

# Jiangmen Power Electronic Co.,Ltd.

## Safety Data Sheet



### Section 1 – Identification

**Product name:** Lithium Polymer Battery

**Sample Model:** PE70350/3.7V 100mAh, 0.37Wh

**Manufacture:** jiangmen power electronic co., ltd.

**Address:** building 11th, baishi shachongwei industrial zone, jiangmen

**PostCode:** 529000

**Tel:**0750-3287310

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**Email:**

### Section 2 – Hazards Identification

#### Health Hazards (Acute and Chronic)

These chemicals are contained in a sealed can. Risk of exposure occurs only if the battery is mechanically or electrically abused. Contact of electrolyte and extruded lithium with skin and eyes should be avoided.

#### Sign/Symptoms of Exposure

A shorted battery can cause thermal and chemical burns upon contact with the skin. May be a reproductive hazard.

### Section 3 –Composition/Information on Ingredient

Chemical name	CAS no.	In% by weight
Polyimide	2657-87-6	1.67
Nickel	7440-02-0	1.67
Aluminum	7429-90-5	6.67
Copper	7440-50-8	15.67
Graphite	64365-11-3	14.9
Cobalt	7440-48-4	25.77
Lithium Hexafluorophosphate	21324-40-3	20
Polyvinylidene fluoride	24937-29-9	3.33
PET	25038-59-9	5
Ethylene carbonate	96-49-1	5

### Section 4 –First Aid Measures

Eyes



Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

#### **Skin**

Remove contaminated clothes and rinse skin with plenty of water or shower for 15 minutes. Get medical aid.

#### **Inhalation**

Remove from exposure and move to fresh air immediately. Use oxygen if available.

#### **Ingestion**

Give at least 2 glasses of milk or water. Induce vomiting unless patient is unconscious. Call a physician.

## Section 5 – Fire Fighting Measures

**Flash Point:** N/A

**Auto-Ignition Temperature:** N/A

#### **Extinguishing Media**

Water, CO<sub>2</sub>.

#### **Special Fire-Fighting Procedures**

Self-contained breathing apparatus.

#### **Unusual Fire and Explosion Hazards**

Cell may vent when subjected to excessive heat-exposing battery contents.

#### **Hazardous Combustion Products**

Carbon monoxide, carbon dioxide, lithium oxide fumes.

## Section 6 – Accidental Release Measures

#### **Steps to be Taken in case Material is Released or Spilled**

If the battery material is released, remove personnel from area until fumes dissipate. Provide maximum ventilation to clear out hazardous gases. Wipe it up with a cloth, and dispose of it in a plastic bag and steel can. The preferred response is to leave the area and allow the battery to cool and vapors to dissipate. Provide maximum ventilation. Avoid skin and eye contact or inhalation of vapors. Remove spilled liquid with absorbent and incinerate.

#### **Waste Disposal Method**

It is recommended to discharge the battery to the end, handing in the abandoned batteries to related department unified, dispose of the batteries in accordance with approved local, state, and federal requirements. Consult state environmental protection agency and/or federal EPA.

## Section 7- Handling and Storage

The battery should not be opened, destroyed or incinerate, since they may leak or rupture and release to the environment the ingredients that they contain in the hermetically sealed container.

Do not short circuit terminals, or over charge the battery, forced over – discharge, throw to fire. Do not crush or puncture the battery, or immerse in liquids.

#### **Precautions to be taken in handling and storing**

Avoid mechanical or electrical abuse. Storage preferably in cool, dry and ventilated area, which is subject to little temperature change. Storage at high temperatures should be avoided.

Do not place the battery near heating equipment, nor expose to direct sunlight for long periods.

#### **Other Precautions**

The battery may explode or cause burns, if disassembled, crushed or exposed to fire or high temperatures. Do not

short or install with incorrect polarity.

## Section 8- Exposure Controls/Personal Protection

### Respiratory Protection

In case of battery venting, provide as much ventilation as possible. Avoid confined areas with venting cell cores. Respiratory protection is not necessary under conditions of normal use.

### Ventilation

Not necessary under conditions of normal use.

### Protective Gloves

Not necessary under conditions of normal use.

### Other Protective Clothing or Equipment

Not necessary under conditions of normal use.

Personal Protection is recommended for venting battery: Respiratory Protection, Protective Gloves, Protective Clothing and safety glass with side shields.

## Section 9 – Physical and Chemical Properties

**Nominal Voltage:** 3.7 V.

**Rated Capacity:** 60 mAh.

**Appearance Characters:** silvery, quadrate, odorless, solid battery.

**Chemical uses:** Power up for the mobile phone.

## Section 10 – Stability and Reactivity

### Stability

Stable

### Conditions to Avoid

Heating, mechanical abuse and electrical abuse.

### Hazardous Decomposition Products

N/A.

### Hazardous Polymerization

N/A

If leaked, forbidden to contact with strong oxidizers, mineral acids, strong alkalis, halogenated hydrocarbons.

## Section 11 – Toxicological Information

Inhalation, skin contact and eye contact are possible when the battery is opened. Exposure to internal contents, the corrosive fumes will be very irritating to skin, eyes and mucous membranes. Overexposure can cause symptoms of non-fibrotic lung injury and membrane irritation.

## Section 12 – Ecological Information(non-mandatory)

When promptly used or disposed the battery does not present environmental hazard, when disposed, keep away from water, rain and snow.



## Section 13 – Disposal Considerations(non-mandatory)

### Appropriate Method of Disposal of Substance or Preparation

If battery are still fully charged or only partially discharged, they can be considered a reactive hazardous waste because of significant amount of not reaction, or unconsumed lithium remaining in the spent battery. The battery must be neutralized through an approved secondary treatment facility prior to disposal as a hazardous waste. Recycling of battery can be done in authorized facility, through licensed waste carrier.

## Section 14 – Transport Information(non-mandatory)

More information concerning shipping, testing, marking, and packaging can be obtained from label master at <http://www.labelmaster.com>.

Separate batteries when shipping to prevent short-circuiting. They should be packed in strong packaging for support during transport, take in a cargo of them without falling, dropping, and breakage. Prevent collapse of cargo piles and wet by rain.

**Transport Fashion:** By air, by sea, by railway, by road.

UN-No 3480

### ADR/RID

Class 9	Packing group II	ADR/RID-Labels	9
Proper shipping name	Lithium-Ion batteries, UN3480		

### IMO

Class	Packing group II	IMO-Labels	9
Proper shipping name	Lithium-Ion batteries, UN3480		

### IATA-DGR

Class 9	Packing group II	ICAO-Labels	9
Proper shipping name	Lithium-Ion batteries, UN3480		

Uncross declares that UN Manual of Tests and Criteria, Part III, sub-section 38.3 is met.

In airfreight, sealed Lithium-Ion batteries are considered as "Lithium-Ion Batteries-Not Restricted", when they meet the requirements of Packing Instruction 965 section II (UN3480).

In Sea freight, sealed Lithium-Ion batteries are considered as "Lithium-Ion Batteries-Not Restricted", when they meet the requirements of IMDG of IMO Dangerous Goods Regulations (UN3480).

In other cases (mainly for large cells (>20Wh) or packs (100Wh)), they are considered as Class 9 (see Packing Instruction 965 Section I for airfreight).

---During the transportation of a large amount of battery by ship, trailer or railway, do not leave them in the places of high temperature and do not allow them to be exposed to condensation.

---During the transportation do not allow packages to be fallen down or damaged.

---For shipping, battery should be less than 50% charged state (SOC).

---For air shipment that contain 24 new lithium Ion rechargeable cell, or more than 12 new rechargeable lithium ion batters, there are necessary to meet the following items.

1. Each package shall be marked indicating that it contains lithium battery and special procedures shall be followed in the event that the package is damaged.
2. Each shipment shall be accompanied with a document indicating the packages contain lithium battery and that special procedure shall be follow in the event that package is damaged.
3. Be capable of with standing a 1.2 meter drop test in any orientation.
4. Package shall not exceed 30kgs.

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## Section 15 – Regulatory Information(non-mandatory)

### Law information

《Dangerous Goods Regulation》

《Recommendations on the Transport of Dangerous Goods Model Regulations》

《International Maritime Dangerous Goods》

《Classification and code of dangerous goods》

OSHA Hazard Communication Standard Status

Toxic Substances Control Act (TSCA) Status

SARA Title III

RCRA

In accordance with all Federal, State and Local laws.

## Section 16 – Other Information

The above information is based on the data of which we are aware and is believed to be correct as of the data hereof. Since this information may be applied under conditions beyond our control and with which may be unfamiliar and since data made available subsequent to the data hereof may suggest modifications of the information, we do not assume any responsibility for the results of its use. This information is furnished upon condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose.

