

## **SAFETY DATA SHEET**

### **1. PRODUCT AND COMPANY IDENTIFICATION**

#### **A. PRODUCT IDENTIFICATION**

Lithium ion Rechargeable Battery Pack

#### **B. Battery Product Matrix**

##### **Customer (Microsoft)**

<b><u>Battery Name</u></b>	<b><u>Model Name</u></b>	<b><u>Dynapack WJ P/N</u></b>	<b><u>Cell Applied</u></b>	<b><u>Number of cells/ per pack</u></b>	<b><u>Battery Rated</u></b>
Mahimahi (Louise)	DYNM04	DAK226138-W0G1G02HA DAK226138-W0G1G01HT	ATL 4642A1 (PY)	4pcs	46.52Wh

Notice 1: CL – Cylindrical type; PM – Prismatic type; PY – Polymer type

Notice 2:

- \* Lithium ion cells and batteries may be offered for transport if they meet the following:
- \* for cells, the Watt-hour rating is not more than 20 Wh;
- \* for batteries, Watt-hour rating is not more than 100 Wh. The Watt-hour rating must be marked on the outside of the battery case except those manufactured before 1 January 2009 which may be transported without this marking until 31 December 2010;

#### **MANUFACTURER**

Headquarter

Dynapack International Technology Corporation.

13F, No. 188, Wenhe Road, Guishan District, Taoyuan City, 333, Taiwan

TEL : 886-3-3963399

Http://www.dynapack.com.tw

Dynapack electronics Technology (Suzhou) Co. Ltd

Wujiang(WJ) Factory

No.8 Hua-Gang Road, Wujiang Economic and Technological Development Zone, Suzhou city, Jiang Su. PRC ZIP: 215200

Tel:86-512-63408688

#### **EMERGENCY CONTACT**

1+800-424-9300

#### **OUSIDE THE UNITED STATES**

1+703-527-3887

## 2. Hazards Identification

Hazard classification:

The product is not classified for GHS. The batteries are defined as "articles", they are exempt from the requirements of the Hazard Communication Standard.

Primary routes of entry: Skin contact. Skin absorption, eye contact, inhalation and ingestion: NO

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

According to the OSHA Hazard Communication Standard (29 CFR 1910.1200) this product is not classified as hazardous.

## 3. Composition/information on ingredients

Composition

CAS number: Not specified (A-1 and A-2):

A-1. Cases: Plastic or Metal Not dangerous

A-2. Printed Circuit Board Assembly Not dangerous

A-3. Lithium Ion Cell:

				CAS No.
Aluminum	2%	-	10%	7429-90-5
Metal Oxide (proprietary)	20%	-	50%	12190-79-3
Polyvinylidene fluoride (PVDF)	0%	-	5%	24937-79-9
Copper	2%	-	10%	7440-50-8
Diethyl Carbonate	0%	-	15%	105-58-8
Electrolyte (proprietary)	10%	-	20%	Main Component: 96-49-1, 623-53-0, 108-32-7

## 4. First Aid Measures

**IF EXPOSURE TO INTERNAL MATERIALS WITHIN CELL DUE TO DAMAGED OUTER CASING , THE FOLLOWING ACTIONS ARE RECOMMENDED.**

Inhalation: Leave area immediately and seek medical attention.

Eye contact: Rinse eyes with water for 15 minutes and seek medical attention.

Skin contact: Wash area thoroughly with soap and water and seek medical attention.

Ingestion: Drink milk/water and induce vomiting; seek medical attention

## 5. Fire Fighting Measures

Extinguishing Media: Use extinguishing media suitable for the materials that are burning. Use metal fire extinction powder or dry sand if only few cells are involved.

Firefighting Equipment: Use NIOSH/MSHA approved full-face self-contained breathing

apparatus ( SCBA) with full protective gear.

## 6. Accidental Release Measures

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

## 7. Handling and Storage

### Handling:

Do not expose the battery to excessive physical shock or vibration. Short-circuiting should be avoided. However, accidental short-circuiting for a few seconds will not seriously affect the battery. Prolonged short circuits will cause the battery to rapidly lose energy, could generate enough heat to burn skin. Sources of short circuits include jumbled batteries in bulk containers, coins, metal jewelry, metal covered tables, or metal belts used for assembly of batteries in devices. To minimize risk of short-circuiting, the protective case supplied with the battery should be used to cover the terminals when transporting or storing the battery. Do not disassemble or deform the battery. Should an individual cell within a battery become ruptured, do not allow contact with water.

### Storage:

The lithium ion battery should be between 25% and 75% of full charge when stored for a long period of time. Store in a cool, dry, well ventilated area. And temperature above 100 degrees Celsius can result in loss of battery performance, leakage, or rust. Do not expose the battery to open flames.

## 8. Exposure Controls / Personal Protection

Engineering Controls : Keep away from heat and open flame. Store in a cool dry place.

### Personal Protection :

Respirator : Not required during normal operations. SCBA required in the event of a fire.

Eye/Face Protection : Not required beyond safety practices of employer.

Gloves : Not required for handling of battery

Foot Protection: Steel toed shoes recommended for large container handling.

## 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

## 10. Stability and Reactivity

Reactivity: None

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

Conditions To Avoid: Avoid exposure to heat and open flame. Don not puncture, crush or incinerate.

## 11. Toxicological Information

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

## 12. Ecological Information

Lithium ion battery pack can be disposable in accordance with appropriate federal, state and local regulations.

## 13. Disposal Considerations

Recommended methods for safe and environmentally preferred disposal:

Product(waste from residues)

Do not throw out a used battery. Recycle it through the recycling company.

Contaminated packaging

Neither a container nor packing is contaminated during normal use. When internal materials leaked from a battery contaminates, dispose as industrial wastes subject to special control.

## 14. Transport Information

With regard to air transport, the following regulations are cited and considered:

- The International Civil Aviation Organization (ICAO) Technical Instructions (2021-2022 Edition)
- The International Air Transport Association (IATA) Dangerous Goods Regulations (63<sup>rd</sup> Edition, 2022) Package Instruction Section IB of 965.
- The International Maritime Dangerous Goods (IMDG 40-20) Code (2020 Edition), Special Provision 188.
- Regulations concerning road transportation of dangerous goods (JT/T617). Special Provision 188.
- The US Hazardous Materials Regulation (HMR) pursuant to a final rule issued by RSPA (Part 49 CFR Sections 100-185),
- The Office of Hazardous Materials Safety within the US Department of Transportation's (DOT) Research and Special Programs Administration (RSPA), and
- The UN Recommendations on the Transport of Dangerous Goods Model Regulations and the Manual of Tests and Criteria.

Our products are properly classified, described, packaged, marked, and labeled, and are in proper condition for transportation according to all the applicable international and national governmental regulations, not limited to the above mentioned. We further certify that the enclosed products have been tested and fulfilled the requirements and conditions in accordance with UN Recommendations 38.3 (T1-T8) on the Transport of Dangerous Goods Model Regulations.

Lithium ion batteries only transport by air in accordance with PI965 at a state of charge (SOC) not to exceed 30 percent of rated design capacity.

UN# for shipment 3480, Haz-Mat class is 9, Proper DOT shipping name is Lithium ion batteries. Packing group refer to PI965 Section IB.

## 15. Regulatory Information

OSHA Hazard communication standard (29 CFR 1910.1200)

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

## 16. Other information -- UN Test Result

There is no hazard in accordance with the UN recommendations tests (Manual of Tests and Criteria , Part III , sub-section 38.3 ). This product passed 1.2 M drop test and comply with UN 38.3.

No	ITEMS	RESULT	REMARKS
1	Altitude Simulation	Pass	

2	Thermal Test	Pass	
3	Vibration	Pass	
4	Shock	Pass	
5	External Short Circuit	Pass	
6	Impact	Pass	For cell only
7	Overcharge	Pass	
8	Forced discharge	Pass	

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# SAFETY DATA SHEET

Date of issue 12-01-2022

Canada/English

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## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

### Product identifier

Product Name Rechargeable Lithium-ion Polymer Battery MQ20

### Other means of identification

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

Recommended Use LITHIUM ION BATTERIES

Uses advised against No information available

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

Initial supplier identifier Sunwoda Electronic Co., Ltd.

Address Floor 1,A,B,D District of Floor 2 and Floor 3 to 9 of Comprehensive Building, No.2 Yihe Road, Shilong Community, Shiyan Street, Bao'an District, Shenzhen City, Guangdong Province, P.R. China

Telephone +86-13823288548

E-mail xiangjing@sunwoda.com

### Emergency telephone number

Company Emergency Phone Number +86-13823288548

## 2. HAZARDS IDENTIFICATION

### Classification

This is a battery. In case of rupture:

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Carcinogenicity	Category 2
Specific target organ toxicity (repeated exposure)	Category 1

### GHS Label elements, including precautionary statements

#### Danger

#### Hazard statements

This is a battery. In case of rupture:.

Causes skin irritation  
Causes serious eye irritation  
Suspected of causing cancer

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Causes damage to organs through prolonged or repeated exposure



**Precautionary Statements - Prevention**

Obtain special instructions before use  
Do not handle until all safety precautions have been read and understood  
Wear protective gloves/protective clothing/eye protection/face protection  
Wash face, hands and any exposed skin thoroughly after handling  
Do not breathe dust/fume/gas/mist/vapors/spray  
Do not eat, drink or smoke when using this product

**Precautionary Statements - Response**

IF exposed or concerned: Get medical advice/attention  
Specific treatment (see supplemental first aid instructions on this label)

**Eyes**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
If eye irritation persists: Get medical advice/attention

**Skin**

IF ON SKIN: Wash with plenty of water and soap  
If skin irritation occurs: Get medical advice/attention  
Take off contaminated clothing and wash it before reuse

**Precautionary Statements - Storage**

Store locked up

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Other information**

Very toxic to aquatic life with long lasting effects

**Unknown acute toxicity** 30.9 % of the mixture consists of ingredient(s) of unknown toxicity

30.9 % of the mixture consists of ingredient(s) of unknown acute oral toxicity

30.9 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity

30.9 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)

30.9 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)

30.9 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

**Substance**

Not applicable.

**Mixture**

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Chemical name	CAS-No	Percent(%) Max	Hazardous Material Information Review Act registry number (HMIRA registry #)	Date HMIRA filed and date exemption granted (if applicable)
Lithium Cobalt Oxide (CoLiO <sub>2</sub> )	12190-79-3	27.8%	-	-
Ethyl propionate	105-37-3	24.0%	-	-
Copper	7440-50-8	17.0%	-	-
Aluminum	7429-90-5	14.5%	-	-
Graphite	7782-42-5	10.5%	-	-
Ethylene carbonate	96-49-1	1.6%	-	-
Propylene carbonate	108-32-7	2.3%	-	-
Phosphate(1-), hexafluoro-, lithium	21324-40-3	1.8%	-	-
Polyethylene	9002-88-4	0.5%	-	-

## 4. FIRST AID MEASURES

### First aid measures

<b>General advice</b>	First aid is upon rupture of sealed battery. IF exposed or concerned: Get medical advice/attention. Show this safety data sheet to the doctor in attendance.
<b>Inhalation</b>	Remove to fresh air. Get medical attention immediately if symptoms occur.
<b>Eye contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists. Do not rub affected area.
<b>Skin contact</b>	Wash off immediately with soap and plenty of water for at least 15 minutes. Get medical attention if irritation develops and persists.
<b>Ingestion</b>	Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Call a physician.
<b>Self-protection of the first aider</b>	Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see section 8).

### Most important symptoms and effects, both acute and delayed

**Symptoms** Burning sensation.

### Indication of any immediate medical attention and special treatment needed

**Note to physicians** Treat symptomatically.

## 5. FIRE-FIGHTING MEASURES

<b>Suitable Extinguishing Media</b>	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
<b>Unsuitable extinguishing media</b>	CAUTION: Use of water spray when fighting fire may be inefficient.
<b>Specific hazards arising from the chemical</b>	No information available.
<b>Hazardous Combustion Products</b>	Carbon oxides.

### **Explosion Data**

**Sensitivity to Mechanical Impact** None.  
**Sensitivity to Static Discharge** None.

**Special protective equipment for fire-fighters** Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

**Personal precautions** Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas.

**Other Information** Refer to protective measures listed in Sections 7 and 8.

### Environmental precautions

**Environmental precautions** Prevent further leakage or spillage if safe to do so.

### Methods and material for containment and cleaning up

**Methods for containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Pick up and transfer to properly labeled containers.

**Prevention of secondary hazards** Clean contaminated objects and areas thoroughly observing environmental regulations.

## 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. Ensure adequate ventilation. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse.

### Conditions for safe storage, including any incompatibilities

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

**Exposure Limits** The following ingredients are the only ingredients of the product above the cut-off level (or level that contributes to the hazard classification of the mixture) which have an exposure limit applicable in the region for which this safety data sheet is intended or other recommended limit. At this time, the other relevant constituents have no known exposure limits from the sources listed here.

Chemical name	Alberta	British Columbia	Ontario TWAEV	Quebec
Lithium Cobalt Oxide (CoLiO <sub>2</sub> ) 12190-79-3	TWA: 0.02 mg/m <sup>3</sup>	TWA: 0.02 mg/m <sup>3</sup>	TWA: 0.02 mg/m <sup>3</sup>	TWA: 0.02 mg/m <sup>3</sup>
Graphite 7782-42-5	TWA: 2 mg/m <sup>3</sup>	TWA: 2 mg/m <sup>3</sup>	TWA: 2 mg/m <sup>3</sup>	TWA: 2 mg/m <sup>3</sup>

Aluminum foil 7429-90-5	TWA: 10 mg/m <sup>3</sup> TWA: 5 mg/m <sup>3</sup>	TWA: 1.0 mg/m <sup>3</sup>	TWA: 1 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup> TWA: 5 mg/m <sup>3</sup>
Copper 7440-50-8	TWA: 0.2 mg/m <sup>3</sup> TWA: 1 mg/m <sup>3</sup>	TWA: 1 mg/m <sup>3</sup> TWA: 0.2 mg/m <sup>3</sup>	TWA: 0.2 mg/m <sup>3</sup> TWA: 1 mg/m <sup>3</sup>	TWA: 0.2 mg/m <sup>3</sup> TWA: 1 mg/m <sup>3</sup>

**Other Exposure Guidelines** Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d962 (11th Cir., 1992).

**Appropriate engineering controls**

**Engineering controls** Showers  
Eyewash stations  
Ventilation systems.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection** If splashes are likely to occur, wear safety glasses with side-shields.

**Hand protection** Wear suitable gloves. Impervious gloves.

**Skin and body protection** Wear suitable protective clothing. Long sleeved clothing.

**Respiratory protection** No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

**General hygiene considerations** Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product. Wear suitable gloves and eye/face protection. Avoid contact with skin, eyes or clothing.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**Physical and Chemical Properties**

**Physical state** Solid  
**Appearance** No information available  
**Odor** No information available  
**Color** No information available  
**Odor Threshold** No information available

<b><u>Property</u></b>	<b><u>Values</u></b>	<b><u>Remarks Method</u></b>
<b>pH</b>	No data available	None known
<b>Melting / freezing point</b>	No data available	None known
<b>Boiling point / boiling range</b>	No data available	None known
<b>Flash Point</b>	No data available	None known
<b>Evaporation Rate</b>	No data available	None known
<b>Flammability (solid, gas)</b>	No data available	None known
<b>Flammability Limit in Air</b>		None known
<b>Upper flammability limit</b>	No data available	
<b>Lower flammability limit</b>	No data available	
<b>Vapor pressure</b>	No data available	None known
<b>Vapor density</b>	No data available	None known
<b>Relative density</b>	No data available	None known
<b>Water Solubility</b>	Insoluble in water	
<b>Solubility(ies)</b>	No data available	None known
<b>Partition coefficient: n-octanol/water</b>	0	

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<b>Autoignition temperature</b>	No data available	None known
<b>Decomposition temperature</b>	No data available	
<b>Kinematic viscosity</b>	No data available	
<b>Dynamic viscosity</b>		
<b>Explosive properties</b>	No information available.	
<b>Oxidizing properties</b>	No information available.	

**Other Information**

<b>Softening Point</b>	No information available
<b>Molecular Weight</b>	No information available
<b>VOC Content (%)</b>	No information available
<b>Liquid Density</b>	No information available
<b>Bulk Density</b>	No information available
<b>Particle Size</b>	No information available
<b>Particle Size Distribution</b>	No information available

**10. STABILITY AND REACTIVITY**

<b>Reactivity</b>	No information available.
<b>Chemical stability</b>	Stable under normal conditions.
<b>Possibility of Hazardous Reactions</b>	None under normal processing.
<b>Hazardous Polymerization</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	None known based on information supplied.
<b>Incompatible materials</b>	Strong acids. Strong bases. Strong oxidizing agents.
<b>Hazardous Decomposition Products</b>	Carbonoxides.

**11. TOXICOLOGICAL INFORMATION**

**Information on likely routes of exposure**

<b>Product Information</b>	Product does not present an acute toxicity hazard based on known or supplied information In case of rupture:
<b>Inhalation</b>	Specific test data for the substance or mixture is not available. May cause irritation of respiratory tract.
<b>Eye contact</b>	Specific test data for the substance or mixture is not available. Causes serious eye irritation. (based on components). Irritating to eyes.
<b>Skin contact</b>	Specific test data for the substance or mixture is not available. Causes skin irritation. (based on components).
<b>Ingestion</b>	Specific test data for the substance or mixture is not available. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

**Information on toxicological effects**

<b>Symptoms</b>	Redness. May cause redness and tearing of the eyes.
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**Numerical measures of toxicity**

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## Acute Toxicity

The following values are calculated based on chapter 3.1 of the GHS document .

**ATEmix (oral)** 12,452.00 mg/kg

**ATEmix (dermal)** 9,132.00 mg/kg

**Unknown acute toxicity** 30.9 % of the mixture consists of ingredient(s) of unknown toxicity  
30.9 % of the mixture consists of ingredient(s) of unknown acute oral toxicity  
30.9 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity  
30.9 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)  
30.9 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)  
30.9 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

## Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Propylene carbonate	= 29000 mg/kg ( Rat )	> 20 mL/kg ( Rabbit )	-

## Delayed and immediate effects as well as chronic effects from short and long-term exposure

**Skin corrosion/irritation** Classification based on data available for ingredients. Irritating to skin.  
**Serious eye damage/eye irritation** Classification based on data available for ingredients. Irritating to eyes.  
**Respiratory or skin sensitization** No information available.  
**Germ cell mutagenicity** No information available.  
**Carcinogenicity** Classification based on data available for ingredients. Contains a known or suspected carcinogen.

## Legend

**ACGIH (American Conference of Governmental Industrial Hygienists)**

A3 - Animal Carcinogen

**IARC (International Agency for Research on Cancer)**

Group 2B - Possibly Carcinogenic to Humans

**NTP (National Toxicology Program)**

Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen

**OSHA (Occupational Safety and Health Administration of the US Department of Labor)**

X - Present

**Reproductive toxicity** No information available.  
**STOT - single exposure** No information available.  
**STOT - repeated exposure** Causes damage to organs through prolonged or repeated exposure.  
**Aspiration hazard** No information available.

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity** Very toxic to aquatic life with long lasting effects.

Chemical name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Copper foil	96h EC50: 0.031 - 0.054 mg/L	96h LC50: 0.0068 - 0.0156 mg/L (Pimephales)	-	48h EC50: = 0.03 mg/L

	(Pseudokirchneriella subcapitata) 72h EC50: 0.0426 - 0.0535 mg/L (Pseudokirchneriella subcapitata)	promelas) 96h LC50: = 1.25 mg/L (Lepomis macrochirus) 96h LC50: = 0.052 mg/L (Oncorhynchus mykiss) 96h LC50: = 0.2 mg/L (Pimephales promelas) 96h LC50: < 0.3 mg/L (Pimephales promelas) 96h LC50: = 0.112 mg/L (Poecilia reticulata) 96h LC50: = 0.3 mg/L (Cyprinus carpio) 96h LC50: = 0.8 mg/L (Cyprinus carpio)		
Propylene carbonate	72h EC50: > 500 mg/L (Desmodesmus subspicatus)	96h LC50: > 1000 mg/L (Cyprinus carpio) 96h LC50: = 5300 mg/L (Leuciscus idus)	EC50 > 10000 mg/L 17 h	48h EC50: > 500 mg/L

**Persistence and Degradability** No information available.

**Bioaccumulation**

#### Component Information

Chemical name	Log Pow
Propylene carbonate	0.48

**Mobility** No information available.

**Other adverse effects** No information available.

### 13. DISPOSAL CONSIDERATIONS

#### Waste treatment methods

**Waste from residues/unused products** Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

**Contaminated packaging** Do not reuse empty containers.

### 14. TRANSPORT INFORMATION

**Note:** The transportation of primary lithium cells and batteries is regulated by the International Civil Aviation Organization, International Air Transport Association, International Maritime Dangerous Goods Code and the US Department of Transportation. The batteries must meet the following criteria for shipment: 1. Air shipments must meet the requirements listed in Special Provision A45 of the International Air Transport Association Dangerous Goods Regulations. 2. Meet the requirements for the US Department of Transportation listed in 49 CFR 173.185. 3. The transport of primary lithium batteries is prohibited aboard passenger aircraft. Refer to the Federal Register December 15, 2004 (Hazardous Materials; Prohibited on the Transportation of Primary Lithium Batteries and Cells Aboard Passenger Aircraft; Final Rule) Lithium batteries shipped as "Lithium batteries", "Lithium batteries packed with equipment", or "Lithium batteries contained in equipment" may not be classified as "Dangerous Goods" when shipped in accordance with "special provision A45 of IATA-DGR" or "special provision 188 of IMO-IMDG Code"

<b><u>TDG</u></b>	Not regulated
<b><u>DOT</u></b>	NOT REGULATED
<b>Proper Shipping Name</b>	NON-REGULATED
<b>Hazard Class</b>	N/A
<b>Emergency Response Guide Number</b>	147
<b><u>MEX</u></b>	Not regulated
<b><u>ICAO</u></b>	Not regulated
<b><u>IATA</u></b>	Not regulated
<b>Proper Shipping Name</b>	NON REGULATED
<b>Hazard Class</b>	N/A
<b><u>IMDG/IMO</u></b>	Not regulated
<b>Hazard Class</b>	N/A
<b>EmS-No.</b>	F-A, S-I
<b><u>RID</u></b>	Not regulated
<b><u>ADR</u></b>	Not regulated
<b><u>ADN</u></b>	Not regulated

## 15. REGULATORY INFORMATION

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

#### International Regulations

**Ozone-depleting substances (ODS)** Not applicable

**Persistent Organic Pollutants** Not applicable

**Export Notification requirements** Not applicable

#### International Inventories

<b>TSCA</b>	Contact supplier for inventory compliance status.
<b>DSL/NDL</b>	Contact supplier for inventory compliance status.
<b>EINECS/ELINCS</b>	Contact supplier for inventory compliance status.
<b>ENCS</b>	Contact supplier for inventory compliance status.
<b>KECL</b>	Contact supplier for inventory compliance status.
<b>PICCS</b>	Contact supplier for inventory compliance status.
<b>AICS</b>	Contact supplier for inventory compliance status.

#### Legend

- TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory
- DSL/NDL** - Canadian Domestic Substances List/Non-Domestic Substances List
- EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
- ENCS** - Japan Existing and New Chemical Substances
- KECL** - Korean Existing and Evaluated Chemical Substances
- PICCS** - Philippines Inventory of Chemicals and Chemical Substances
- AICS** - Australian Inventory of Chemical Substances

## 16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

<b><u>NFPA</u></b>	<b>Health hazards 1</b>	<b>Flammability 0</b>	<b>Instability 0</b>	<b>Physical and Chemical Properties -</b>
<b><u>HMIS</u></b>	<b>Health hazards 0</b>	<b>Flammability 0</b>	<b>Physical hazards 0</b>	<b>Personal Protection X</b>

**Prepared By** Shenzhen Precise Testing Technology Co., Ltd.

**Issuing Date** 12-01-2022

**Revision Note** No information available

**Disclaimer**

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

**End of Safety Data Sheet**

Inhalation Statement	dust
Not Hazardous	This is a battery. In case of rupture:
Hazard statements	Causes damage to organs through prolonged or repeated exposure
Signal word	Danger
Precautionary Statements	P302 + P352 - IF ON SKIN: Wash with plenty of water and soap P321 - Specific treatment (see supplemental first aid instructions on this label) P332 + P313 - If skin irritation occurs: Get medical advice/attention P362 + P364 - Take off contaminated clothing and wash it before reuse P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing P337 + P313 - If eye irritation persists: Get medical advice/attention P201 - Obtain special instructions before use P202 - Do not handle until all safety precautions have been read and understood P280 - Wear protective gloves/protective clothing/eye protection/face protection P308 + P313 - IF exposed or concerned: Get medical advice/attention P405 - Store locked up P260 - Do not breathe dust/fume/gas/mist/vapors/spray P264 - Wash face, hands and any exposed skin thoroughly after handling P270 - Do not eat, drink or smoke when using this product P314 - Get medical advice/attention if you feel unwell P501 - Dispose of contents/ container to an approved waste disposal plant
Signal word	Danger
Skin corrosion/irritation	Category 2
Hazard statements	Causes skin irritation
Signal word	Warning
Serious eye damage/eye irritation	Category 2A
Hazard statements	Causes serious eye irritation
Signal word	Warning
Carcinogenicity	Category 2
Hazard statements	Suspected of causing cancer
Signal word	Warning
Specific target organ toxicity (repeated exposure)	Category 1
Skin corrosion/irritation	- (H315)
Serious eye damage/eye irritation	- (H319)
Carcinogenicity	- (H351)
STOT - repeated exposure	- (H372)
STOT - repeated exposure	





Graphic



Graphic



Graphic



Hazard statements

Causes skin irritation Causes serious eye irritation Suspected of causing cancer Causes damage to organs through prolonged or repeated exposure

Hazard statements

H315 - Causes skin irritation H319 - Causes serious eye irritation H351 - Suspected of causing cancer H351 - Suspected of causing cancer H372 - Causes damage to organs through prolonged or repeated exposure H372 - Causes damage to organs through prolonged or repeated exposure

Precautionary Statements - EU (§28, 1272/2008)

P103 - Read label before use P280 - Wear face protection P370 + P378 - In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish P234 - Keep only in original container P303 - IF ON SKIN (or hair):

Precautionary Statements

IF ON SKIN: Wash with plenty of water and soap IF ON SKIN: Wash with plenty of water and soap If skin irritation occurs: Get medical advice/attention If skin irritation occurs: Get medical advice/attention Take off contaminated clothing And wash it before reuse Take off contaminated clothing and wash it before reuse Take off contaminated clothing And wash it before reuse Take off contaminated clothing and wash it before reuse IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing If eye irritation persists: Get medical advice/attention If eye irritation persists: Get medical advice/attention Obtain special instructions before use Obtain special instructions before use Do not handle until all safety precautions have been read and understood Do not handle until all safety precautions have been read and understood Wear protective gloves Wear protective gloves IF exposed or concerned: Get medical advice/attention IF exposed or concerned: Get medical advice/attention Store locked up Do not breathe dust/fume/gas/mist/vapors/spray Do not breathe dust/fume/gas/mist/vapors/spray Do not breathe dust/fume/gas/mist/vapors/spray Do not eat, drink or smoke when using this product Do not eat, drink or smoke when using this product Get medical advice/attention if you feel unwell Get medical advice/attention if you feel unwell

Skin

IF ON SKIN: Wash with plenty of water and soap If skin irritation occurs: Get medical advice/attention Take off contaminated clothing and wash it before reuse

Precautionary Statements

P302 + P352 - IF ON SKIN: Wash with plenty of water and soap P321 - Specific treatment (see supplemental first aid instructions on this label) P332 + P313 - If skin irritation occurs: Get medical advice/attention P362 + P364 - Take off contaminated clothing and wash it before reuse P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing P337 + P313 - If eye irritation persists: Get medical advice/attention P201 - Obtain special instructions before use P202 - Do not handle until all safety precautions have been read and understood P280 - Wear protective gloves/protective clothing/eye protection/face protection P308 + P313 - IF exposed or concerned: Get medical advice/attention P405 - Store locked up P260 - Do not breathe dust/fume/gas/mist/vapors/spray P264 - Wash face, hands and any exposed skin thoroughly after handling P270 - Do not eat, drink or smoke when using this product P314 - Get medical advice/attention if you feel unwell P501 - Dispose of contents/ container to an approved waste disposal plant

Precautionary Statements - Prevention

Obtain special instructions before use Do not handle until all safety precautions have been read and understood Wear protective gloves/protective clothing/eye protection/face protection Wash face, hands and any exposed skin thoroughly after handling Do not breathe dust/fume/gas/mist/vapors/spray Do not eat, drink or smoke when using this product

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention Specific treatment (see supplemental first aid instructions on this label)

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Eyes	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing If eye irritation persists: Get medical advice/attention
Skin	IF ON SKIN: Wash with plenty of water and soap If skin irritation occurs: Get medical advice/attention
Precautionary Statements - Storage	Take off contaminated clothing and wash it before reuse
Precautionary Statements - Disposal	Store locked up
The following values are calculated based on chapter 3.1 of the GHS document	Dispose of contents/container to an approved waste disposal plant
ATEmix (oral)	12,452.00
Units	mg/kg
ATEmix (dermal)	9,132.00
Units	mg/kg
Contains Carbon black, Phosphate(1-), hexafluoro-, lithium	
Unknown acute toxicity	90.77 % of the mixture consists of component(s) of unknown hazards to the aquatic environment
Unknown Acute Aquatic Toxicity	90.77
Unknown Chronic Aquatic Toxicity	90.77
Product ATE Oral Status	1
Product ATE Dermal Status	1
Product ATE Inhalation - Gas Status	1
Product ATE Inhalation - Vapor Status	1
Product ATE Inhalation - Dust/Mist Status	1
Product Skin Corrosion Status	1
Product Eye Damage Status	1
Product Respiratory Sens. Status	1
Product Skin Sensitization Status	1
Product Mutagenic Status	1
Product Carcinogenic Status	1
Product Reproductive Toxicity Status	1
Product STOT Single Status	1
Product STOT Repeated Status	1
Product Aquatic Toxicity Status	1
Product Aspiration Toxicity Status	1
Product Ozone Status	1
Product and Component Overall Classification Status	1
STOT - repeated exposure	- (H372)
<b>Unknown acute toxicity</b>	30.9 % of the mixture consists of ingredient(s) of unknown toxicity
	30.9 % of the mixture consists of ingredient(s) of unknown acute oral toxicity
	30.9 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity
	30.9 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)
	30.9 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)
	30.9 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)
Symbols/Pictograms	
Symbols/Pictograms	
Other hazards	Very toxic to aquatic life with long lasting effects
Health hazards	Skull and Crossbones
Health hazards	Exclamation mark
Inhalation Statement	dust
Health hazards	1

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