at the heart of the company's success. In order to realize our vision and maintain our leadership position in the field of high-tech research equipment, we are committed to building an exceptional team with the following attributes:

1. Professionalism

- **Technical Expertise:** Our team consists of technical experts and engineers in the field with deep expertise and technical backgrounds to meet complex technical challenges and innovation needs.
- **Industry experience:** We bring together professionals with extensive experience in the fields of research equipment, material science and engineering technology to ensure a precise grasp of market needs and technological trends.

2. Innovative Spirit

- **R&D-driven:** The team encourages innovative thinking and technological exploration, supports employees to participate in R&D projects on cutting-edge technologies, and continuously pushes forward the technological advancement of products and solutions.
- **Flexible Adaptation:** In the face of changing market environment, we have the ability to adapt quickly and flexibly to meet the changing needs of our customers.

3. Collaboration and Communication

- **Cross-sectoral collaboration:** The team maintains close collaboration between various departments, including R&D, production, sales and customer service, to ensure the smooth progress of projects and timely response to customer needs.
- **Efficient Communication:** Emphasize internal communication and information sharing, through efficient communication mechanisms and tools to ensure that all team members are consistent with the project goals and progress.

4. Customer Orientation

- **Customer Service:** Team members are customer-focused and committed to providing quality service and support to ensure that our customers have the best experience in using our products and solutions.

- Customized solutions: the ability to deeply understand the specific needs of customers and provide customized solutions to meet the special requirements of different customers.

5. Professional Training and Development

- Continuous Learning: We provide continuous training and learning opportunities for our team members to ensure that they are always up-to-date with the latest technology and industry knowledge.
- Career Development: We value the career development and growth of our employees, provide clear career paths and promotion opportunities, and motivate our employees to realize their personal goals and career aspirations within the company.

6. Corporate Culture

- Integrity and Responsibility: The team upholds integrity and responsibility, treats work and customers with honesty and fairness, and builds trust and long-term cooperative relationships.
- Unity and Collaboration: Focusing on the spirit of teamwork, the team emphasizes mutual support and joint efforts to achieve the company's goals and promote the overall success of the team.

By building such a highly qualified, innovation-driven and customer-oriented team, we ensure that Kintek Solution Ltd continues to lead in the field of scientific research equipment and provide excellent products and services to our customers worldwide.

At KINTEK, technology fuels our corporate spirit. This dynamic energy awaits you upon joining our team. Expect a distinctive cultural environment where our global business focus opens doors to diverse customs and traditions worldwide. Here, challenging roles promise to propel your career to new heights.

Our exceptional corporate culture sparks innovation, fosters care, and drives continuous progress among individuals and teams. Our team embodies youthfulness, positivity, enthusiasm, and a bold attitude toward challenges. Passionate about our business, our employees ardently contribute to the company's growth.

We seek individuals brave enough to embrace challenges, harbor grand ambitions, and thirst for knowledge. If you're driven by dreams and passion, and aspire to start your

entrepreneurial journey, KINTEK is the platform to actualize your career plans. We don't just offer opportunities; we pave the way for your future.

Join us at KINTEK, where innovation meets opportunity. Let's create a future that's as promising as your aspirations.

Future Plans

Kintek Solution Ltd's future plans are aimed at further strengthening our leadership position in the research equipment sector and driving the company forward in terms of technological innovation, market expansion and customer service. The following are our key future directions:

1. Technology Innovation and R&D

- Cutting-edge technology development: Continue to invest resources in the research and development of cutting-edge technologies, such as artificial intelligence, the Internet of Things and nanotechnology, in order to promote equipment intelligence and automation.
- New Product Lines: Expand existing product lines and develop equipment to meet emerging market needs, especially in the areas of biochemistry, biomedicine and high-performance materials.
- Cooperative R&D: Strengthen cooperation with international research institutes and institutions of higher learning to carry out joint R&D projects to ensure that the technology remains at the global leading level.

2. Market Expansion

- Global Market Expansion: Further expand the global market, especially in emerging markets and developing regions, establish more sales and service networks, and enhance the brand's international influence.
- Industry application: Explore and expand the application fields in other industries, such as new energy, environmental protection technology and intelligent manufacturing, to open up new business growth points.

3. Customer Service Enhancement

- Enhancement of customer support: Establish a more complete customer support system, provide 24/7 technical support and maintenance services, and ensure

the efficient experience of customers in the use of equipment.

- Customized services: Provide more customized services and solutions according to customers' individual needs to enhance customer satisfaction and loyalty.

4. Sustainable Development

- Environmentally friendly technology: Develop and adopt environmentally friendly materials and processes to reduce the environmental impact during the production and use of equipment and promote sustainable development.
- Energy saving and consumption reduction: Optimize the energy efficiency of equipment, reduce energy consumption, improve resource utilization efficiency, and support the development of green technology.

5. Internal optimization

- Intelligent management: Implement intelligent management systems and data analysis tools to improve productivity and management and reduce operating costs.
- Employee Training: Enhance employee training and skills upgrading to build a high-quality team to meet changing market demands and technological challenges.

6. Innovation ecosystem

- Establishment of innovation platform: Create innovation platforms and laboratories to support employees and partners in technological innovation and product development.
- Industry Chain Cooperation: Deepen cooperation with the upstream and downstream of the industry chain, integrate resources, and promote the development and implementation of industry technical standards and market norms.

Through these future plans, Kintek Solution Ltd will continue to lead the forefront of science and technology, provide customers with more advanced and reliable products and services, and at the same time, promote the sustainable development of the enterprise and the progress of the industry.



Platinum Sheet Platinum Electrode

Item Number: BC-09



Introduction

Platinum sheet is composed of platinum, which is also one of the refractory metals. It is soft and can be forged, rolled and drawn into rod, wire, plate, tube and wire.

[Learn More](#)

0.1*5*5mm	0.5*10*10mm	0.3*10*20mm	0.5*10*30mm	0.3*20*20mm
0.2*5*5mm	0.1*10*15mm	0.5*10*20mm	0.1*15*15mm	0.5*20*20mm
0.1*10*10mm	0.2*10*15mm	0.1*10*30mm	0.2*15*15mm	0.1*30*30mm
0.2*10*10mm	0.1*10*20mm	0.2*10*30mm	0.1*20*20mm	0.2*30*30mm
0.3*10*10mm	0.2*10*20mm	0.3*10*30mm	0.2*20*20mm	

Button Battery Storage Box

Item Number: BC-10



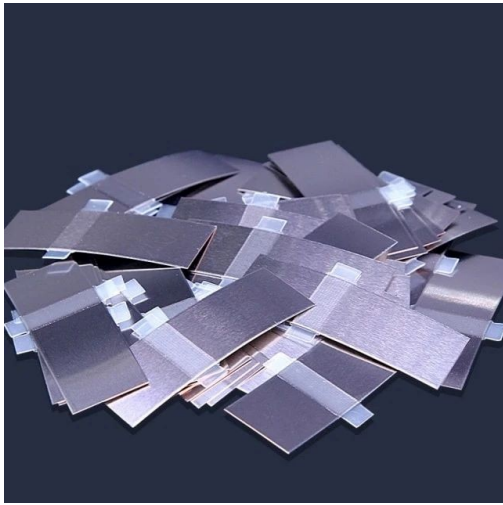
Introduction

Button-type battery storage box, detachable, high-quality PP environmental protection material; suitable for small objects/chemicals, etc., thickened, compressive, durable, and available in a variety of styles.

[Learn More](#)

Nickel-Aluminum Tabs For Soft Pack Lithium Batteries

Item Number: BC-11



Introduction

Nickel tabs are used to manufacture cylindrical and pouch batteries, and positive aluminum and negative nickel are used to produce lithium-ion and nickel batteries.

[Learn More](#)

Negative electrode material	nickel	Cathode material	aluminum
tape material	white glue	tape material	J7-100
Substrate thickness	0.1±0.1mm	Substrate thickness	0.1±0.01mm
width	10±0.1mm	width	4±0.1mm
unit length	50±1mm	unit length	60±1mm
tab tape width	5±0.5mm	tab tape width	4±0.5mm
Total thickness of tab	0.3±0.02mm	Total thickness of tab	0.3±0.02mm
Adhesive strength between tab and tape	>7N/15mm	Adhesive strength between tab and tape	>7N/15mm
Corrosion resistance	Soaked in the electrolyte for 4 hours at 85°C, the material is stable, and the bonding between the lug and the substrate is stable.		

Aluminum-Plastic Flexible Packaging Film For Lithium Battery Packaging

Item Number: BC-12



Introduction

Aluminum-plastic film has excellent electrolyte properties and is an important safe material for soft-pack lithium batteries. Unlike metal case batteries, pouch batteries wrapped in this film are safer.

[Learn More](#)

Aluminum Foil Current Collector For Lithium Battery

Item Number: BC-13



Introduction

The surface of aluminum foil is extremely clean and hygienic, and no bacteria or microorganisms can grow on it. It is a non-toxic, tasteless and plastic packaging material.

[Learn More](#)

model	thickness	width/mm	Surface density g/m ²	pull	pull	Elongation %
	20±um					
single sided light	20	170	53.48	≥26N/cm	(back)	≥1.8
				33	57	1.82

304 Stainless Steel Strip Foil 20Um Thick Battery Test

Item Number: BC-14



Introduction

304 is a versatile stainless steel, which is widely used in the production of equipment and parts that require good overall performance (corrosion resistance and formability).

[Learn More](#)

chemical composition	C≤0.08; Si≤1.00; Mn≤2.00; P≤0.035; S≤0.03; Ni:8.0-10.0; Cr:18.0-20.0;
Tensile strength (Mpa)	620 MIN
Yield strength (Mpa)	310 MIN
Elongation(%)	30 MIN
Area reduction (%)	40 MIN
density	7.93 g/cm ³
Chromium content (%)	18--20

High Purity Zinc Foil

Item Number: BC-15



Introduction

There are very few harmful impurities in the chemical composition of zinc foil, and the surface of the product is straight and smooth; it has good comprehensive properties, processability, electroplating colorability, oxidation resistance and corrosion resistance, etc.

[Learn More](#)

Percent Purity	99.9%
Odor	Odorless
Weight	≈0.045g/25x25mm
Form	Foil
Assay	metals basis
Chemical Name or Material	Zinc foil, 0.01±0.0025mm (0.0004±0.0001 in.) thick

Tgph060 Hydrophilic Carbon Paper

Item Number: BC-16



Introduction

Toray carbon paper is a porous C/C composite material product (composite material of carbon fiber and carbon) that has undergone high-temperature heat treatment.

[Learn More](#)

Properties	Unit	TGP-H-030	TGP-H-060	TGP-H-090	TGP-H-120
thickness	mm	0.11	0.19	0.28	0.37
Hydrophobic treatment	/	5% Hydrophobic	Relatively hydrophilic (without hydrophobic treatment) / 20% hydrophobic optional	5% Hydrophobic	5% Hydrophobic
Bulk density	g/cm ³	0.4	0.44	0.44	0.45
Porosity	%	80	78	78	78
Surface roughness	μm	8	8	8	8
gas permeability	ml·mm/[cm ² ·hr·mmAq]	2500	1900	1700	1500
Resistivity (throughplane)	mΩcm	80	80	80	80
Resistivity (inplane)	mΩcm	/	5.8	5.6	4.7
vertical [room temperature]	W/[m·k]	/	[1.7]	[1.7]	1.7
In-plane[100°C]	W/[m·k]	/	23	23	23
In-plane expansion coefficient[25-100°C]	*10 ⁻⁶ /C	-0.8	-0.8	-0.8	-0.8
Bending strength	MPa	40	40	40	40
Flexural modulus	GPa	8	10	10	10
tensile strength	N/cm	/	50	70	90

High-Purity Titanium Foil / Titanium Sheet

Item Number: BC-17



Introduction

Titanium is chemically stable, with a density of 4.51g/cm³, which is higher than aluminum and lower than steel, copper, and nickel, but its specific strength ranks first among metals.

[Learn More](#)

Titanium sheet thickness / MM						
0.01	0.08	0.4	1.2	5	12	25
0.02	0.1	0.5	1.5	6	13	30
0.03	0.15	0.6	2	7	14	40
0.04	0.2	0.7	2.5	8	15	50
0.05	0.25	0.8	3	9	18	
0.06	0.3	1	4	10	20	

Polyethylene Separator For Lithium Battery

Item Number: BC-18



Introduction

The polyethylene separator is a key component of lithium-ion batteries, located between the positive and negative electrodes. They allow the passage of lithium ions while inhibiting electron transport. The performance of the separator affects the capacity, cycle and safety of the battery.

[Learn More](#)

Material:	SK single layer PE film
thickness:	16 μ m
width:	115mm
Air permeability:	200s
Porosity:	44%
Heat shrinkage rate:	Vertical 3% Horizontal 1%
tensile strength:	Vertical 1200kgf/cm ² Horizontal 1200kgf/cm ²
Storage conditions:	The best storage environment temperature is 25 \pm 3 $^{\circ}$ C, humidity is 30%-70%, moisture-proof

Lithium Battery Tab Tape

Item Number: BC-19



Introduction

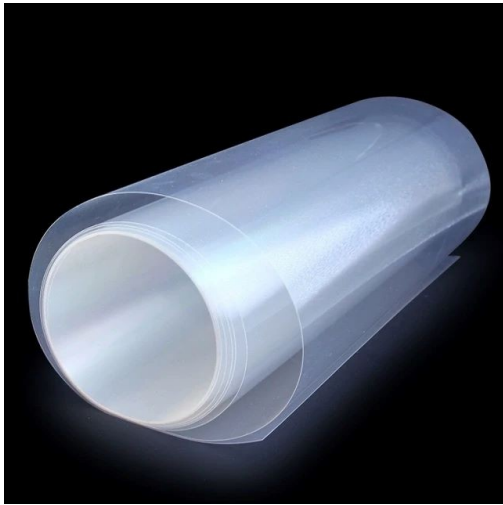
PI polyimide tape, generally brown, also known as gold finger tape, high temperature resistance 280 °C, to prevent the influence of heat sealing of soft pack battery lug glue, suitable for soft pack battery tab position glue.

[Learn More](#)

Substrate	Polyimide film
Total tape thickness	0.060mm
tape length	33m
width	2 / 3 / 5 / 6 / 8 / 10 / 12 / 15 / 16 / 18 / 20 / 25 / 30 / 35 / 40 / 50mm(optional)
Tape Adhesion	5.39 (550) N (gf)/w.25mm
Tape Tensile Strength	122.6 (12.5) N (kgf)/w.25mm
Tape elongation	50%
Temperature resistance	220°C,10min,
chemical resistance	20% HCl, NaOH/10Hrs good

Carbon Paper For Batteries

Item Number: BC-20



Introduction

Thin proton exchange membrane with low resistivity; high proton conductivity; low hydrogen permeation current density; long life; suitable for electrolyte separators in hydrogen fuel cells and electrochemical sensors.

[Learn More](#)

model	N-117 or N117	NafionN115	NR211	NRE-212
thickness:	183um	127Micron	25.4Micron	50.8Micron
Weight:	/	250g/m2	50g/m2	100g/m2
Specification:	10*10cm	40*40CM	61cm*L	/
Conductivity:	0.083S/cm	0.083S/cm	0.083S/cm	0.083S/cm
Exchange capacity:	0.89meq/g	0.89meq/g	0.95-1.01	0.95-1.01 meq/g

Anion Exchange Membrane

Item Number: BC-21



Introduction

Anion exchange membranes (AEMs) are semipermeable membranes, usually made of ionomers, designed to conduct anions but reject gases such as oxygen or hydrogen.

[Learn More](#)

Product number	Thickness	Available Size
A15-HCO3	15 microns	
A20-HCO3	32 microns	
A32-HCO3	40 microns	5*5cm; 5*10cm; 10*10cm; 20*10cm; 20*20cm; 30*10cm; 30*15cm
A40-HCO3	60 microns	
A80-H29316	80 microns	
A15R-HCO3	15 microns	5*7cm; 10*7cm; 14*10cm; 28.5*10cm;
PiperION A5 ionomer solid	PiperION-A5-HCO3 0.8g	1 bottle/half bottle
Thickness and Basis Weight	Typical Thickness (um)	Basis Weight (g/m ²)
A20-HCO3	20	22.6
A40-HCO3	40	45.2
A80-HCO3	80	90.4
Physical Properties	Typical Value	
Tensile Strength(MPa)		
A20-HCO3	>30	
A40-HCO3	>50	
A80-HCO3	>50	
Young's Modulus		
A20-HCO3	>30	
A40-HCO3	>50	
A80-HCO3	>50	
Elongation at Break (%)		
A20-HCO3	>20	
A40-HCO3	>60	
A80-HCO3	>100	
Specific Gravity	1.13	

Other Properties

IEC(meq/g) 2.35

Conductivity(mS·cmOH80°C) 150

Hydrolytic Properties

Typical Value

Swelling Ratio(%80°C 1M KOH) 8

Water Uptake(%80°C1MKOH) 50

Iridium Dioxide Iro2 For Electrolysis Of Water

Item Number: BC-22



Introduction

Iridium dioxide, whose crystal lattice is rutile structure. Iridium dioxide and other rare metal oxides can be used in anode electrodes for industrial electrolysis and microelectrodes for electrophysiological research.

[Learn More](#)

Test items	value
Iridium content is not less than wt%	85.6
Purity not less than wt%	99.95
Specific surface area m2/g	45-66
The average particle size is not more than nm	5
Appearance	black powder
Moisture content wt%	
Analysis of impurity content	
Pt	0.002
Pd	0.0016
Au	0.0018
Ru	0.0019
Mn	0.0015
Cu	0.0011
Mg	0.0013
Al	0.0014
Fe	0.0012
Zn	0.001
Sn	0.0009
Pb	N.D

Carbon Paper/Cloth Diaphragm Copper/Aluminum Foil And Other Professional Cutting Tools

Item Number: BC-23



Introduction

Professional tools for cutting lithium sheets, carbon paper, carbon cloth, separators, copper foil, aluminum foil, etc., with round and square shapes and different sizes of blades.

[Learn More](#)

Nickel Foam

Item Number: BC-24



Introduction

Nickel foam is a high-tech deep-processing, and the metal nickel is made into a foam sponge, which has a three-dimensional full-through mesh structure.

[Learn More](#)

Aperture:	0.1mm-10mm (5-120ppi)	
Porosity:	50%-98%	
Porosity:	≥98%	
Bulk density:	0.1-0.8g/cm ³	
Surface density (g/㎡)	280~3000 (±30~200)	
Thickness (mm)	0.5~10 (±0.05~1.0)	
Length/Width Size(mm)	70≤L/W≤500 (±0.5)	
Size	Thickness 0.3 / 0.5 / 1.0 / 1.5 / 1.7mm*Width 200mm*Length 1m	Thickness 0.3/0.5/1.0/1.5/2.0mm*width 200mm*length 250mm
		Thickness 0.5/1.0/1.5/1.7/2.5/2.0mm*width 200mm*length 300mm

Copper Foam

Item Number: BC-25



Introduction

Copper foam has good thermal conductivity and can be widely used for heat conduction and heat dissipation of motors/electrical appliances and electronic components.

[Learn More](#)

Aperture:	0.1mm-10mm (5-130ppi)
Porosity:	50%-98%
Through hole rate:	≥98%
Number of holes in inches:	110 (110PPI)
Bulk density:	0.1-0.8g/cm ³
Surface density G/M ² :	280-3000(±30-200)
Thickness (MM):	0.1~40(0.05~1.0)
Number of holes PPI:	13~1300(±5~10)
Length/Width/Thickness Dimensions (MM):	70≤length and width



Kintek Solution

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