



# Material Safety Data Sheet

**Name of Sample:** Rechargeable Li-Polymer Battery  
L21D2P31 3.87V 10000/10200mAh

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**Commissioner:** SCUD (FUJIAN) ELECTRONICS Co., Ltd.

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Shanghai Truron Testing Technology Co., Ltd.

Material Safety Data Sheet



**Section 1. IDENTIFICATION**

Name of goods	Rechargeable Li-Polymer Battery
Type/Mode	L21D2P31
Nominal Parameter:	3.87V
Nominal Capacity:	10000mAh
Manufacturer	SCUD (FUJIAN) ELECTRONICS Co., Ltd.
Manufacturer address	SCUD INDUSTRIAL PARK, MAIWEI ECONOMIC AND TECHNOLOGY DEVELOPMENT ZONE, FUZHOU, FUJIAN, CHINA 350015
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Date	Issue date: 20210625

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### Section 2. Hazards Identification

Explosive risk	This article does not belong to the explosion dangerous goods
Flammable risk	This article does not belong to the flammable material
Oxidation risk	This article does not belong to the oxidation of dangerous goods
Toxic risk	This article does not belong to the toxic dangerous goods
Radioactive risk	This article does not belong to the radiation of dangerous goods
Mordant risk	This article does not belong to the corrosion of dangerous goods
other risk	This article is Rechargeable lithium-ion battery, which belongs to the Lithium ion batteries(including lithium polymer batteries)

### Section3. Composition/Information on Ingredients

Chemical Composition	concentration ranges (%) (About)	CAS No.
Cobalt lithium dioxide	15-40	12190-79-3
Ethyl propionate	15-40	105-37-3
Copper foil	10-30	7440-50-8
Aluminum foil	10-30	7429-90-5
Graphite	5-25	7782-42-5
Ethylene Carbonate	0-15	96-49-1
Propylene Carbonate	0-15	108-32-7
Lithium Hexafluorophosphate(1-)	0-15	21324-40-3
Separator	0-5	9002-88-4

#### **Section 4. First aid measures**

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

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

Eye: 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.

#### **Section 5: Fire-Fighting Measures**

Extinguishing Media: Water or water mist, sand, fire blanket, dry powder or carbon dioxide fire extinguisher

Inappropriate extinguishing medium: None

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

#### **Section 6. Accidental release measures**

On-site: Place the material in a suitable container and alert the local police.

In water: When the battery pack is in water, there is a risk of slight electric shock; when electrolyzing water, hydrogen will be generated. Ventilation must be maintained to prevent hydrogen accumulation and explosion in closed space. If possible, remove the batteries or modules from the water and alert the local police. Despite being rechargeable, the battery has a limited life span, Replace when usage time between charges becomes short. Please offer all used batteries for recycling according with local guidelines and regulation. Do not throw in the trash.

#### **Section 7. Handling and storage**

##### **Precautions for safe handling**

##### **Advice on safe handling**

In case of rupture: Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Ensure adequate ventilation. Provide

extract ventilation to points where emissions occur. In case of insufficient ventilation, wear suitable respiratory equipment. Remove contaminated clothing and shoes. Take off contaminated clothing and wash before reuse. Avoid breathing dust/fume/gas/mist/vapors/spray. Avoid generation of dust.

**Conditions for safe storage, including any incompatibilities**

**Storage Conditions:**

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. Store locked up.

**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**

State	Solid
Odor	N/A
PH	N/A
Vapor pressure	N/A
Vapor density	N/A
Boiling point	N/A
Solubility in water	Insoluble
Specific gravity	N/A
Density	N/A

**Section 10. Stability and reactivity**

Reactivity	None
Stability	Good stability at standard temperature.
Notice	Avoid exposure to heat and open flame. Do not puncture, crush or incinerate.

**Section 11. Toxicological information**

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

**Section 12. Ecological information**

Proper use and disposal of batteries will not harm the environment. Dispose of used batteries away from water, rain and snow

**Section 13. Disposal consideration**

Product disposal recommendation: Observe local, state and federal laws and regulations.  
Packaging disposal recommendation: Be aware discarded batteries may cause fire, tape the battery terminals to insulate them. Don't disassembly the battery.

**Section 14. Transport Information**

In the case of transportation, confirm no leakage and no overspill from a container. Take in a cargo of them without falling, dropping and breakage. Prevent collapse of cargo piles and wet by rain. The container must be handled carefully. Do not give shocks that result in a mark of hitting on a cell. Handle with care and flammability hazard exists if the package is damaged.

Please refer to Section 7-HANDLING AND STORAGE also.

Codes and classifications according to:

International regulations for transport Air IATA-DGR : section IB OF PI965 and section II OF PI966/967

International regulations for transport Sea IMDG CODE: special provision 188

National regulations for transport land GB12268-2012

Marine pollutant(Y/N):N

The UN classification number : Class 9 3480&3481

Rated capacity of cell  $\leq$  20Wh

Rated capacity of battery  $\leq$  100Wh

Note: IATA: International Air Transport Association

IMDG: International Maritime Dangerous Goods

Organizations governing the transport of lithium batteries

Area	Method	Organization	Special Prrovision
International	Air	IATA, ICAO	Packing Instruction 965-967
International	Marine	IMO	SP188
U.S.A	Air.Rall.Road.Marine	DOT	49 CFR Section 173.185

However, since it corresponds to special provision section IB OF PI965 and section II OF PI966/967 of IATA-DGR 、 special provision 188 of IMDG CODE 、 GB12268-2012 of land regulation, this battery cell can be conveyed normally.

Production of MSDS proving UN manual of Tests and Criteria, part III, sub-section 38.3 is met on MSDS .

### **Section 15. Regulatory Information (non-mandatory)**

OSHA Hazard communication standard (29 CFR 1910.1200)

\_\_\_\_\_ Hazardous    Yes \_\_\_\_\_ Non-hazardous

### **Section 16. Other information**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text