


正本/ORIGINAL

# Design Report of Safety Data Sheet

<b>*Product Name:</b>	Li-ion Battery Module EQ4800-S
<b>*Applicant:</b>	FOXESS CO., LTD.
<b>Supplier:</b>	FOXESS CO., LTD.
<b>Importer</b>	FOXESS AUSTRALIA PTY LTD.
<b>*Composition of the product:</b>	Ferrous Lithium Phosphate(CAS: 15365-14-7): 38.8%; Carbon(CAS: 7782-42-5): 19.4%; Aluminum(CAS: 7429-90-5): 11.4%; Copper(CAS: 7440-50-8): 6.7%; <b>Details on the next page</b>
<b>Warranty of Design:</b>	Model Work Health and Safety Regulations 2024
<b>*Information materials:</b>	HGBZ2603EA1《Application》、P161503《Declaration of consistency of components of the sample submitted for inspection》、P161503《UN 38.3》、P161503-Product Picture
<b>Design Result of SDS please see next page.</b>	
<b>Designer:</b> 叶江波	<b>Auditor:</b> 江帆
<b>Approver:</b> 戎霄	
 <p>常州合規思遠產品安全技術服務有限公司                  Changzhou Hegui Siyuan Products Safety Technology Service Co., Ltd.</p>	

Notes: This SDS is valid before the revision of Model Work Health and Safety Regulations 2024.



正本/ORIGINAL

Contd. of Prev. page: Complete sample component information.

<b>*Composition of the product:</b>	Ferrous Lithium Phosphate(CAS: 15365-14-7): 38.8%; Carbon(CAS: 7782-42-5): 19.4%; Aluminum(CAS: 7429-90-5): 11.4%; Copper(CAS: 7440-50-8): 6.7%; Ethylene carbonate(CAS: 96-49-1): 5.6%; Dimethyl carbonate(CAS: 616-38-6): 5.6%; Ethyl methyl carbonate(CAS: 623-53-0): 4.6%; Lithium hexafluorophosphate(1-)(CAS: 21324-40-3): 2.3%; Polyethylene(CAS: 9002-88-4): 2.2%; else: 1.4%; Styrene-Butadiene Rubber(CAS: 9003-55-8): 0.8%; Polyvinylidene fluoride(CAS: 24937-79-9): 0.8%; Carbon black(CAS: 1333-86-4): 0.4%
-------------------------------------	---



正本/ORIGINAL

## Terms of the Using of the Report

1. According to the needs of the report, the company requires the commissioner to provide real and complete samples and information (see the report belt ★). The company does not assume any consequences caused by false, misleading, concealment, and major omissions due to the entrusted party. For example, when the chemical information submitted by the commissioner, the changes in authoritative databases and related policies affect the conclusion of this report, this report automatically fails. In this report, the data is only responsible for the commissioner's inspection samples. It is not applicable to products of the same batch, the same specifications or the same brand other than the test sample. , Correction and rationality of the process or process. The accuracy of the information of the sample component information shall be responsible for the commissioner.
2. The data source of this report is based on the relevant materials and information submitted by the client, the test results of international authoritative databases, laboratories and the current relevant knowledge of the company. We try our best to ensure the correctness of all information during the audit. However, due to the diversity of information sources and the limitations of the Company's knowledge, users of this report should make further judgments on the reasonableness of relevant information based on the purpose of use.
3. This report will be effective only after it is signed by the inspector, approver and stamped by our company.
4. Our company guarantees the objectivity and fairness of this report, and carries out confidentiality obligations on business secrets such as business information, technical documents and so on.
5. This report does not consider the differences between countries and operators.
6. The partly duplicating of this report is prohibited without the written approver.
7. The report is invalid when anything of the following happens-illegal transfer, embezzlement, imposture, modification or tampering in any media form. The inspection report is limited to the use of the commissioner. The client transfer the inspection report to any loss caused by any third party use. The company will not bear any responsibility.
8. If the entrusting party has objections to the inspection report, it shall submit a written objection to the company within 15 days from the date of receiving the report. If there is no written objection if the overdue does not propose a written objection, it shall be deemed to have no objection.
9. Due to force majeure, national legal policies, administrative mandatory behavior or judicial compulsory behavior, the inspection samples provided by the commissioner are damaged and lost, resulting in inspection reports that cannot be issued, or caused any losses and costs of the client, the company will not be liable for compensation.



## Safety Data Sheet

# Li-ion Battery Module EQ4800-S

Version: V2.0.1.1

Report No.: HGBZ2603EA11

Creation Date: 2026/03/16

Revision Date: -

\*According to Model Work Health and Safety Regulations 2024

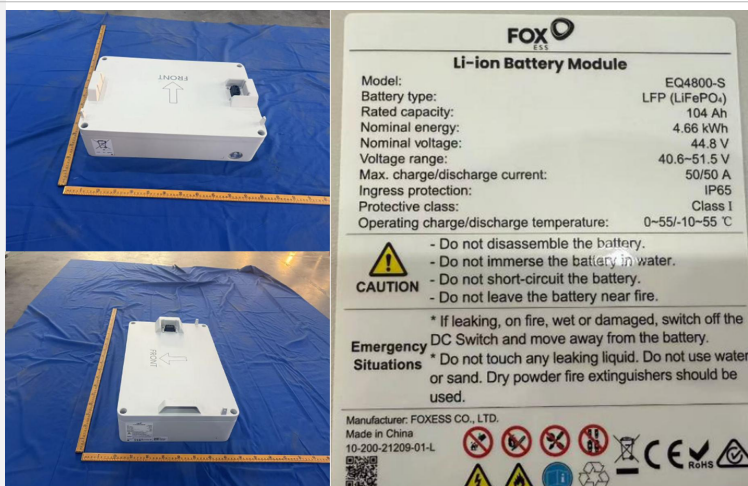


## Part 1: Identification

### Product identifier

Product Name	Li-ion Battery Module EQ4800-S
Product Model	EQ4800-S
CAS No.	Not applicable
EC No.	Not applicable
Molecular Formula	Not applicable

### Product Picture



### Recommended use of the chemical and restrictions on use

Relevant identified uses	The EQ4800-S is the battery module in the EQ4800-Lx Battery Svstem.x=2/3/4/5/6/7/8/9
Uses advised against	No special instructions.

### Details of manufacturer or importer

Applicant Name	FOXESS CO., LTD.
Applicant Address	No.939, Jinhai Third Road, New Airport Industry Area, Longwan District, Wenzhou, Zhejiang, China
Applicant Post Code	325025
Applicant Telephone	0510-68092998
Applicant Fax	-
Applicant E-mail	foxrd@fox-ess.com
Supplier Name	FOXESS CO., LTD.
Supplier Address	No.939, Jinhai Third Road, New Airport Industry Area, Longwan District, Wenzhou, Zhejiang, China
Supplier Post Code	325025
Supplier Telephone	0510-68092998
Supplier Fax	-

Supplier E-mail	foxrd@fox-ess.com
Importer Name	FOXESS AUSTRALIA PTY LTD.
Importer Address	53 Willow Avenue, springvale VIC 3171
Importer Post Code	3171
Importer Telephone	+61 1300 377 369
Importer Fax	-
Importer E-mail	service.au@fox-ess.com



## Emergency phone number

Emergency phone number	+61 1300 377 369
------------------------	------------------

## Part 2: Hazard(s) identification

### Classification of the hazardous chemical

The product meets the definition of "article". In the Globally Harmonized Chemical Classification and Labeling System (GHS), the "articles" defined by the US Occupational Safety and Health Administration "Hazard Communication Standard" (29 CFR 1910.1200) or similar definitions do not fall within the scope of this system. [Rev.11 (2025) Part 1.3.2.1.1]. According to Model Work Health and Safety Regulations 2024, not classified as a hazardous chemical.

### Label elements, including precautionary statements

Hazard pictograms	Not applicable
Signal word	Not applicable

### Hazard statements

Hazard statements	Not applicable
-------------------	----------------

### Precautionary statements

#### ◆ Prevention

Prevention	Not applicable
------------	----------------

#### ◆ Response

Response	Not applicable
----------	----------------

#### ◆ Storage

Storage	Not applicable
---------	----------------

#### ◆ Disposal

Disposal	Not applicable
----------	----------------

### Hazard description

#### ◆ Physical and chemical hazards

	When the outer enclosure and safety circuits have been compromised or have been significantly damaged, it is likely to contain substantial electrical charge and can cause injury or death if mishandled. Mechanical damage can lead to danger. Battery products exposed to high temperature conditions, may produce heat out of control, causing fire.
--	---

#### ◆ Health hazards

Inhaled	According to the material form, it is not the normal way of contacting.
Ingestion	Accidental ingestion of the product may be harmful to the health of the individual.
Skin Contact	No harm in general situation.

**Eye** This product may cause temporary discomfort following direct contact with the eye.

◆ Environmental hazards

Please refer to 12th chapter of SDS.

## Part 3: Composition and information on ingredients



### Substance/mixture

Mixture

Component	CAS No.	EC No.	Concentration (weight percent, %)
<b>Ferrous Lithium Phosphate</b>	15365-14-7	604-917-2	38.8
<b>Carbon</b>	7782-42-5	231-955-3	19.4
<b>Aluminum</b>	7429-90-5	231-072-3	11.4
<b>Copper</b>	7440-50-8	231-159-6	6.7
<b>Ethylene carbonate</b>	96-49-1	202-510-0	5.6
<b>Dimethyl carbonate</b>	616-38-6	210-478-4	5.6
<b>Ethyl methyl carbonate</b>	623-53-0	613-014-2	4.6
<b>Lithium hexafluorophosphate(1-)</b>	21324-40-3	244-334-7	2.3
<b>Polyethylene</b>	9002-88-4	618-339-3	2.2
<b>else</b>	-	-	1.4
<b>Styrene-Butadiene Rubber</b>	9003-55-8	618-370-2	0.8
<b>Polyvinylidene fluoride</b>	24937-79-9	607-458-6	0.8
<b>Carbon black</b>	1333-86-4	215-609-9	0.4

## Part 4: First aid measures

### Description of necessary first aid measures

<b>General advice</b>	Immediate medical attention is required. Show this safety data sheet (SDS) to the doctor in attendance.
<b>Eye contact</b>	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician if feel uncomfortable.
<b>Skin contact</b>	No harm in general situation. First aid is not needed.
<b>Ingestion</b>	Never give anything by mouth to an unconscious person. Call a physician immediately.
<b>Inhalation</b>	Move victim into fresh air. If breathing is difficult, give oxygen and consult a physician immediately.
<b>Protecting of first-aiders</b>	Ensure that medical personnel are aware of the substance involved. Take precautions to protect themselves and prevent spread of contamination.

### Symptoms caused by exposure

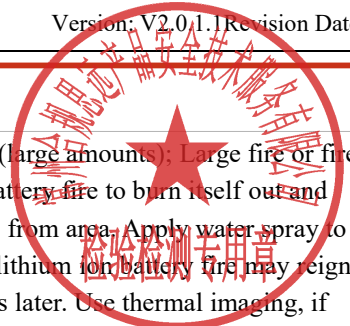
1 Please see section 11.

### Medical attention and special treatment

1 Treat symptomatically.

2 Symptoms may be delayed.

## Part 5: Fire-fighting measures



## Extinguishing media

Suitable extinguishing media	Small fire or fire involving small battery: water spray only (large amounts); Large fire or fire involving large battery or multiple small batteries: Allow battery fire to burn itself out and protect surroundings. Safely remove undamaged containers from area. Apply water spray to neighboring batteries to reduce the spread of the hazard. A lithium ion battery fire may reignite at any point after the initial fire is extinguished, up to weeks later. Use thermal imaging, if available, to continuously monitor the battery. Reignition can be accompanied by off-gassing of white smoke or electrical arcs or sparks that reignite with visible flames or fire.
Unsuitable extinguishing media	Small fire or fire involving small battery: Do not use dry chemical, CO <sub>2</sub> or Halon®. The use of salt water for firefighting is not recommended since it may increase production of hydrogen and hydrogen fluoride gas.

## Specific hazards arising from the chemical

1	Development of hazardous combustion gases or vapor possible in the event of fire.
2	May expand or decompose explosively when heated or involved in fire.

## Special protective equipment and precautions for firefighters

1	As in any fire, wear self-contained breathing apparatus (MSHA/NIOSH approved or equivalent) and full protective gear.
2	Fight fire from a safe distance, with adequate cover.
3	Prevent fire extinguishing water from contaminating surface water or the ground water system.

## Part 6: Accidental release measures

### Personal precautions, protective equipment and emergency procedures

1	Ensure adequate ventilation. Remove all sources of ignition. Take precautionary measures against static discharges.
2	Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.
3	Use personal protective equipment, do not breathe dust/fume.

### Environmental precautions

1	Prevent further leakage or spillage if safe to do so.
2	Discharge into the environment must be avoided.

### Methods and materials for containment and cleaning up

1	Keep leaks in a ventilated place.
2	Cut off the source of the leak as much as possible.
3	Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.
4	Isolation of contaminated areas and restrictions on access.
5	It is recommended that emergency personnel wear dust masks.
6	Collect the spill with a clean shovel and place it in a clean, dry, loosely closed container and move the container away from the leak.

## Part 7: Handling and storage

### Precautions for safe handling

1	Handling is performed in a well ventilated place.
2	Wear suitable protective equipment.
3	Avoid contact with skin and eyes.
4	Keep away from heat/sparks/open flames/ hot surfaces.

### Conditions for safe storage, including any incompatibilities



1	Keep containers tightly closed.
2	Keep containers in a dry, cool and well-ventilated place.
3	Keep away from heat/sparks/open flames/hot surfaces.
4	Store away from incompatible materials and foodstuff containers.

## Part 8: Exposure controls/personal protection

### Exposure control measures

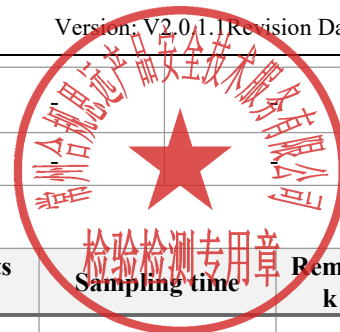
#### ◆ Occupational exposure limit values

Component	Country/Region	Limit value - Eight hours		Limit value - Short term	
		ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>
Carbon	Australia	-	3	-	-
	Canada - Ontario	-	2	-	-
	Canada - Québec	-	2	-	-
	New Zealand	-	3	-	-
	USA - ACGIH	-	2( respirable fraction)	-	-
	Belgium	-	2	-	-
Aluminum	Australia	-	5(powder, pyrophoric)	-	-
	Canada - Ontario	1	-	-	-
	Canada - Québec	-	10	-	-
	New Zealand	-	5(pyrophoric powder)	-	-
	USA - ACGIH	-	1( respirable fraction)	-	-
	Austria	-	10	-	20
Copper	Australia	-	0.2(fume, respirable fraction)	-	-
	Canada - Ontario	-	0.2(fume, respirable fraction)	-	-
	Canada - Québec	-	0.2(fume, respirable fraction)	-	-
	New Zealand	-	0.01	-	-
	USA - ACGIH	-	1(dust and mist)	-	-
	USA - ACGIH	-	0.2(fume)	-	-
Polyvinylidene fluoride	USA - ACGIH	-	2.5(as F)	-	-
	Permissible exposure standards for workers in the workplace	-	2.5 (as F)	-	5 (as F)
Carbon black	Australia	-	3	-	-
	Canada - Ontario	-	3	-	-
	Canada - Québec	-	3	-	-
	New Zealand	-	3	-	-

	USA - ACGIH	-	3(Inhalable fraction)	
	Belgium	-	3	

◆ Biological monitoring

Component	Standard	Biological monitoring index	Biological limits value	Sampling time	Remark
Lithium hexafluorophosphate(1-)	SCOEL(EU)	Fluorine/urine	8mg/L	end of shift	
Polyvinylidene fluoride	USA -ACGIH	Fluoride(Urine)	2mg/L	Prior to shift	
		Fluoride(Urine)	3mg/L	End of shift	



### Engineering controls

1	Ensure adequate ventilation, especially in confined areas.
2	Ensure that eyewash stations and safety showers are close to the workstation location.
3	Set up emergency exit and necessary risk-elimination area.
4	Handle in accordance with good industrial hygiene and safety practice.

### Individual protection measures

General requirement	No special requirements, please see the description below.
Eye protection	In general situation, eye protection is not needed. In the production process, when contacting with vapour or dust, tightly fitting safety goggles.
Hand protection	In general situation, hand protection is not needed.
Respiratory protection	In general situation, respiratory protection is not needed. If exposure limits are exceeded or if irritation or other symptoms are experienced, wear dust proof mask or gas defence mask.
Skin and body protection	In general situation, skin and body protection are not needed.

## Part 9: Physical and chemical properties

### Physical and chemical properties

Appearance	White cuboid
Odor	No special odor
Odor threshold	No information available
pH	No information available
Melting point/freezing point(°C)	No information available
Initial boiling point and boiling range(°C)	No information available
Flash point(Closed cup,°C)	Not applicable
Evaporation rate	Not applicable
Flammability	Not flammable
Upper/lower explosive limits[%(v/v)]	Upper limit: No information available; Lower limit: No information available
Vapor pressure	Not applicable
Vapor density(Air=1)	Not applicable
Relative density(Water=1)	No information available
Solubility	Insoluble in water
n-octanol/water partition coefficient	No information available
Auto-ignition temperature(°C)	No information available

<b>Decomposition temperature(°C)</b>	No information available		
<b>Viscosity</b>	Not applicable		
<b>Other safety information</b>			
<b>Biodurability or biopersistence</b>	No information available	<b>Shape and aspect ratio</b>	No information available
<b>Crystallinity</b>	No information available	<b>Size distribution</b>	No information available
<b>Dustiness</b>	No information available	<b>Specific heat value</b>	No information available
<b>Particle size</b>	No information available	<b>Surface area</b>	No information available
<b>Redox potential</b>	No information available	<b>Surface coating or chemistry</b>	No information available
<b>Release of invisible flammable vapours and gases</b>	No information available		
<b>Degree of aggregation or agglomeration, and dispersibility</b>	No information available		
<b>Saturated vapour concentration</b>	No information available		



## Part 10: Stability and reactivity

### Stability and reactivity

<b>Reactivity</b>	Contact with incompatible substances can cause decomposition or other chemical reactions.
<b>Chemical stability</b>	Stable under proper operation and storage conditions.
<b>Possibility of hazardous reactions</b>	Reacts with Hg severely and forms amalgam.
<b>Conditions to avoid</b>	Incompatible materials, heat, flame and spark.
<b>Incompatible materials</b>	Oxidants, halogen, interhalogen and mercury.
<b>Hazardous decomposition products</b>	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## Part 11: Toxicological information

### Acute toxicity

Component	LD <sub>50</sub> (oral)	LD <sub>50</sub> (dermal)	LC <sub>50</sub> (inhalation,4h)
<b>Dimethyl carbonate</b>	13000mg/kg(Rat)	> 5000mg/kg(Rabbit)	No information available
<b>Ethylene carbonate</b>	10000mg/kg(Rat)	> 3000mg/kg(Rabbit)	No information available
<b>Carbon black</b>	> 15400mg/kg(Rat)	> 3000mg/kg(Rabbit)	No information available

### Carcinogenicity

Component	List of carcinogens by the IARC Monographs	Report on Carcinogens by NTP
<b>Ferrous Lithium Phosphate</b>	Not Listed	Not Listed
<b>Carbon</b>	Not Listed	Not Listed
<b>Aluminum</b>	Not Listed	Not Listed
<b>Copper</b>	Not Listed	Not Listed
<b>Ethylene carbonate</b>	Not Listed	Not Listed
<b>Dimethyl carbonate</b>	Not Listed	Not Listed
<b>Ethyl methyl carbonate</b>	Not Listed	Not Listed
<b>Lithium hexafluorophosphate(1-)</b>	Not Listed	Not Listed

<b>Polyethylene</b>	Category 3	Not Listed
<b>else</b>	Not Listed	Not Listed
<b>Styrene-Butadiene Rubber</b>	Category 3	Not Listed
<b>Polyvinylidene fluoride</b>	Not Listed	Not Listed
<b>Carbon black</b>	Category 2B	Not Listed



## Others

Li-ion Battery Module EQ4800-S	
<b>Skin corrosion/irritation</b>	Based on available data, the classification criteria are not met
<b>Serious eye damage/irritation</b>	Based on available data, the classification criteria are not met
<b>Skin sensitization</b>	Based on available data, the classification criteria are not met
<b>Respiratory sensitization</b>	Based on available data, the classification criteria are not met
<b>Reproductive toxicity</b>	Based on available data, the classification criteria are not met
<b>STOT-single exposure</b>	Based on available data, the classification criteria are not met
<b>STOT-repeated exposure</b>	Based on available data, the classification criteria are not met
<b>Aspiration hazard</b>	Based on available data, the classification criteria are not met
<b>Germ cell mutagenicity</b>	Based on available data, the classification criteria are not met

## Part 12: Ecological information

### Ecotoxicity

#### ◆ Acute aquatic toxicity

Component	Fish	Crustaceans	Algae or other aquatic plants
<b>Copper</b>	LC <sub>50</sub> : 0.665mg/L (96h)(Fish)	EC <sub>50</sub> : 0.02mg/L (48h)(Daphnia magna)	ErC <sub>50</sub> : 7.9mg/L (96h)(Freshwater algae)
<b>Dimethyl carbonate</b>	LC <sub>50</sub> : ≥ 100mg/L (96h)(Fresh water fish)	EC <sub>50</sub> : > 100mg/L (48h)(Daphnia magna)	ErC <sub>50</sub> : > 57.29mg/L (72h)(Freshwater algae)
<b>Ethylene carbonate</b>	LC <sub>50</sub> : > 100mg/L (96h)(Fish)	EC <sub>50</sub> : > 100mg/L (48h)(Ceriodaphnia dubia)	ErC <sub>50</sub> : > 100mg/L (72h)(Algae)
<b>Ethyl methyl carbonate</b>	LC <sub>50</sub> : > 100mg/L (96h)(Fresh water fish)	EC <sub>50</sub> : > 100mg/L (48h)(Daphnia magna)	ErC <sub>50</sub> : > 62mg/L (72h)(Algae)
<b>Carbon</b>	LC <sub>50</sub> : 100mg/L (96h)(Fresh water fish)	No information available	No information available
<b>Ferrous Lithium Phosphate</b>	LC <sub>50</sub> : > 28mg/L (96h)(Fresh water fish)	EC <sub>50</sub> : > 28mg/L (48h)(Aquatic invertebrates)	ErC <sub>50</sub> : > 24mg/L (72h)(Algae)
<b>Aluminum</b>	LC <sub>50</sub> : 1.55mg/L (96h)(Fish)	No information available	No information available
<b>Carbon black</b>	LC <sub>50</sub> : > 1000mg/L (96h)(Fish)	No information available	ErC <sub>50</sub> : > 10000mg/L (72h)(Algae)
<b>Lithium hexafluorophosphate(1-)</b>	LC <sub>50</sub> : 68mg/L (96h)(Fresh water fish)	No information available	No information available

#### ◆ Chronic aquatic toxicity

Component	Fish	Crustaceans	Algae or other aquatic plants
<b>Lithium hexafluorophosphate(1-)</b>	NOEC: 3.1mg/L(Fish)	No information available	No information available

### Persistence and degradability

Component	Persistence (water/soil)	Persistence (air)
<b>Carbon</b>	Low	Low

Ethylene carbonate	High	High
Ethyl methyl carbonate	High	High
Polyethylene	Low	Low



### Bioaccumulative potential

Component	Bioaccumulative potential	Comments
Carbon	Low	Log Kow=0.5294
Ethylene carbonate	Low	Log Kow=-0.3388
Ethyl methyl carbonate	Low	Log Kow=0.7247
Polyethylene	Low	Log Kow=1.2658

### Mobility in soil

Component	log Koc	Remark	Data source
Ferrous Lithium Phosphate	-0.252		ECHA
Carbon	1.375		Chemwatch
Ethylene carbonate	1.08	20 °C	ECHA
Dimethyl carbonate	0.4624- 0.82282		ECHA
Ethyl methyl carbonate	0.199	40°C	ECHA
Polyethylene	1.155		Chemwatch

### Results of PBT and vPvB assessment

Component	Results of PBT and vPvB assessment [according to (EC) No 1907/2006 with amendment 2020/878]
Ferrous Lithium Phosphate	No information available
Carbon	Not applicable
Aluminum	Not applicable
Copper	Not applicable
Ethylene carbonate	Not PBT/vPvB
Dimethyl carbonate	Not PBT/vPvB
Ethyl methyl carbonate	Not PBT/vPvB
Lithium hexafluorophosphate(1-)	Not applicable
Polyethylene	No information available
else	No information available
Styrene-Butadiene Rubber	No information available
Polyvinylidene fluoride	No information available
Carbon black	Not PBT/vPvB

## Part 13: Disposal considerations


### Disposal methods

Waste chemicals	Before disposal should refer to the relevant national and local laws and regulation. Recommend the use of incineration disposal.
Contaminated packaging	Containers may still present chemical hazard when empty. Keep away from hot and ignition

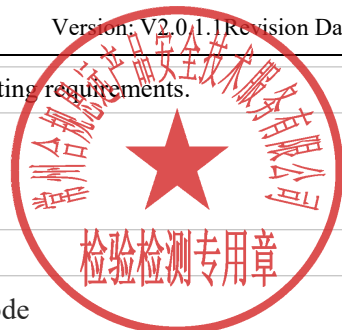
	source of fire. Return to supplier for recycling if possible.
<b>Disposal recommendations</b>	Refer to section waste chemicals and contaminated packaging.

## Part 14: Transport information



<b>Label</b>	
Transporting Label	
<b>IMDG-CODE</b>	
UN number	3480
UN proper shipping name	LITHIUM ION BATTERIES (including lithium ion polymer batteries)
Transport hazard class	9
Transport subsidiary hazard class	None
Packing group	Packagings shall conform to the packing group II performance level
Marine pollutant (Yes or no)	No
EmS No.	F-A, S-I
<b>ICAO/IATA-DGR</b>	
UN number	3480
UN proper shipping name	LITHIUM ION BATTERIES (including lithium ion polymer batteries)
Transport hazard class	9
Transport subsidiary hazard class	None
Packing group	Packagings shall conform to the packing group II performance level
<b>UN-ADR</b>	
UN number	3480
UN proper shipping name	LITHIUM ION BATTERIES(including lithiumion polymer batteries)
Transport hazard class	9
Transport subsidiary hazard class	None
Packing group	Packagings shall conform to the packing group II performance level
<b>ADG-CODE</b>	
UN number	3480
UN proper shipping name	LITHIUM ION BATTERIES (including lithium ion polymer batteries)
Transport hazard class	9
Transport subsidiary hazard class	None
Packing group	Packagings shall conform to the packing group II performance level
Environmental hazards	Not marine pollutant
Additional information	No information available
<b>Special precautions for user</b>	
	Transport vehicles should be equipped with the appropriate variety and quantity of fire equipment and emergency equipment leakage during transport. Before transport, should be preceded by checking whether container integrity, sealing. The transport unit must be

placarded and marked in accordance with relevant transporting requirements.



**Transport in bulk according to IMO instruments**

- ◆ Transport in bulk according to Annex II of MARPOL and the IBC code

No information available

- ◆ Transport in bulk in accordance with MARPOL Annex V and the IMSBC Code

No information available

- ◆ Transport in bulk in accordance with the IGC Code

No information available

**Hazchem or emergency action code**

Hazchem or emergency action code No information available

**Part 15: Regulatory information**

**International chemical inventory**

Component	A	B	C	D	E	F	G	H	I	J	K	L	M
<b>Ferrous Lithium Phosphate</b>	√	×	√	√	×	×	√	×	×	×	×	√	√
<b>Carbon</b>	√	√	√	√	√	√	√	√	×	√	√	√	√
<b>Aluminum</b>	√	√	√	√	√	√	√	√	×	√	√	√	√
<b>Copper</b>	√	√	√	√	√	√	√	√	×	√	√	√	√
<b>Ethylene carbonate</b>	√	√	√	√	√	√	√	√	√	×	×	√	√
<b>Dimethyl carbonate</b>	√	√	√	√	√	√	√	√	√	√	√	√	√
<b>Ethyl methyl carbonate</b>	√	×	√	×	×	√	√	×	√	√	×	√	√
<b>Lithium hexafluorophosphate(1-)</b>	√	√	√	×	×	√	√	√	×	√	×	√	√
<b>Polyethylene</b>	√	×	√	√	√	√	√	√	√	√	√	√	√
<b>else</b>	×	×	×	×	×	×	×	×	×	×	×	×	×
<b>Styrene-Butadiene Rubber</b>	√	×	√	√	√	√	√	√	√	√	√	√	√
<b>Polyvinylidene fluoride</b>	√	×	√	√	√	√	√	√	√	√	×	√	√
<b>Carbon black</b>	√	√	√	√	√	√	√	√	×	√	√	√	√

- 【A】 China Inventory of Existing Chemical Substances(IECSC)
- 【B】 European Inventory of Existing Commercial Chemical Substances(EC inventory)
- 【C】 United States Toxic Substances Control Act Inventory(TSCA)
- 【D】 Canadian Domestic Substances List(DSL)
- 【E】 New Zealand Inventory of Chemicals(NZIoC)
- 【F】 Philippines Inventory of Chemicals and Chemical Substances(PICCS)
- 【G】 Korea Existing Chemicals Inventory(KECL)
- 【H】 Australian. Inventory of Industrial Chemical (AIICS)
- 【I】 Japan Inventory of Existing & New Chemical Substances(ENCS)
- 【J】 Thailand Existing Chemicals Inventory(TECI)
- 【K】 Mexico National Inventory of Chemical Substances(INSQ)
- 【L】 Russia Inventory of Existing Substances(DRAFT)
- 【M】 Inventory of Existing Chemical Substances in Taiwan, China(TCSI)

**List of Chemical Substances under International Conventions**

Component	A	B	C
Ferrous Lithium Phosphate	×	×	
Carbon	×	×	
Aluminum	×	×	
Copper	×	×	×
Ethylene carbonate	×	×	×
Dimethyl carbonate	×	×	×
Ethyl methyl carbonate	×	×	×
Lithium hexafluorophosphate(1-)	×	×	×
Polyethylene	×	×	×
else	×	×	×
Styrene-Butadiene Rubber	×	×	×
Polyvinylidene fluoride	×	×	×
Carbon black	×	×	×

【A】 The Montreal Protocol on Substances that Deplete the Ozone Layer

【B】 Stockholm Convention on Persistent Organic Pollutants (POPs)

【C】 Rotterdam Convention on the prior informed consent procedure for certain hazardous chemicals and pesticides in international trade

Note:

“√” Indicates that the substance included in the regulations.

“×” No data or not included in the regulations.

## Part 16: Other information

### Information on revision

Creation Date	2026/03/16
Revision Date	-
Reason for revision	-

### Reference

- 【1】 IPCS: The International Chemical Safety Cards (ICSC), website: <http://www.ilo.org/dyn/icsc/showcard.home>.
- 【2】 IARC, website: <http://www.iarc.fr/>.
- 【3】 OECD: The Global Portal to Information on Chemical Substances, website: <https://www.echemportal.org/echemportal/>.
- 【4】 CAMEO Chemicals, website: <http://cameochemicals.noaa.gov/search/simple>.
- 【5】 NLM: ChemIDplus, website: <http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp>.
- 【6】 EPA: Integrated Risk Information System, website: <http://cfpub.epa.gov/iris/>.
- 【7】 U.S. Department of Transportation: ERG, website: <http://www.phmsa.dot.gov/hazmat/library/erg>.
- 【8】 Germany GESTIS-database on hazard substance, website: <http://gestis-en.itrust.de/>.

### Abbreviations and acronyms

CAS	Chemical Abstracts Service	UN	The United Nations
PC-STEL	Short term exposure limit	OECD	Organization for Economic Co-operation and Development
PC-TWA	Time Weighted Average	IMDG-CODE	International Maritime Dangerous Goods CODE
MAC	Maximum Allowable Concentration	IARC	International Agency for Research on Cancer
DNEL	Derived No Effect Level	ICAO	International Civil Aviation Organization
PNEC	Predicted No Effect Concentration	IATA	International Air Transportation Association
NOEC	No Observed Effect Concentration	ACGIH	American Conference of Governmental Industrial Hygienists
LC <sub>50</sub>	Lethal Concentration 50%	NFPA	National Fire Protection Association

LD <sub>50</sub>	Lethal Dose 50%	NTP	National Toxicology Program
EC <sub>50</sub>	Effective Concentration 50%	PBT	Persistent, Bioaccumulative, Toxic
EC <sub>X</sub>	Effective Concentration X%	vPvB	very Persistent, very Bioaccumulative
P <sub>OW</sub>	Partition coefficient Octanol: Water	CMR	Carcinogens, mutagens or substances toxic to reproduction
BCF	Bioconcentration factor	RPE	Respiratory Protective Equipment
ED	Endocrine disruptor	G1	Carcinogenic to humans
G2A	Probably carcinogenic to humans	G2B	Possibly carcinogenic to humans
G3	Not yet classified as carcinogenic to humans	G4	Probably not carcinogenic to humans



## Disclaimer

This Safety Data Sheet (SDS) was prepared according to Model Work Health and Safety Regulations 2024. The data included was derived from international authoritative database and provided by the enterprise. Other information was based on the present state of our knowledge. We try to ensure the correctness of all information. However, due to the diversity of information sources and the limitations of our knowledge, this document is only for user's reference. Users should make their independent judgment of suitability of this information for their particular purposes. We do not assume responsibility for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product.