

Shenzhen Huquan Technology Co.,Ltd
Material Safety Data Sheet**MSDS No. EXC2025010001****Section 1 – Chemical Product and Company Identification**

Product name: LITHIUM POLYMER BATTERY(EXC:401030)

Specifications: 3.7V 130mAh,0.481Wh

Manufacturer: Shenzhen Huquan Technology Co.,Ltd.

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Section 2 – Composition/Information on Ingredient

Chemical Name	Chemical Formula or Abbreviation	CAS No.	Content (wt%)
Lithium Cobalt Oxide LiCoO_2		12190-79-3	30-50
Carbon / Graphite	C	7440-44-0	15-25
Aluminum Foil	Al	7429-90-5	3-10
Copper Foil	Cu	7440-50-8	7-14
*PVDF (Polyvinylidene Fluoride)	$(\text{C}_2\text{H}_2\text{F}_2)_n$	24937-79-9	3-8
Electrolyte	-- -- 10-20		
Al Lamination Film	-- -- <8		
Silicon Rubber	-- 63394-02-5		<5
PVC	$[-\text{CH}_2-\text{CHCl}-]_n$	9002-86-2	<3

Section 3 - Hazards Identification**Primary routes of entry**

Skin contact	No
Skin absorption	No
Eye contact	No
Inhalation	No
Ingestion	No

Signs and Symptoms of Exposure

Skin Contact	No effect under routine handling and use
Skin absorption	No effect under routine handling and use
Eye Contact	No effect under routine handling and use
Inhalation	No effect under routine handling and use
Reported as carcinogen	Not applicable

<Caution>

Risk of exposure occurs only if the battery is mechanically or electrically abused.
May explode in a fire, which could release hydrogen fluoride gas and smoke. Use extinguishing media suitable for materials burning in fire.

Section 4 - First Aid Measures

Inhalation	Not a health hazard.
Eye contact	Not a health hazard.
Skin contact	Not a health hazard.
Ingestion	If swallowed, obtain medical attention immediately.

<Caution>

IF EXPOSURE TO INTERNAL MATERIALS WITHIN CELL DUE TO DAMAGED OUTER AI CASING,THE FOLLOWING ACTIONS ARE RECOMMENDED ; Inhalation

If inhaled, remove to fresh air. If not breathing give artificial respiration, preferably mouth-to-mouth and seek medical attention.

Eye & Skin contact

In case of contact, immediately flush eyes or skin with copious amounts of water for at least 15minutes while removing contaminated clothing and shoes; seek medical attention.

Ingestion

Drink milk / water and induce vomiting; seek medical attention.

Section 5 - Fire Fighting Measures

General Hazard

Cell is not flammable but internal organic material will burn if the cell is incinerated. Combustion products include, but are not limited to hydrogen fluoride, carbon monoxide and carbon dioxide.

Extinguishing Media

Use extinguishing media suitable for the materials that are burning.

Special Firefighting Instructions

If possible, remove cell(s) from fire fighting area. If heated above 130 , Cell(s) may explode/swell or leak.

Firefighting Equipment

Use NISH/MSHA approved full-face self-contained breathing apparatus(SCBA) with full protective gear.

Section 6 - Accidental Release Measures

Procedures of Personal Precautions

Put on adequate protective equipment. Do not breathing vapour.

Environmental precautions

Keep away from drains, surface-water, ground-water and soil.

Methods for Cleaning Up

Collect as much as possible in a clean container for disposal. Disposal according to local regulations.

On Land

Place material into suitable containers and call local fire/police department.

In Water

If possible, remove from water and call local fire/police department.

Section 7 - Handling and Storage

Handling

No special protective clothing required for handling individual cells.

Storage

Store away from sources of heat or ignition. Over high temperature will make the cell inflate, melt the separator, causing short circuit.

Storage area should be cool, dry, well ventilated, out of direct sunlight, away from metal or sharp edge, such as keys, pins, or wires.

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.

Eye/face protection

Not necessary under conditions of normal use.

Foot protection

Not necessary under conditions of normal use.

Gloves

Not necessary under conditions of normal use.

Section 9 - Physical and Chemical Properties

Appearance	Silvery-white, solid battery.
Odor	Odorless
Vapor Pressure(mmHg)	N/A
Vapor Density(air=1)	N/A
Boiling Point	N/A
Solubility in water	Insoluble
Specific Gravity	N/A
Density	N/A

Section 10 - Stability and Reactivity

Reactivity

None during normal operating or handling conditions.

Hazardous decomposition

None during normal operating conditions. If Cells are leaked, hydrogen fluoride, carbon monoxide and carbon dioxide may be released.

Incompatibilities

None during normal operation. Avoid exposure to heat, open flame and corrosives

Conditions to avoid

Don't short terminals and immerse in water or pour.

Don't heat or throw in fire and solder.

Don't attempt to crush or drop.

Don't put it in microwave oven, oven or pressure container.

Section 11 - Toxicological Information

This product does not elicit toxicological properties during routine handling and use.

Sensitization	No
Teratogenicity	No
Reproductive toxicity	No
Acute toxicity	No

If the cells are leaked through misuse or damage, discard immediately.

Internal components of cell are irritants and sensitizer.

Section 12 - Ecological Information

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

Methods of disposal

Lithium-ion Polymer battery contains no toxic metals, only naturally occurring trace elements. It is advisable to consult with local authorities as disposal regulations may vary dependent on location.

Dangers

Incinerating and disposing of the cell in fire are strictly prohibited, because it may cause rupture. Fully charged battery or only partially discharged batteries may cause fire or explosion when disposed improperly. Fully discharged the battery before disposal.

Section 14 - Transport Information

Li-ion Polymer Battery (EXC 401730) had passed the UN38.3 test and is classified as non-dangerous goods and also complies with the UN Recommendations on the Transport of Dangerous Goods; IATA Dangerous Goods regulations, and applicable U.S.DOT regulations for the safe transport of Li-ion Polymer Battery. The Li-ion Polymer Battery is transported according to the NEW PACKING INSTRUCTION PI 967 Section II of IATA DGR 66th Edition

The batteries are considered to be non-dangerous by the INTERNATIONAL MARITIME DANGEROUS GOODS regulation (IMDG). The Watt-hour rating of all batteries is not more than 100Wh. Each battery of the type is proven to meet the requirements of each test in the UN Manual of Tests and *Criteria, Part III, subsection 38.3. Number: DGCTL202004020006A

Section 15 - Regulatory Information

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

Section 16 - Additional 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

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MSDS Creation Date: JAN 03, 2025

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