



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

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.

In the past 20 years, we earned rich experiences in this researching equipment field, we are capable to supply both the equipment and solution according to customer's needs and realities, we have also developed lots of customer tailored equipment according to a specific working purpose, and we have lots of successful projects in many universities and institutes from different countries, like Asia, Europe, North and South America, Australia and New Zealand, Middle East, and Africa.

Profession, quick response, hard working, and sincerity is a remarkable label of our team members working attitude, which earn us a sound reputation among our clients.

We are here and ready to service our clients from different countries and regions, and share the most efficient and reliable technology together!



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



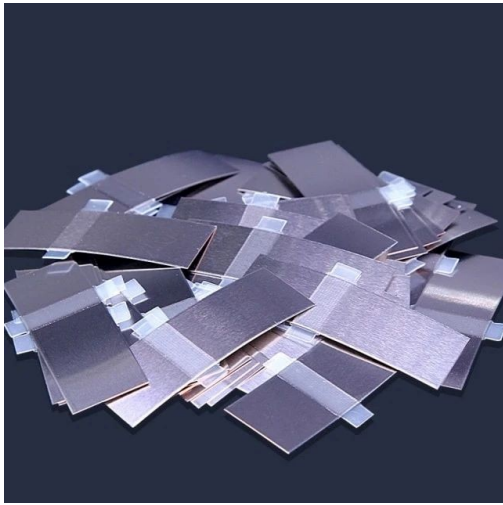
Introduction

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			≥26N/cm	(back)	
single sided light	20	170	53.48	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°C, humidity is 30%-70%, moisture-proof

Lithium Battery Tab Tape

Item Number: BC-19



Introduction

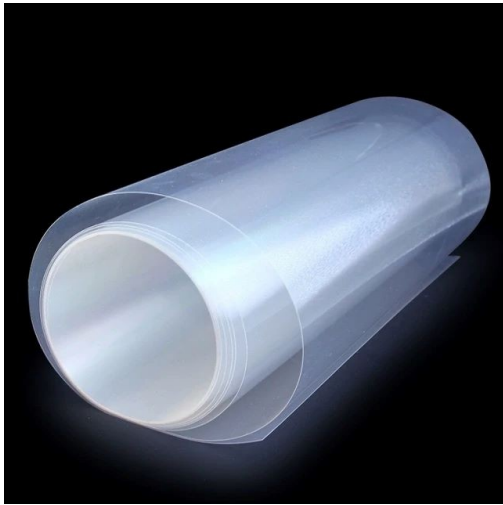
PI polyimide tape, generally brown, also known as gold finger tape, high temperature resistance 280 °C, to prevent the influence of heat sealing of soft pack battery lug glue, suitable for soft pack battery tab position glue.

[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



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