

03

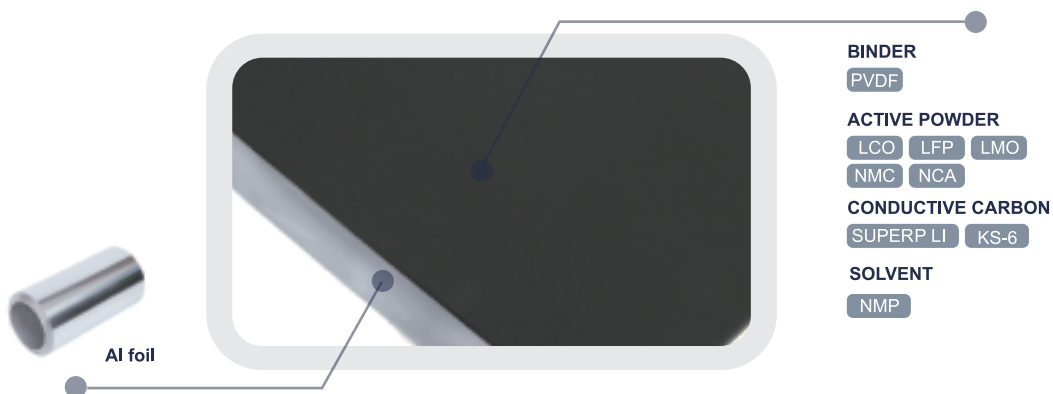
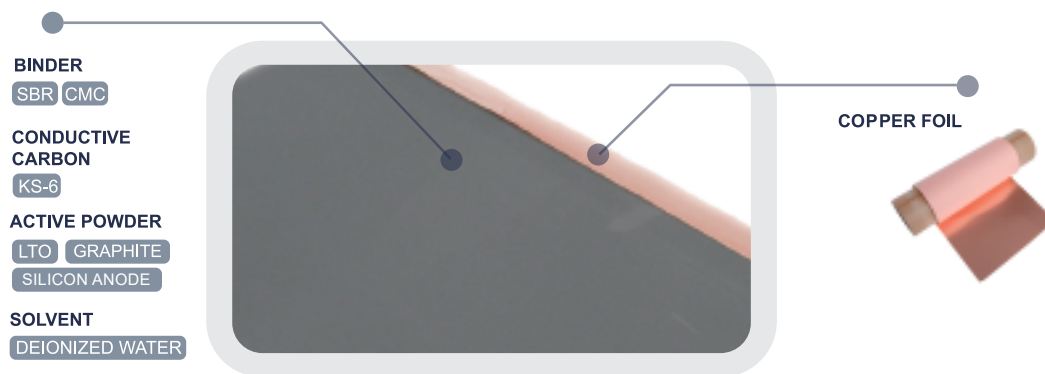


**MAJOR
MATERIALS**

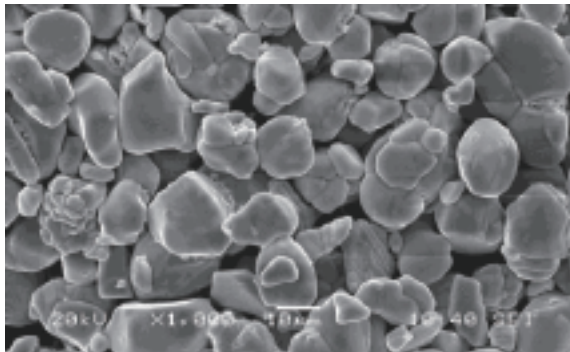
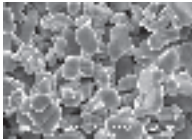
MATERIAL CATALOG

GELON

| SOLVENT | BINDER | CONDUCTIVE CARBON | CATHODE POWDER | ANODE POWDER | CASE | SEPARATOR | CURRENT COLLECTION | TABS | ELECTROLYTE | SODIUM ION BATTERIES |
|---------|-----------|---------------------|----------------|---------------------|-------------------|-------------------|---------------------------|------------------|--------------------|----------------------|
| ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ |
| NMP | CMC | SUPERP LI | NMC | CMB | AL CASE | PP | COPPER FOIL | AL TAB | LLZO | NVP |
| | PVDF | KS-6 | LCO | ARTIFICIAL GRAPHITE | STEEL CASE | PE | CARBON COATED COPPER FOIL | NI TAB | LATP | Na-NM |
| | SBR | ACETYLENE BLACK(AB) | LMO | NATURAL GRAPHITE | AL LAMINATED FILM | PP/PE/PP | AL FOIL | NI PLATED CU TAB | LAGP | Na-NFM |
| | PTFE | KETJEN BLACK (KB) | LFP | LTO | | CERAMIC SEPARATOR | CARBON COATED AL FOIL | TITANIUM TAB | LLZXO | |
| | LA132/133 | CARBON FIBRE | NCA | SILICON ANODE | | PVDF SEPARATOR | NI FOAM | | LLTO | |
| | PAA | | LMFP | SOFT CARBON | | | CU FOAM | | NZSPO | |
| | | | PRECURSOR | HARD CARBON | | | MICROPOROUS COPPER FOIL | | LPSCI | |
| | | | | | | | MICROPOROUS ALUMINUM FOIL | | LPS | |
| | | | | | | | | | NPSCI | |
| | | | | | | | | | LGPS | |
| | | | | | | | | | LIQUID ELECTROLYTE | |



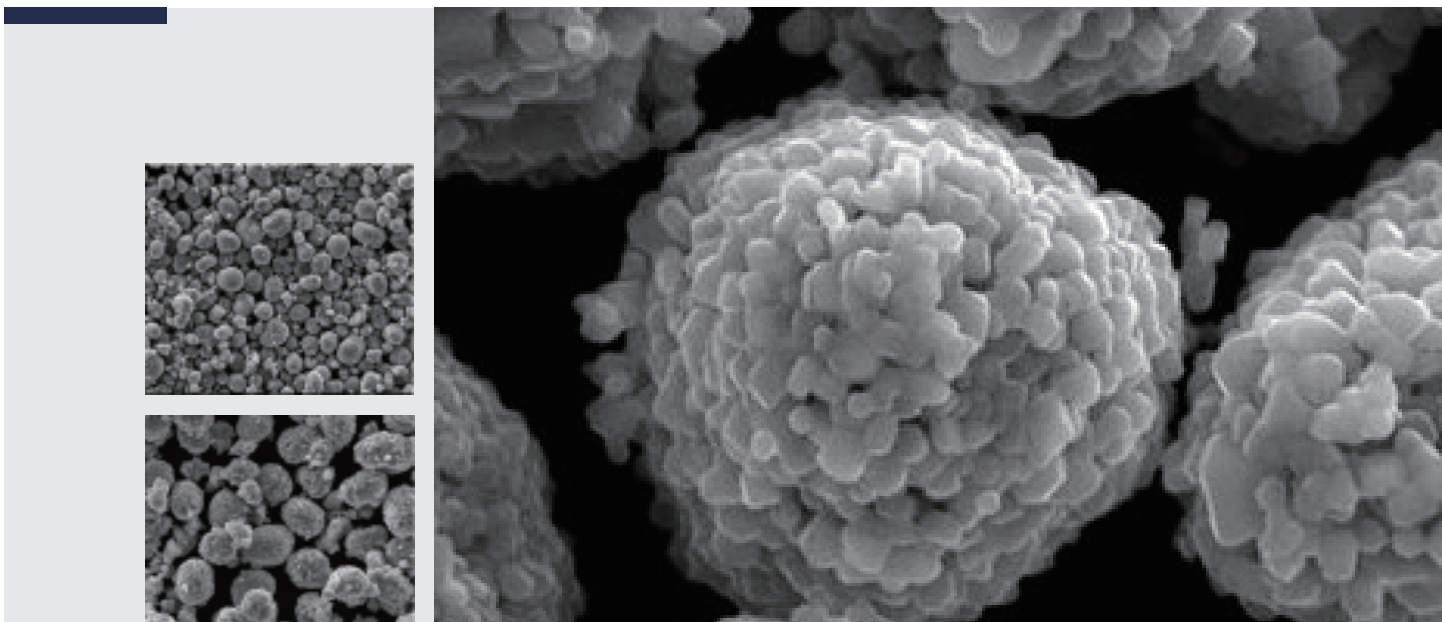
LITHIUM ION BATTERY CATHODE MATERIALS



LCO

Mainly used for 3C digital Li-ion battery products, as well as small Li-ion batteries used for aircraft models, drones and other products.

1st Discharge Capacity (CR2032, 0.1/0.2C, 3.0 ~ 4.3V v.s. Li) :from 155mAh/g to 195mAh/g
(CR2032, 0.1/0.1C, 3.0 ~ 4.6V v.s. Li) :≥220mAh/g
1st efficiency:>94 %



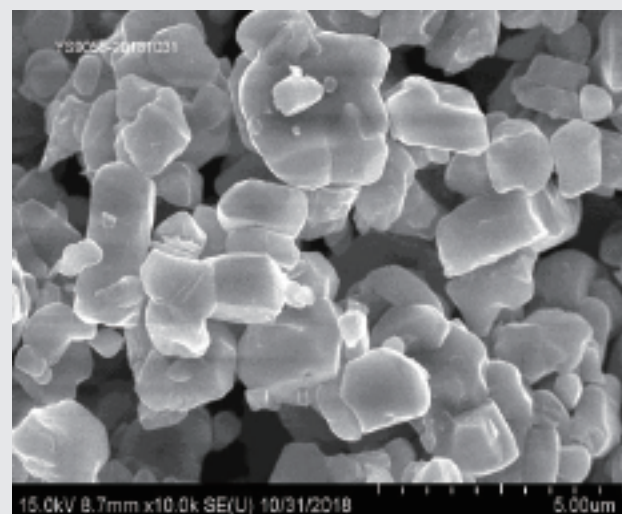
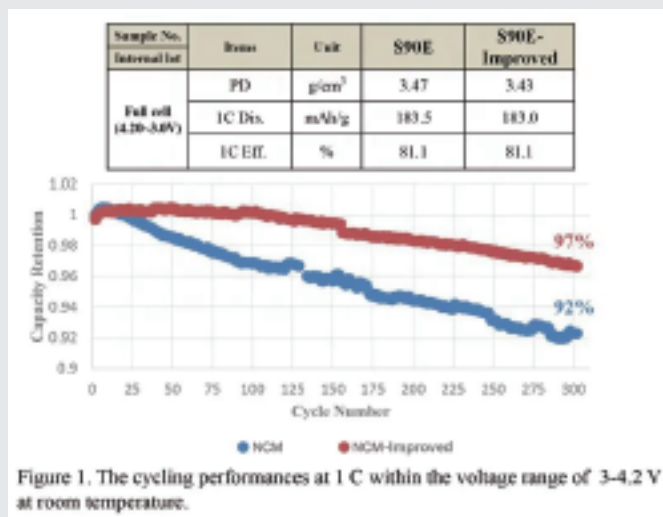
NCM

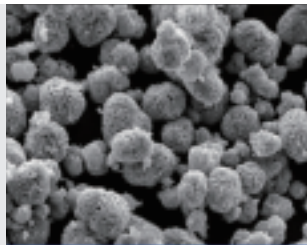
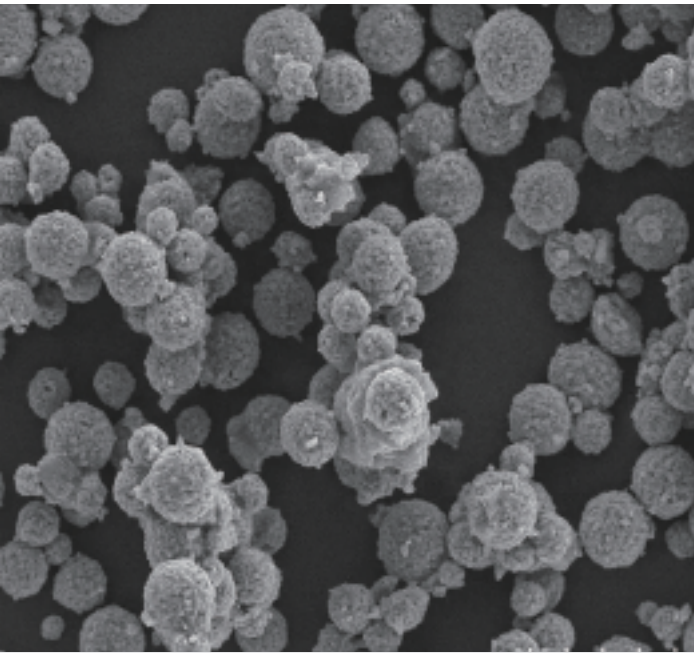
APPLICATION:
Mainly used for prismatic cell, pouch cell, cylindrical cell and EV batteries.

TYPE:
111 / 532 / 622 / 811 / 9series

FEATURES:

- ① High capacity
- ② High density
- ③ Good rate performance
- ④ Long cycle life





NCM PRECURSOR

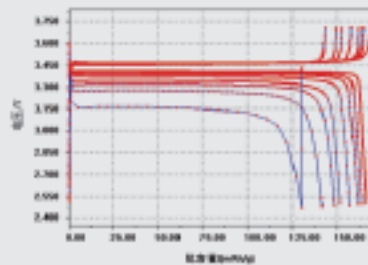
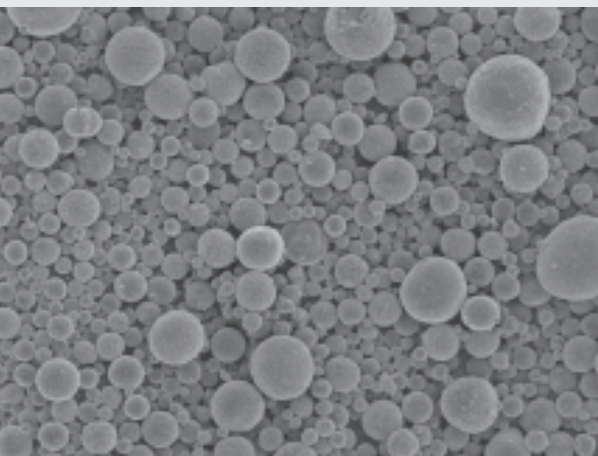
Specification

| Item | Unit | Ni-C | Ni-E | Ni-C | Ni-L |
|---|---------|------------------------|--------------------------|---------------|--------------------------|
| Ni content | (mol %) | 82.5 | | 85 | |
| Feature | | Low initial resistance | High Temperature Cycling | High capacity | High Temperature Cycling |
| D50 | μm | 12.5±2.0 | 11.5±2.0 | 12.5±2.0 | 11.5±2.0 |
| SSD | (D/g) | 1.7±0.5 | 2.2±0.5 | 1.7±0.5 | 2.2±0.5 |
| pH | ° | ±11.6 | ±11.6 | ±11.6 | ±11.6 |
| ORP | mV | ±0.10 | ±0.10 | ±0.10 | ±0.10 |
| CO ₂ - | mV | ±0.20 | ±0.20 | ±0.20 | ±0.20 |
| 1st Discharge Capacity (4.2V-3.0V/0.5C) | mAh/g | ±195 | ±190 | ±205 | ±200 |
| 1st Coulombic | % | ±85 | ±85 | ±85 | ±85 |
| Full Battery 0.5C capacity display (4.2V-3.0V/0.5C) | mAh/g | ±180 | ±175 | ±190 | ±185 |

APPLICATION:

NCM precursor is the main raw material for manufacturing NCM materials. It mainly uses nickel salt, cobalt salt, and manganese salt as raw materials (nickel-cobalt-manganese hydroxide $\text{Ni}_{1-x}\text{Co}_x\text{Mn}_x(\text{OH})$). The same amount of NCM precursor is required to produce NCM materials. NCM precursors currently account for about 55% of the cost of NCM cathode materials. The properties of the precursor are very important, because the morphology, particle size, specific surface area, tap density and other factors of the precursor directly determine the physical and chemical indicators of the final sintered product.

There are several models of NCM (523, 622, 811, 9 series). In fact, different models represent different mass contents of Ni, Co, and Mn in the NCM precursor. In NCM, nickel is the main redox reaction element.



LFP

The product is developed by using unique spherical-ization, nano preparation & dispersion and surface coating technology combined with our's unique engineering equipments. By strict selection of raw materials and good control on multi-composition, the LFP multi-composed materials is characterized with high stability, consistence and price-ability.

VALUE CORE : HIGH CAPACITY,HIGH COMPACTION

INDEX:

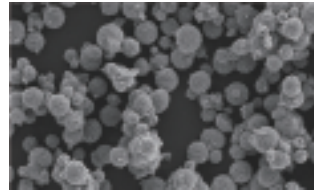
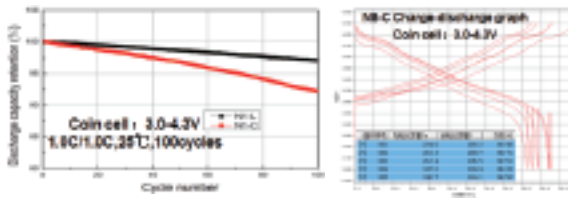
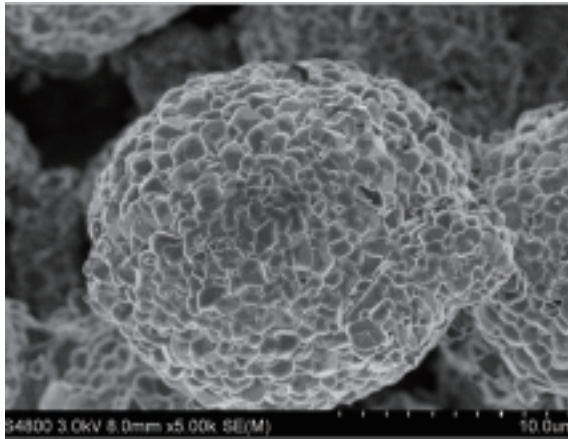
CARBON CONTENT(%): 1.55±0.2

1ST DISCHARGE CAPACITY(1C): ≥145mAh/g

CYCLE: 2000th: ≥85% (≥90% for low temperature serial)

-20°C low temperature retention: ≥50%(≥80% for low temperature serial)

APPLICATION: It is suitable for the use of high capacity and high rate type power lithium ion battery



VALUE CORE:

HIGH CAPACITY: 225mAh/g

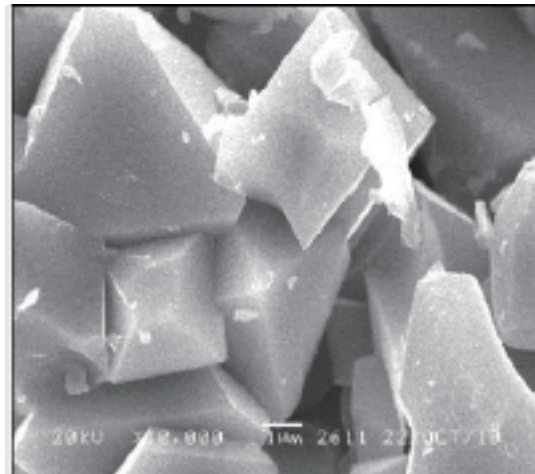
APPLICATION: Lithium ion battery for EV

Excellent processability

Lithium ion battery for digital products

NCA

To solve the issues of mileage and safety for electric vehicle, developed NCA cathode material with high capacity and excellent processability by using advanced engineering equipment combined with surface treatment technology.



LMO

FEATURES:

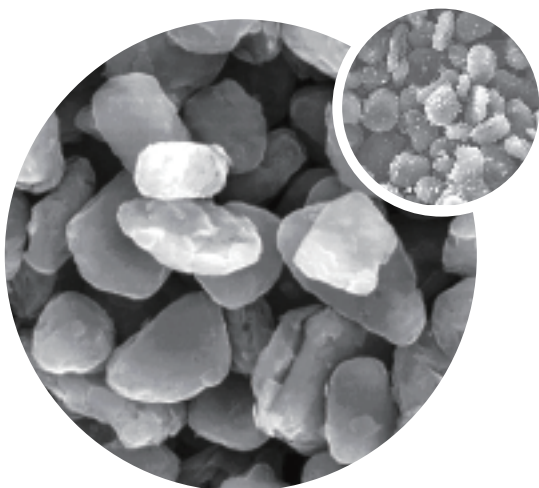
- High capacity
- High magnification
- Good temperature performance
- Good processing performance
- Long cycle life
- High security

APPLICATION:

Suitable for bicycle, EV, HEV and other power batteries

Resource
Qualification
Experience

LITHIUM ION BATTERY ANODE MATERIALS



NATURAL GRAPHITE

The product is developed by introducing unique liquid coating and super critical graphitization technology which can make the coating layer thinner and can improve compatibility with electrolyte.

The capacity is well increased, PD, cycling life, high temperature performance is greatly increased.

VALUE CORE:

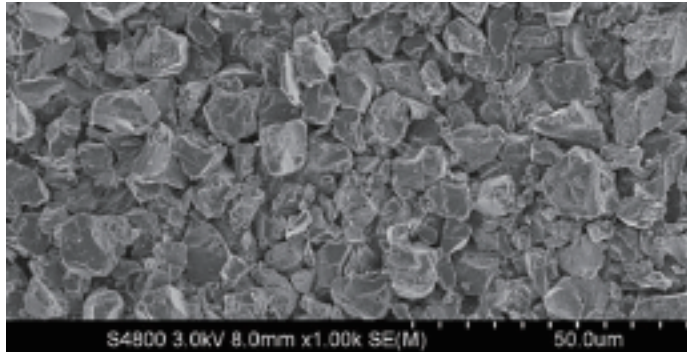
HIGH ENERGY DENSITY: $\geq 360\text{mAh/g}$

Long cycle life

Easy operation(additive does not require)

APPLICATION: It is suitable for the use of high grade lithium ion battery.

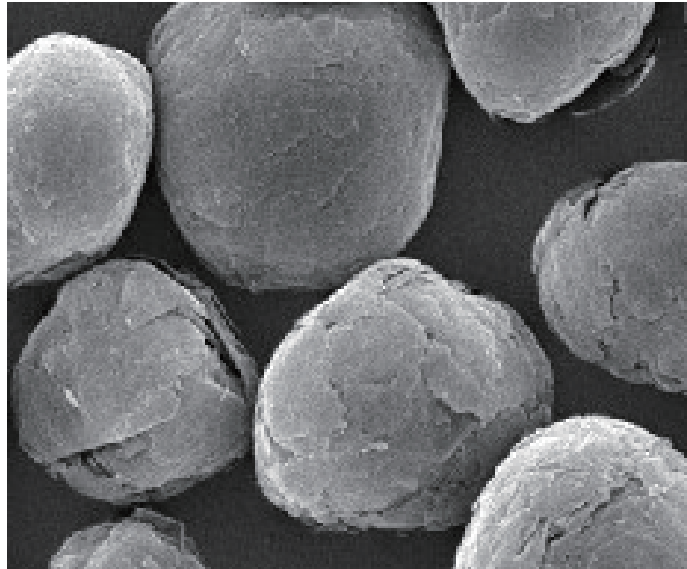
MAIN TYPES: 518,818,918.



HARD CARBON

VALUE CORE:

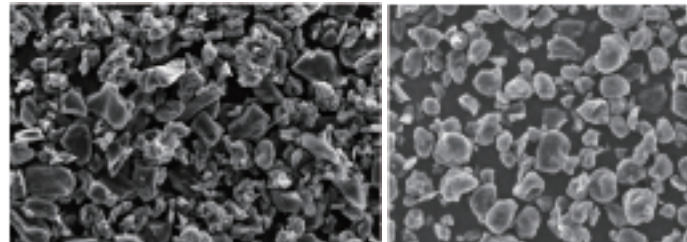
The hard carbon is used for high rate power cell, are produced by mesophase precursor and orpolymer pyrolysis process. It is suitable for the LIB battery applied in EV, power tool and other special fields.



ARTIFICIAL GRAPHITE

This product is produced by using unique powder modification, mechanofusion technics and equipped with advanced engineering equipment. Many kinds of coke is produced by treated with grinding, spheroidization, mechansfusion, graphitization and surface modification procedures and finally characterized with higher performance and lower cost.

It has the advantage of high capacity($\geq 340\text{mAh/g}$), granularity D50(9micron-26micron)... Good cycling performance and high stability. What we supply is the world's top anode materials. It will be more and more widely used in the market.

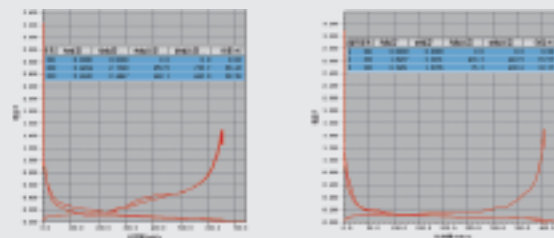
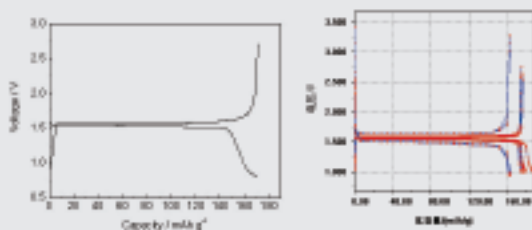
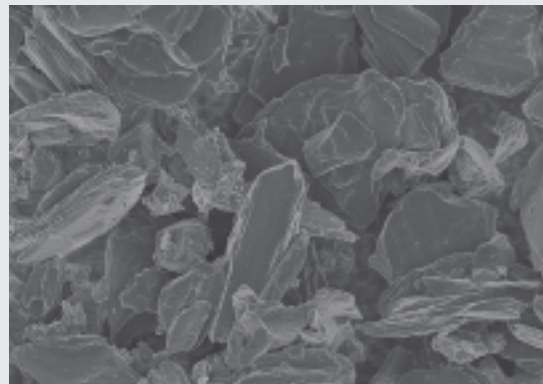
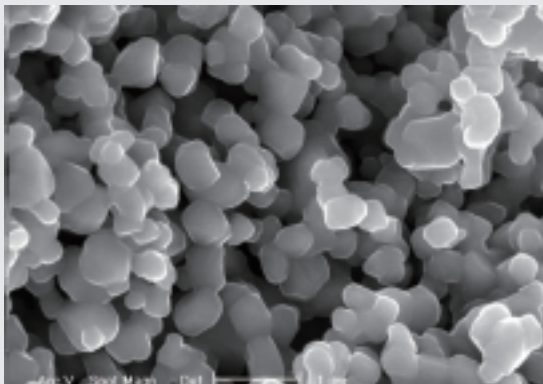


APPLICATION:

It is suitable for all kinds of lithium ion battery applied in EV, HEV, power tools, energy storage, consumer electronics and other application fields.

MAIN TYPES:

AGP-2L-S, S360-L2-H, CMB-Z, CMB-N, CMB-S



LTO

LTO is characterized with good safety and long cycling performance, it is ideal materials applied in LIB for EV and ESS application.

VALUE CORE:

High safety performance
Ultra-long cycle life
High rate performance

INDEX:

First discharge efficiency > 90%
First discharge capacity > 150mah/g

APPLICATION FIELD:

EV
ESS
High rate charge and discharge lithium ion battery
Super capacitor

SI-ANODE

As a new anode energy material, Si - based anode material has ultra-high theoretical specific capacity and low lithium removal potential (<0.5v), and the voltage platform of silicon is slightly higher than graphite, so it is difficult to cause lithium dissection on the surface during charging, and the safety performance is better.

VALUE CORE:

The product is characterized with high capacity (≥400Ah/g), high first efficiency(≥85%), good cycle performance, low volume expansion and realization the SNNC and non crystalline of Si.

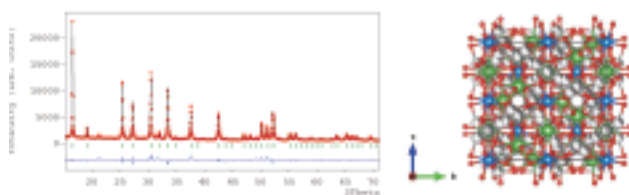
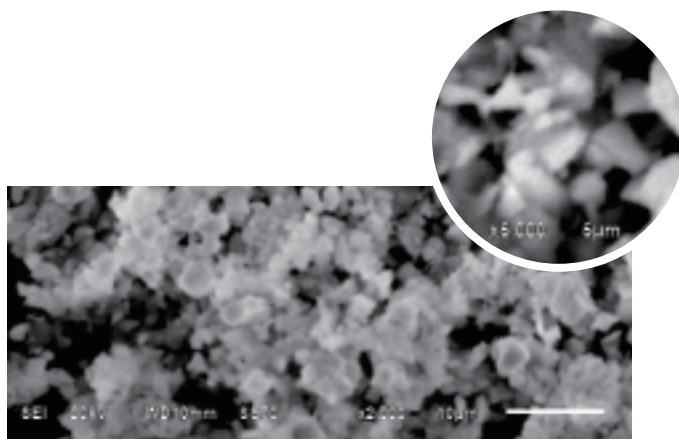
APPLICATION FIELD:

3C digital, power tools, electric vehicles (EV/HEV/PHEV).

MAIN TYPES:

S400, S420, S450, S500, S650, S1000

SOLID STATE ELECTROLYTE MATERIALS



Lithium-lanthanum-zirconium-oxygen has excellent ionic conductivity, and there is a strong interaction force between its lithium ions and oxygen vacancies, which makes the lithium ions to have a high migration rate in the crystal, and it is an ideal solid electrolyte material.

VALUE CORE:

PURITY: 3N

PARTICLE SIZE (MESH): 325

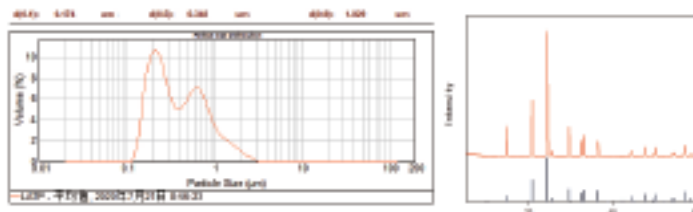
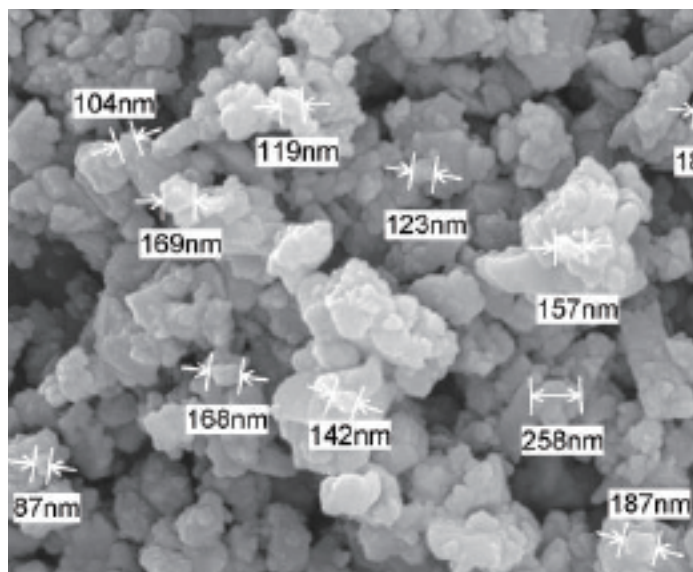
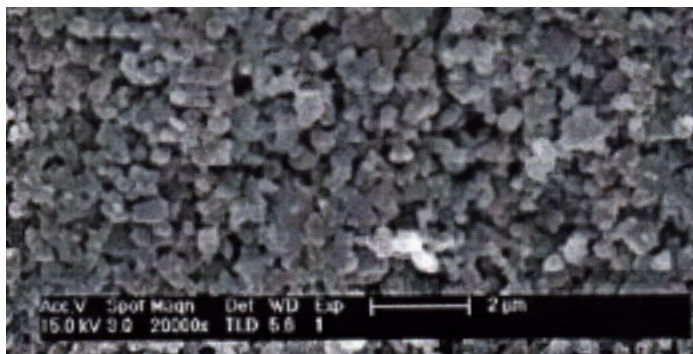
INGREDIENT RATIO: Li:La:Zr:O = 7:3:2:12 (at);

Li₇La₃Zr₂O₁₂(wt%): ≥ 99.9%

IONIC CONDUCTIVITY: 6x10⁻⁴S/cm

CUBIC PHASE: Space group: Ia-3d, a = 13.091835

MORE TYPES: Can be customized upon request



VALUE CORE:

PURITY: 3N

PARTICLE SIZE(MESH): $D_{50}(\mu\text{m}) \leq 2$

INGREDIENT RATIO: Li:Al:Ge:P:O = 1.5:0.5:1.5:3:12(mol)

IONIC CONDUCTIVITY: $3 \sim 6 \times 10^{-4} \text{ S/cm}$

MORE TYPE: Can be customized upon request

LATP

This product is made of lithium hydroxide, alumina, titanium oxide and other raw materials by high temperature calcination. It is characterized by high ionic conductivity at room temperature, high oxidation potential and controllable particle size.

APPLICATION FIELDS:

Pure inorganic all-solid-state batteries, polymer semi-solid-state batteries.

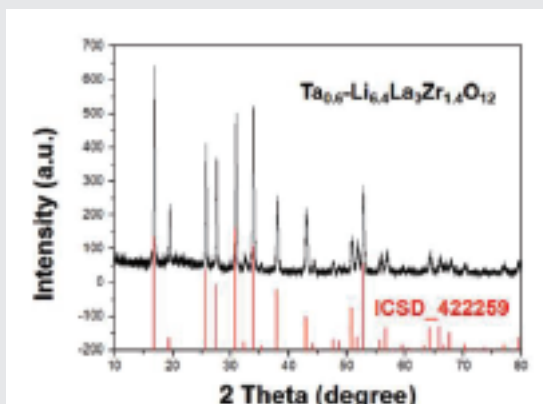
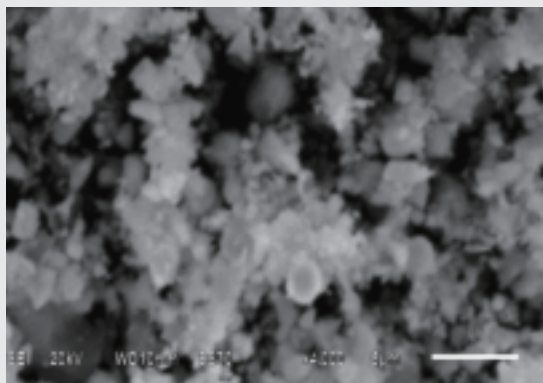
VALUE CORE:

REAL DENSITY: 2.94 g/cm^3

PARTICLE SIZE: $D_{10} \geq 0.3$ / $D_{50} 0.6 \pm 0.05$ / $D_{90} \leq 1.5$ / $D_{100} \leq 2.5$

IONIC CONDUCTIVITY(MS/CM): 0.9 ± 0.05

MORE TYPES: Can be customized upon request



LLZTO

LLZTO is a compound consisting of lithium, aluminum, titanium, and oxygen with high ionic and electronic conductivity, and is therefore considered a promising solid electrolyte material.

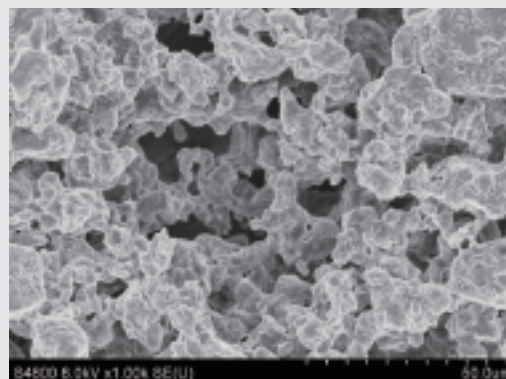
MATERIAL PURITY(wt%): ≥99.9%

IONIC CONDUCTIVITY: $5.5 \times 10^{-3} \text{ S} \cdot \text{cm}^{-1}$

PARTICLE SIZE DISTRIBUTION: <5 μm

SCREENING SIZE: 325mesh

**MIN TIME
MAX VALUE!**



LPSC

Its crystal structure is characterized by a three- dimensional network of ion-conducting channels, which has a high degree of ionic conductivity and can effectively facilitate the transport of lithium ions in the solid electrolyte.

IONIC CONDUCTIVITY(POWDER UNPRESSURIZED):

~8mS/cm@27℃

IONIC CONDUCTIVITY(POWDER COLD PRESSED):

~12mS/cm@27℃

ELECTRONIC CONDUCTIVITY(POWDER COLD PRESSED): $<1 \times 10^{-8} \text{ S/cm@27}^\circ\text{C}$

CONDUCTIVITY ACTIVATION ENERGY (POWDER COLD PRESSED):

0.275 eV(26.6 kJ/mol) (25~85℃)

THEORETICAL DENSITY: 2g/cm³

SODIUM ION BATTERY MATERIALS

Na-NFM

It is a composite oxide composed of four elements: sodium, nickel, iron and manganese. Sodium nickel-iron-manganate has good electrochemical properties, so it is widely used in the field of batteries.

PARTICLE SIZE (μm) :

D10: ≥ 5

D50: $\in 10\text{-}13$

D90: ≤ 30

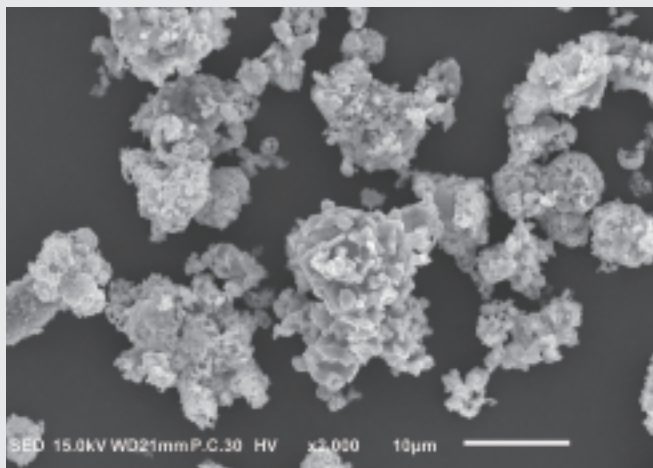
D(max): ≤ 50

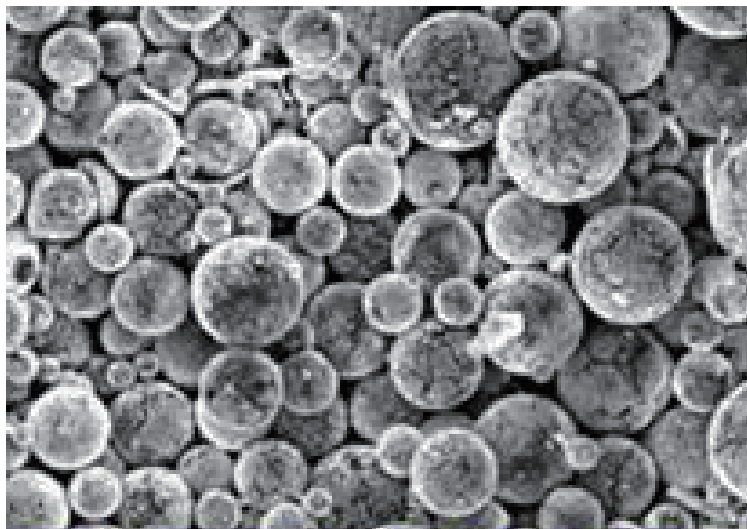
DISCHARGE SPECIFIC CAPACITY (mAh/g) :

0.1C ≥ 135 / 0.1C First Efficiency: $\geq 90\%$

0.2C ≥ 125

THE MAINLY TYPE: 424 / 333 / 252550





NVP

It has high discharge specific capacity, excellent multiplication performance and long cycle life, and is mainly used in sodium ion batteries.

PARTICLE SIZE (μm) :

D10: 13 ± 1

D50: 20 ± 1

D90: 35 ± 1

TAP DENSITY : 0.95 g/cm^3

SPECIFIC CAPACITY: $\geq 117.6 \text{ mAh/g}$

AMORPHOUS CARBON CONTENT : 3%

PH : 8

NFPP

VALUE CORE:

Sodium ferric pyrophosphate, also named NFPP, is a cathode material of sodium-ion battery with features of long cycle life, excellent thermal stability, high safety, and high capacity.

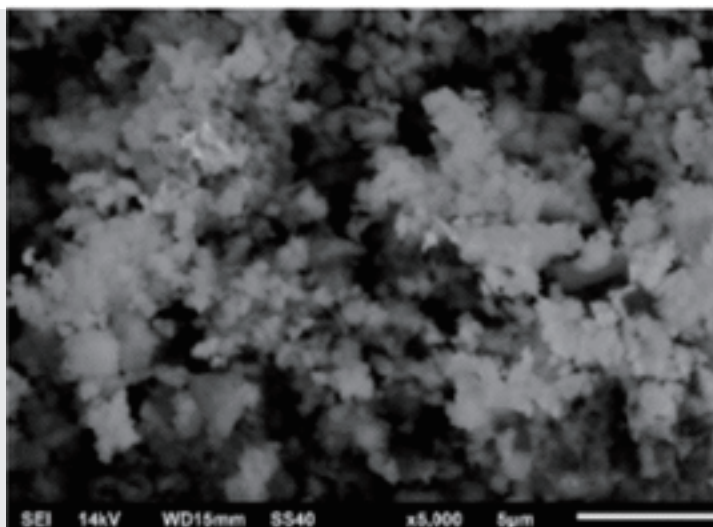
INDEX:

TYPE: $\text{Na}_4\text{Fe}_3(\text{PO}_4)_2\text{P}_2\text{O}_7$, $\text{Na}_3\text{Fe}_2(\text{PO}_4)_2\text{P}_2\text{O}_7$

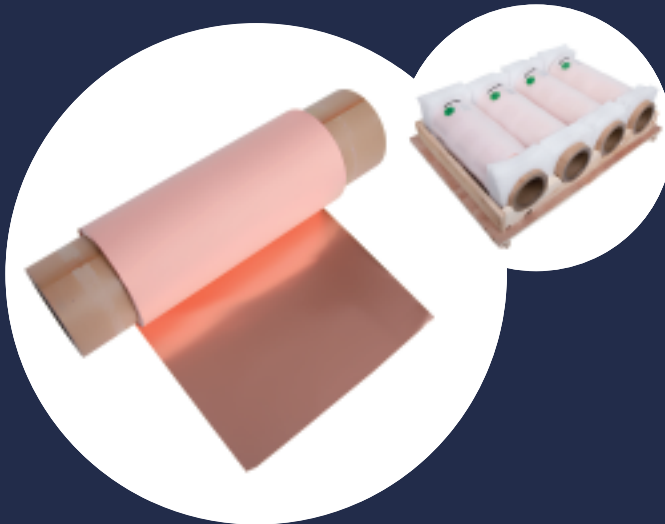
PARTICLE SIZE($\text{Na}_3\text{Fe}_2(\text{PO}_4)_2\text{P}_2\text{O}_7$): D10: $\geq 0.4 \mu\text{m}$ / D50: $2.5 \pm 0.3 \mu\text{m}$ / D90: $\leq 8.0 \mu\text{m}$ / D100: $\leq 20 \mu\text{m}$

SPECIFIC SURFACE AREA: $18 \pm 3 \text{ m}^2/\text{g}$

COMPACTION DENSITY: $1.9 \pm 0.1 \text{ g/cm}^3$



ACCESSORY MATERIALS



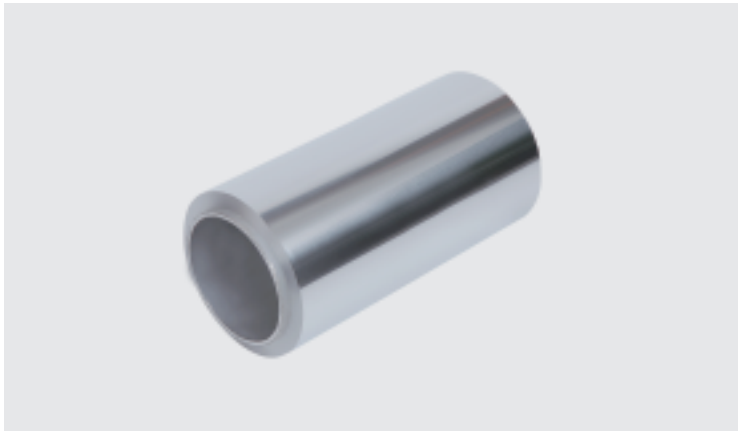
COPPER FOIL

Copper foil is a material primarily used as the current collector of the anode in lithium-ion batteries. It has ultra-thin properties and can be coated on both sides. It has the advantage of high load-carrying power and has good coating properties when is adhered.

TYPES: : Double side shiny, one side shiny.

THICKNESS: 4.5 micron, 6 micron, 8 micron, 9 micron, 10 micron, 12 micron, 15 micron Etc.

WIDTH: According to customer' s request.



ALUMINUM FOIL

Aluminum foil is used as a current collector for lithium ion batteries. It is the cathode electrode collector.

THICKNESS: 12micron, 16micron, 20micron, 25micron

TYPES: 1070, 1060, 1235, with -O, H14, -H24, -H22, -H18

WIDTH: According to customer's request



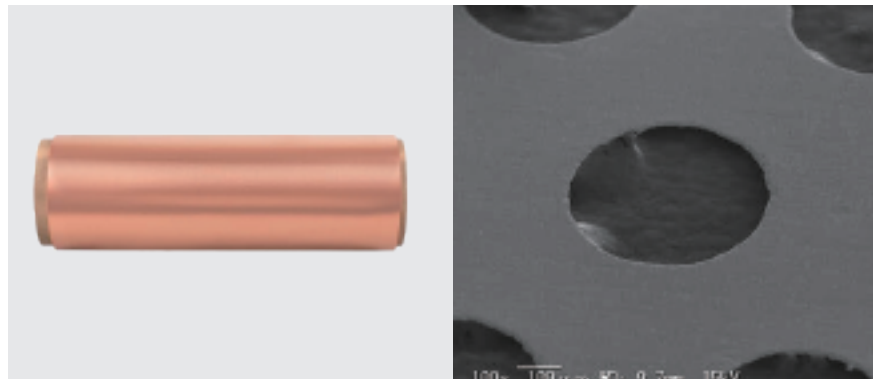
MICROPOROUS COPPER FOIL

APPLICATION:

Microporous copper foil is a new type collector used in lithium batteries. It is the basis of process the original lithium battery copper foil for secondary processing, using mechanical processing to make pores, which can maximize the physical and chemical properties of the foil itself.

FUNCTIONAL CHARACTERISTICS:

1. It effectively improves the specific energy of the battery.
2. It effectively improves the lithium battery multiplier function.
3. It effectively reduces the internal resistance of the battery.
4. It improves the electrolyte wetting of electric cells.
5. It enhances the adhesion of the foil exterior.



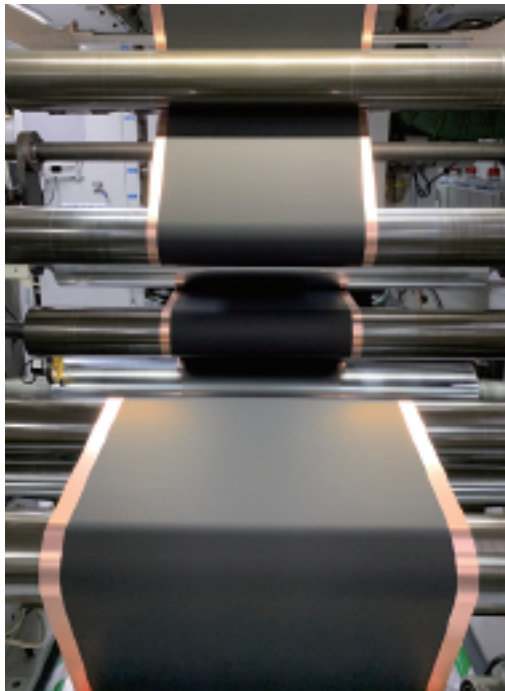
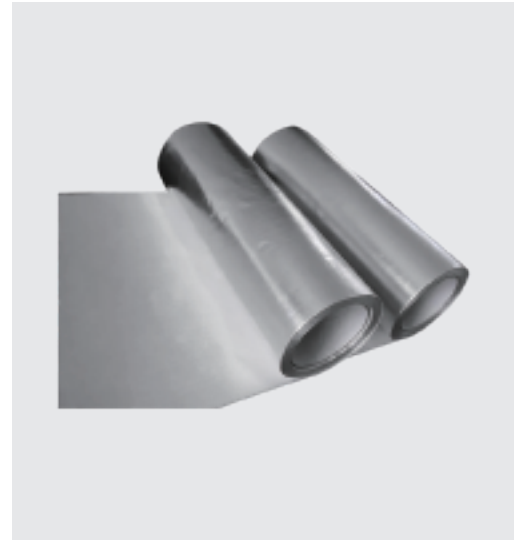
MICROPOROUS ALUMINUM FOIL

APPLICATION:

Microporous aluminum foil is a new type of fluid collector applied to lithium batteries. It does secondary processing on the basis of the original copper foil for lithium batteries, using mechanical process to make pores, which can maximally maintain the physical and chemical properties of the foil itself.

FUNCTIONAL CHARACTERISTICS:

1. It effectively improves the specific energy of the battery.
2. It effectively improves the lithium battery multiplier function.
3. It effectively reduces the internal resistance of the battery.
4. It improves the electrolyte wetting of electric cells.
5. It enhances the adhesion of the foil's appearance.
6. It increases the flexibility of the bending of the electrode, better suitable for the use of flexible batteries.



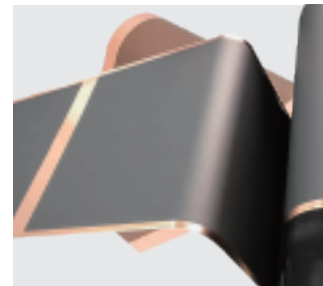
CARBON COATED COPPER FOIL

APPLICATION:

Conductive carbon-coated copper foil can replace conventional copper foil as a battery anode substrate with improved properties.

FUNCTIONAL CHARACTERISTICS:

1. Better electrical conductivity and less internal resistivity.
2. Better mechanical strength and toughness to avoid short circuit caused by dendrite growth.
3. Better coating strength with electrode material.
4. It will provide larger discharging capability and longer service life for Lithium ion batteries.



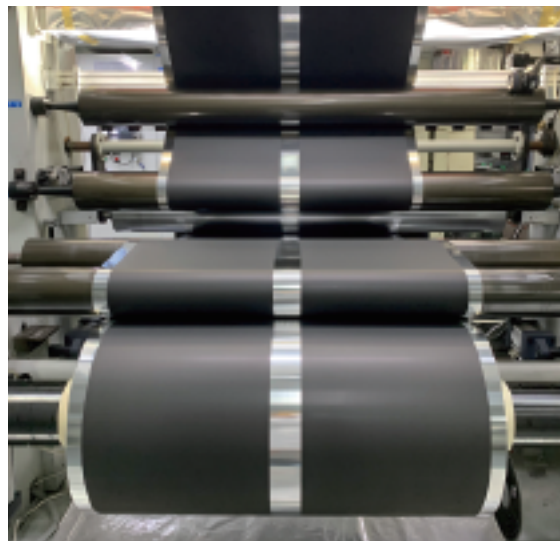
CARBON COATED ALUMINUM FOIL

APPLICATION:

Conductive carbon coated aluminium foil can replace conventional Al foil as battery cathode substrate with improved properties.

FUNCTIONAL CHARACTERISTICS:

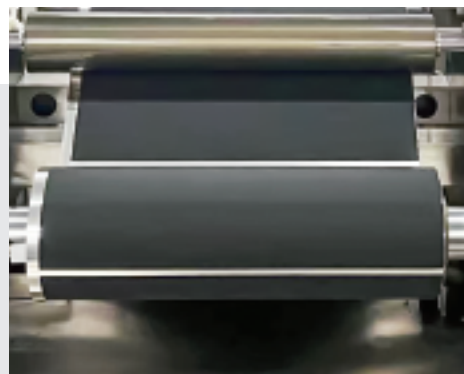
1. Better electrical conductivity and less internal resistivity.
2. Better mechanical strength and toughness to avoid short circuit caused by dendrite growth.
3. Improved adhesion to the electrode material.
4. It provides larger discharging capability and longer service life for lithium ion batteries.



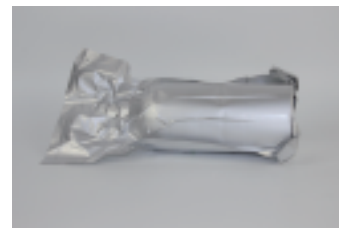
ELECTRODE

APPLICATION:

The battery electrode is a key component that determines the performance of battery and its structure with usually consists of two parts: The current collector foil and the active material. The active material is the substance used to store energy and provide electrons to participate in chemical reactions within the battery and is generally made up of two parts: The cathode material and the anode material.



The current collector foil is generally including: Al foil, Cu foil, C-coated Al foil, C-coated Cu foil, Cu mesh foil and Al mesh foil. All battery electrode parameters can be customized.



INDEX:

WATER: $\leq 20\text{ppm}$

HF CONTENT: $\leq 50\text{ppm}$

CHROMA: $\leq 50\text{Hazen}$

CONDUCTIVITY: 7.93 ± 0.3

DENSITY: 1.195 ± 0.015

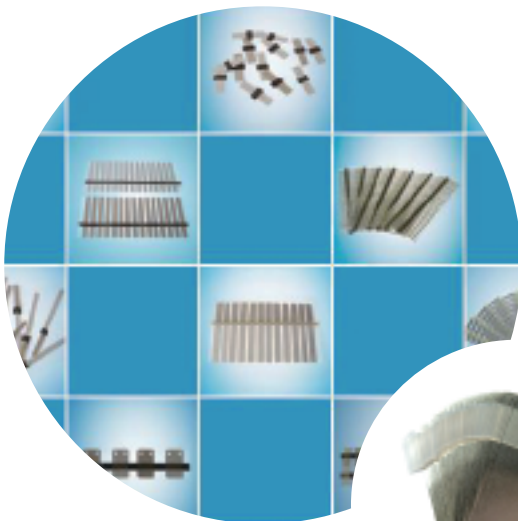
TYPES:

LIPF6 / LITFSI / LIFSI /

LIBF4 / NAPF6

ELECTROLYTE

Our high-purity battery electrolytes are developed to meet the demands of today's lithium-ion battery manufacturing and research. Specifically designed to optimize the performance of advanced Li-ion batteries, our electrolyte solutions are composed of organic solvents, LIPF6 salts and various additives. They are used by battery manufacturers and research centers to produce Li-ion batteries for various applications, from consumer electronics to electric vehicles.



BATTERY TABS

Aluminium tab / Nickel tab / Titanium tab

Usually it is used for Pouch cell / Cylinder cell / Power cell; Dimensions can be customized.

PRODUCT FEATURE :

- ① Nickel 99.99%; aluminum 1060; titanium 99.99%.
- ② Adhesive polymer tape on the tab allows for immediate hot sealing.
- ③ Using special surface treatment technology on metal strip, with excellent electrolysis resistance.
- ④ Outstanding functionality of tab ultrasonic welding.
- ⑤ The tin functionality of nickel tab is better than similar domestic products.

NMP

NMP is used as a solvent for PVDF when prepare Li-ion battery cathode.

CHARACTERISTICS:

NMP is a nitrogen-containing heterocyclic compound, characterized by a range of excellent physicochemical properties. It is a non-toxic, high-boiling, strongly polar, low-acidic, corrosion-resistant, highly soluble, low-volatile, stable, and easily recyclable solvent with high selectivity.



SEPARATOR

PE & PP separator is used for lithium ion battery manufacturing and research, this materials consist of polymer film separators that are either polypropylene (pp) or it contains micron and nano pores to provide excellent ion transportation capabilities for Li-ion battery.

We also offer ceramic coating varieties to enhance thermal deformation resistance and mechanical strength.

1) PE/PP SINGLE LAYER SEPARATOR :

| | |
|-----------|------------------------------|
| Thickness | 12um , 16um, 18um,20um, 25um |
| Porosity | 38~45% |

2) CERAMIC-COATED SEPARATOR :

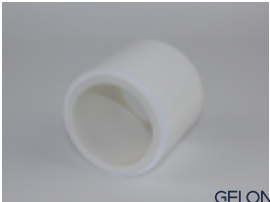
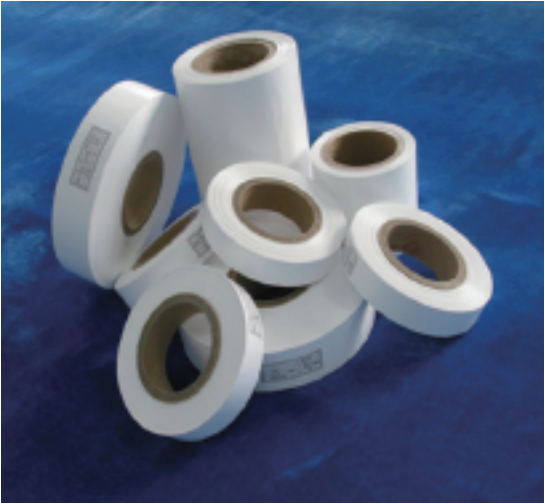
| | |
|--|---------------------------|
| Thickness | 12um, 16um,18um,20um,25um |
| Double sided alumina coating thickness | 2um/side |
| Porosity | 38% |

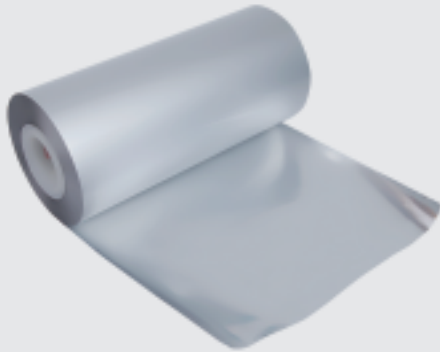
3) PP/PE/PP MULTILAYER SEPARATOR :

| | |
|-----------|---------------------------|
| Thickness | 12um, 16um,18um,20um,25um |
| Porosity | 39~44% |

4) PVDF SEPARATOR :

| | |
|-----------|---------------------------|
| Thickness | 12um, 16um,18um,20um,25um |
| Porosity | 38~45% |

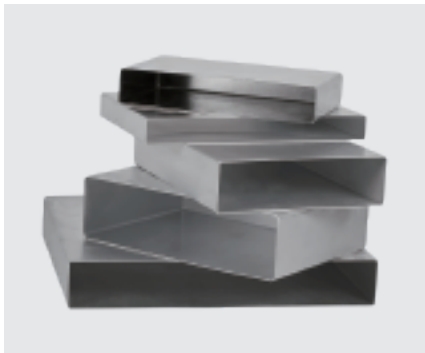




ALUMINUM LAMINATED FILM

Aluminum laminated film is one of the five major materials of lithium ion battery, and it is a pouch lithium battery packaging material. The aluminum laminated film consists of outer nylon layer / adhesive / intermediate aluminum foil / adhesive / internal heat seal layer.

BRAND: DNP
THICKNESS: 66um / 88um / 113um/ 148um / 152um / 153um
WIDTH: ~400mm
LENGTH: <300meters



PRISMATIC CELL CASE

Prismatic can&lids is used for prismatic cell, any dimensions can be customized, The dimensions in the table are our current dimensions.

Specification Sheet

| TYPE | Overall dimensions | Casing Thickness ±0.1mm | Aluminum shell height ±0.10mm |
|-------|--------------------|-------------------------|-------------------------------|
| 1865 | 18*65 | 0.6 | <138 |
| 2770 | 27*70 | 0.6 | <165 |
| 29135 | 29*135 | 0.6/0.8 | <215 |
| 32173 | 301.4*172.4 | 0.6/0.8 | 191 |
| 36130 | 36*130 | 0.75 | <235 |
| 39148 | 39.5*148 | 0.6 | 95 |
| 45120 | 4.5*120 | 0.75 | <177 |
| 48174 | 47.5*173.6 | 0.6 | 145.2 |



COIN CELL CASE

It is made of 304 or 316 stainless steel with sealing gasket, including CR2016, CR2025, CR2032, CR2430, CR2450 etc; and we also have coin cell case with aluminum coated on the inside of the case.

MATERIALS :

- **CASING:** SS304 or SS316 or aluminium.
- **SEALING GASKET:** PP
- The thickness of the SS304 / 316 for both anode and cathode case is 0.25 mm +/- 0.02 mm.

CYLINDER CELL CASE

TYPES:

18650 / 26650 / 21700 / 32650, etc

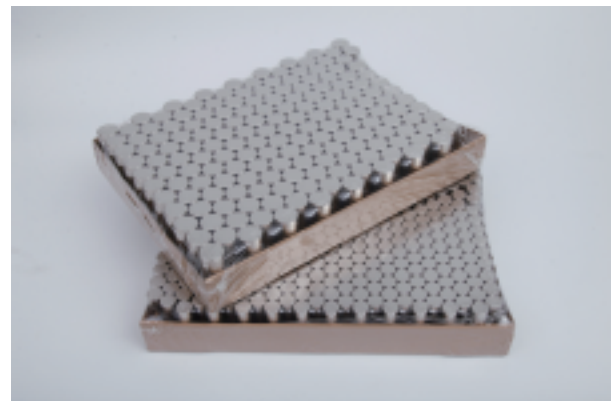
MATERIALS :

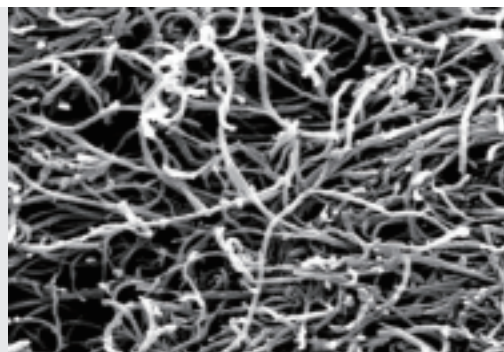
Case and cap are made of nickel plated A3 steel Sealing gasket and spacer are made of nylon Insulating gasket is made of PET

CAP :

Cap with built-in PTC thermistor for overcurrent protection

In addition, offer super capacitor case, aluminium case, shaped vattery case





CONDUCTIVE CARBON

As conductive additive for lithium-ion battery making, we usually add certain conductive materials when making the electrode in order to ensure the electrode has good charge and discharge performance. It can improve the electron transfer between the active materials and current, and reduce the interface contact resistance of the electrode. Main types are as below: Super P-Li, C45, C65, KS-6, acetylene black, ketjen black ECP-600JD, carbon nano tube.



BINDER



The binder is an inactive component in the electrode sheet of the lithium ion battery, and its main function is to connect the electrode active material, the conductive agent and the electrode current collector, so as to have an overall connectivity between the electrode active material, the conductive agent and the current collector, thereby reducing the impedance of the small electrode.

According to the dispersion of the binder in the electrode, it can be divided into point type, line type and body type.

Currently, commonly used binders are : CMC, PVDF, PTFE, SBR, Aqueous binder LA132/133, BAP-L

TAB TAPE

APPLICATION:

Hot Melt Adhesive (Polymer Tape) is the insulating part on the tabs. Its function is to prevent short circuit between the metal strip and the aluminum laminated film when the battery is encapsulated, and to prevent leakage of liquid by heating and thermally sealing the aluminum laminated film together during encapsulation.

FUNCTIONAL CHARACTERISTICS:

BLACK ADHESIVE: Generally used in many small digital batteries.

YELLOW ADHESIVE: Generally used in low and medium-level power batteries and high rate batteries.

WHITE ADHESIVE: Generally used in high-level digital batteries, power batteries and high rate batteries.



TAPE

KAPTON TAPE

The kapton tape is made of PI film, it has good temperature resistance, rebound-resist, also has high stable adhesion for many materials, especially for cambered surface. It can protect cathode / anode tab in Li-ion battery; cover the soldering tin to make the electrical circuit; high grade electric appliance insulation. The specification can be customized.



STRAPPING TAPE

The strapping tape is primarily used for strapping/fixing the battery core of pouch/cylinder cell as well as good insulation functionality. this material is based on polypropylene film coated with the specific rubber adhesive, which has strong resistance to Li-ion battery electrolyte. The specification can be customized.



LITHIUM CHIPS AND STRIP

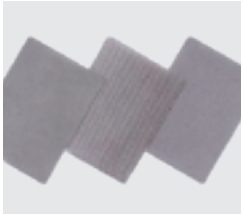
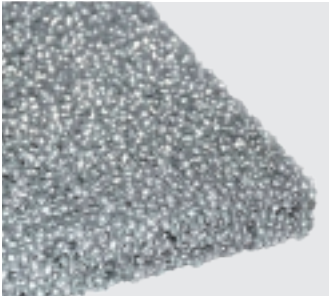
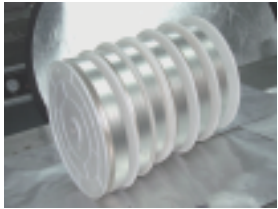
Lithium chips/Lithium strip/Li-Cu-Li strip are widely used for Li-ion and Li metal rechargeable battery production.

Battery grade purity > 99.9%.

Lithium foil sizes are 0.02-4mm thickness, 130mm width (can be customized).

Lithium chip regular dimensions are 15.6*0.25mm, 15.6*0.45mm, 16.0*0.20mm, other sizes can be customized.

| Elements | | Unit | Standard |
|----------|----|------|----------|
| 1 | Li | % | ≥99.9 |
| 2 | Na | % | ≤0.02 |
| 3 | Ca | % | ≤0.02 |
| 5 | K | % | ≤0.01 |
| 6 | Fe | % | ≤0.01 |
| 7 | Si | % | ≤0.01 |
| 8 | N | % | ≤0.03 |
| 9 | Ci | % | ≤0.006 |



FOAM METAL

Due to the small density, high porosity and large specific surface area of foam metal, it has excellent properties that non-foam metal does not have, such as good damping performance, strong fluid permeability, excellent acoustic performance, low thermal and electrical conductivity, etc.

TYPES:

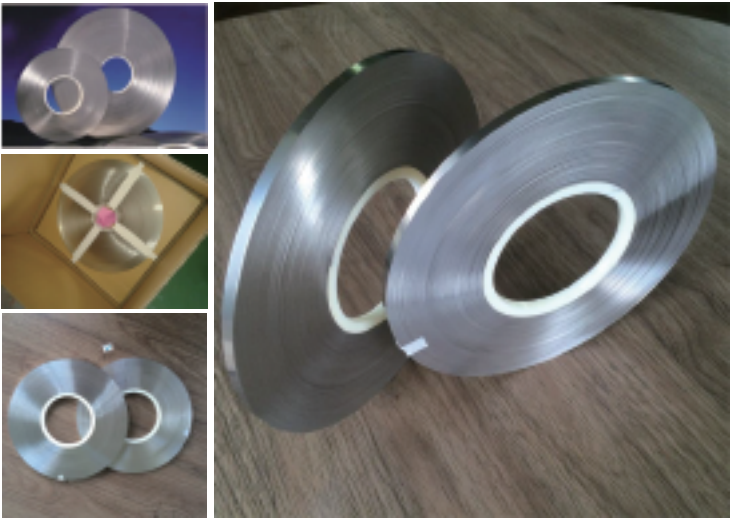
Copper, nickel, stainless steel, aluminium, silver.

NICKEL STRIP

The raw material of nickel is Ni 200, Ni 201.
All size can be customized. Mainly used for manufacturing lithium ion batteries and assembling batteries.

INDEX:

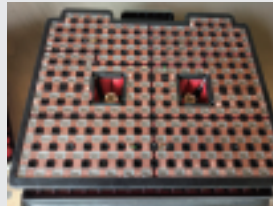
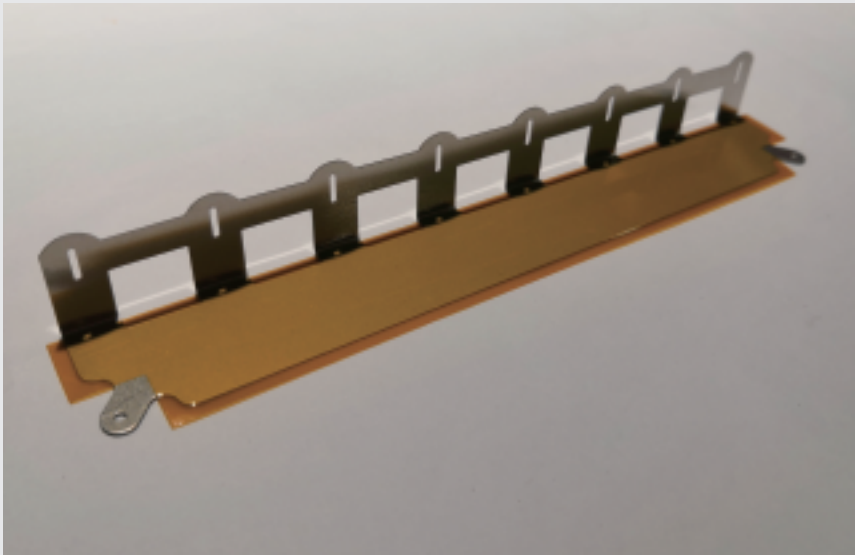
| | |
|-----------|----------------------|
| Ni purity | ≥99.9% |
| Hardness | Soft type, 1/2, 1/4, |
| Thickness | ≥50um |
| Width | ≤250mm |



NICKEL-COPPER-NICKEL COMPOSITE STRIP

APPLICATION:
Nickel-copper-nickel composite strip is mainly used for lithium ion battery and pouch cell connector and has good weldability (can be used for transition welding). The unique production process effectively avoids various shortcomings of previous processes. The strip is smooth and flat without delamination, cracks, peeling, bubbles and other phenomena.

CORE VALUE:
Special for new energy vehicle battery tabs.



NICKEL CHIP

INDEX:

| | |
|-----------|--------|
| Purity | ≥99.9% |
| Thickness | ≥50um |
| Width | ≤250mm |

Nickel/nickel-plated copper materials are widely used in lithium ion battery packing applications. The raw material of nickel include Ni 200, Ni 201, nickel-plated copper, nickel-plated steel, and copper. All nickel plating materials are annealed and electroplated.

Good welding effect, lower internal resistance, longer discharge time of battery pack.
Dimensions can be changed and can be customized to your requirements.