

# Material Safety Data Sheet

according to 1907/2006/EC

**For Lithium-ion Rechargeable Cell  
Model: L1865 Series**

<b>Report No.</b>	<b>JYLN20240301MSDS05</b>	
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**UNION LITHPLUS ENERGY (LIAONING) CORP.**

## Material Safety Data Sheet

### SECTION 1: Identification of the substance/mixture and of the company /undertaking

#### 1.1. Product identifier

Lithium-ion rechargeable battery cell , L1865 Series

This series has the same chemical system and structural design.

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

No information available.

#### 1.3. Details of the supplier of the safety data sheet

Supplier: Lithplus

UNION LITHPLUS ENERGY(LIAONING) CORP.

No. 13, Guang Tong Road, Lishan District, Anshan, Liaoning, China

#### 1.4. Emergency telephone number

Emergency number: 0412-8772102

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Not classified

#### Adverse physicochemical, human health and environmental effects

To our knowledge, this product does not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety practice.

#### 2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP): None

Signal word (CLP): None

Hazard statements (CLP) : None

Precautionary statements (CLP) : None

EUH-statements: None

#### 2.3. Other hazards

No additional information available.

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

Description	CAS No.	EC number /ECHA list number	Conc.(%)	Classification according to Regulation(EC) No 1272/2008 (CLP)
Lithium nickel-cobalt- manganese oxide	182442-95-1		23-35	
Aluminum	7429-90-5	(EC-No.)231-072-3 (EC Index-No.)013-002- 00-1	3-8	Flam, Sol. 1, H228 Water-react. 2, H261
PVDF	24937-79-9	(EC-No.)607-458-6	0.2-0.6	Not classified
Graphite	7782-42-5	(EC-No.)231-955-3	13-20	Not classified
Copper	7440-50-8	(EC-No.)231-159-6	6-11	Not classified
SBR	9003-55-8	(EC-No.)618-370-2	0.4-1	Not classified
PE	9002-88-4	(EC-No.)618-339-3	0-1	Not classified
PP	9003-07-0	(EC-No.)618-352-4	0-1	Not classified
Lithium Hexafluorophosphate	21324-40-3	(EC-No.)244-334-7	1-3	Not classified
EC	96-49-1	(EC-No.)202-510-0	2-3	Not classified
Steel	7439-89-6	(EC-No.)215-168-2;231- 096-4	15-20	Not classified
Nickel	7440-02-0	(EC-No.)231-111-4 (EC Index-No.) 028-002- 00-7		Skin Sens. 1, H317 Carc. 2, H351 STOT RE 1, H372

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

**First-aid measures general:** If you feel unwell, seek medical advice (show directions for use or safety data sheet if possible).

**First-aid measures after eye contact:** Not an expected route of exposure. Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

**First-aid measures after ingestion:** Give at least 2 glasses of milk or water. Induce vomiting unless patient is unconscious. Call a physician.

**First-aid measures after skin contact:** Not expected to present a significant skin hazard under anticipated conditions of normal use. If the internal battery materials of an opened battery cell come into contact with skin, immediately flush with plenty of water or soap.

**First-aid measures after Inhalation:** Not an expected route of exposure. Remove from exposure and move to fresh air immediately. Use oxygen if available.

#### **4.2. Most important symptoms and effects, both acute and delayed**

No additional information available.

#### **4.3. Indication of any immediate medical attention and special treatment needed**

Treat symptomatically.

### **SECTION 5: Firefighting measures**

#### **5.1. Extinguishing media**

**Suitable extinguishing media:** Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable extinguishing media:** No information available.

#### **5.2. Special hazards arising from the substance or mixture**

**Hazardous decomposition products in case of fire:** Carbon monoxide, carbon dioxide, lithium oxide fumes.

#### **5.3. Advice for firefighters**

**Special Fire-Fighting Procedures:** Self-contained breathing apparatus. Complete protective clothing.

### **SECTION 6: Accidental release measures**

#### **6.1. Personal precautions, protective equipment and emergency procedures**

If the battery material is released, remove personnel from area until fumes dissipate. Avoid skin and eye contact or inhalation of vapors.

#### **6.2. Environmental precautions**

Avoid release to the environment.

#### **6.3. Methods and material for containment and cleaning up**

**Methods for cleaning up:** Provide maximum ventilation to clear out hazardous gases. Wipe it up with a cloth, and dispose of it in a plastic bag and put into a steel can. The preferred response is to leave the area and allow the batteries to cool and vapors to dissipate. Provide maximum ventilation. Remove spilled liquid with absorbent and incinerate.

#### **6.4. Reference to other sections**

For further information refer to section 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

**Precautions for safe handling:** The batteries 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.

### 7.2. Conditions for safe storage, including any incompatibilities

**Storage conditions:** 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.

### 7.3. Specific end use(s)

No additional information available.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

No additional information available.

DNEL values		Oral exposure		Dermal exposure		Inhalative exposure	
		Short term(acute)	Long term (chronic)	Short term(acute)	Long term (chronic)	Short term(acute)	Long term (chronic)
Consumer	Local	No data	No data	No data	No data	No data	No data
	Systemic	No data	No data	No data	No data	No data	No data
Worker	Local	No data	No data	No data	No data	No data	No data
	Systemic	No data	No data	No data	No data	No data	No data

PNEC values		
Compartment	Value	Note (s)
Freshwater	No data	No notes
Marine Water	No data	No notes
Marine water sediment	No data	No notes
Sewage Treatment Plant(STP)	No data	No notes
Intermittent release	No data	No notes
Secondary poisoning	No data	No notes

Soil	No data	No notes
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## 8.2. Exposure controls

**Respiratory Protection:** In case of battery venting, provide as much ventilation as possible. Avoid confined areas with venting batteries. 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 batteries: Respiratory Protection, Protective Gloves, Protective Clothing and safety glass with side shields.

**Environmental exposure controls:** Avoid release to the environment.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

**Nominal Voltage:** 3.6V.

**Rated Capacity:** 800-3600mAh.

**Appearance Characters:** cylindrical, with odorless solid battery.

**Chemical Uses:** Various.

Parameter	Value/Test method/Remarks
1.Physical state	Solid
2.Colour	Khaki
3.Odour, odour threshold	No data available
4.Melting point/freezing point	No data available
5.Boiling point or initial boiling point and boiling range	No data available
6.Flammability	Non flammable
7.Lower and upper explosion limit	Not applicable
8. Flash point	Not applicable
9. Auto-ignition temperature	Not applicable
10. Decomposition temperature	No data available
11.PH	No data available
12. Kinematic viscosity	Not applicable
13. Solubility in waterin other solvents	No

14. Partition coefficient n-octanol/water (log value)	No data available
15. Vapour pressure	No data available
16. Density and/or relative density	No data available
17. Relative vapour density	No data available
18. Particle characteristics	No data available

## 9.2. Other information

No additional information available.

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4. Conditions to avoid

Heating, mechanical abuse and electrical abuse.

### 10.5. Incompatible materials

Strong acid, Strong bases.

### 10.6. Hazardous decomposition products

Not applicable

## SECTION 11: Toxicological information

### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Not applicable

### 11.2. Information on other hazards

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-fibroid lung injury and membrane irritation.

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## **SECTION 12: Ecological information**

### **12.1. Toxicity**

Ecology – general: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

Acute aquatic toxicity : Not classified

Chronic aquatic toxicity: Not classified

### **12.2. Persistence and degradability**

No information available.

### **12.3. Bioaccumulative potential**

No information available.

### **12.4. Mobility in soil**

No information available.

### **12.5. Results of PBT and vPvB assessment**

No additional information available.

### **12.6. Endocrine disrupting properties**

No additional information available.

### **12.7. Other adverse effects**

No additional information available.

## **SECTION 13: Disposal considerations**

### **13.1. Waste treatment methods**

If batteries are still fully charged or only partially discharged, they can be considered a reactive hazardous waste because of significant amount of not creation, or unconsumed lithium remaining in the spent battery. The batteries 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**

### **14.1. UN number or ID number**

UN3480

### **14.2. UN proper shipping name**

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## LITHIUM ION BATTERIES

### 14.3. Transport hazard class(es)

CLASS 9

### 14.4. Packing group

PACKING INSTRUCTION 965, section IB

### 14.5. Environmental hazards

Dangerous for the environment: No

### 14.6. Special precautions for user

Regarding air transport, the following regulations are cited and considered:

- I) The International Civil Aviation Organization (ICAO) Technical Instructions.
- II) The International Air Transport Association (IATA) Dangerous Goods Regulations (65th Edition (Year 2024), PI965 - PI967),
- III) The International Maritime Dangerous Goods (IMDG) Code (Amendment 41-22) Special provision 188,
- IV) The US Hazardous Materials Regulation (HMR) pursuant to a final rule issued by RSPA (Part 49 CFR Sections 100-185),
- V) The Office of Hazardous Materials Safety within the US Department of Transportation's (DOT) Research and Special Programs Administration (RSPA), and
- VI) The UN Recommendations on the Transport of Dangerous Goods Model Regulations and the Manual of Tests and Criteria.

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

### 14.7. Maritime transport in bulk according to IMO instruments

Not applicable

## SECTION 15: Regulatory information

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

#### 15.1.1. EU-Regulations

Contains no substance on the REACH candidate list.

Contains no substance subject to REGULATION (EU) No 649/2012 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 4 July 2012 concerning the export and import of hazardous chemicals.

Substance(s) are not subject to Regulation (EC) No 850/2004 of the European Parliament and of the Council of 29 April 2004 on persistent organic pollutants and amending Directive 79/117/EEC.

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### **15.1.2. National regulations**

- «Dangerous Goods Regulation»
- «Recommendations on the Transport of Dangerous Goods Model Regulations»
- «International Maritime Dangerous Goods»
- «Technical Instructions for the Safe Transport of Dangerous Goods»
- «Classification and code of dangerous goods»
- «Occupational Safety and Health Act» (OSHA)
- «Toxic Substances Control Act» (TSCA)
- «Consumer Product Safety Act» (CPSA)
- «Federal Environmental Pollution Control Act» (FEPCA)
- «The Oil Pollution Act» (OPA)
- «Superfund Amendments and Reauthorization Act Title III (302/311/312/313)» (SARA)
- «Resource Conservation and Recovery Act» (RCRA)
- «Safety Drinking Water Act» (CWA)
- «California Proposition 65»
- «Code of Federal Regulations» (CFR)

### **15.2. Chemical safety assessment**

No chemical safety assessment has been carried out

## **SECTION 16: Other information**

This information has been compiled from sources considered to be dependable and is, to the best of our knowledge and belief, accurate and reliable as of the date compiled. However, no representation, warranty (either expressed or implied) or guarantee is made to the accuracy, reliability or completeness of the information contained herein.

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