

## Safety Data Sheet

This sheet is only provided as technical information and is referred normal use of the product in question. Pairdeer makes no warranty expressed or implied.

### Section 1- Identification

● Product Name Lithium Manganese-Dioxide Batteries	Sizes All	Date of preparation Jan.01, 2023
● Company: Enix Energies	Telephone Numbers: +33 825 88 65 11	
● Address: 27 rue des Glairaux, 38120 Saint-Égrève		

### Section 2-Hazards Identification

This contains lithium, organic solvent, and other combustible materials. For this reason, improper handling of the battery could lead to distortion, leakage\*, overheating, explosion, or fire and cause human injury or equipment trouble. Please strictly observe safety instructions.

(\*leakage is defined as an unintended escape of liquid from a battery)

### Section 3-Composition/Information on Ingredients

Component	CAS #	% by weight
Manganese Dioxide	1313-13-9	15 ~ 40 %
Propylene Carbonate	108-32-7	2 ~ 6%
1,2-Dimethoxyethane	110-71-4	1 ~ 5%
Lithium Perchlorate	7791-03-9	0 ~ 1.5%

## SDS- Lithium Primary Battery

Issue date: 2023.01.01

Lithium or Lithium Alloy	7439-93-2	1 ~ 5%
Graphite	7782-42-5	1 ~ 4%

### Lithium content for each cell

Model	Li content(gr.)	Model	Li content(gr.)
CR2012	0.014	CR2032	0.065
CR2016	0.025	CR2430	0.090
CR2025	0.048	CR2450	0.165
CR1632	0.038	CR1220	0.012
CR1620	0.030	CR1216	0.008
CR1616	0.016	CR927	0.008
CR1025	0.008	CR2477	0.290
CR1225	0.015	CR3032	0.170
CR2325	0.060	CR2320	0.045
CR2330	0.072	CR2354	0.155

### **Section 4-First Aid Measures**

None unless internal materials are exposed.

**Inhalation** Fumes can cause respiratory irritation. Remove to fresh air and consult a physician.

**Skin** Immediately flush skin with plenty of water. If itch or irritation by chemical burn persists, consult a physician.

**Eyes** Immediately flush eye with plenty of water for at least 15 minutes. Consult a physician immediately

**Ingestion** If swallowing a battery, consult a physician immediately.  
If contents come into mouth, immediately rinse by plenty of water and consult a physician.

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

Extinguishing Media: Fire extinguisher: Carbon dioxide; fire foam; dry sand; water spray and powder etc.

### **Section 6-Accidental Release Measures**

NA

### **Section 7-Handling and Storage**

#### 1) Handling

Never swallow. Never charge. Never heat. Never expose to open flame. Never disassemble. Never reverse the positive and negative terminals when mounting. Never short-circuit the battery. Never weld the terminal or wire to the body of the battery directly. Never use different batteries together. Never touch the liquid leaked out of battery. Never bring fire close to battery liquid. Keep away from children.

#### 2) Storage

Never let the battery contact with water. Never store the battery in hot and high humid place.

### **Section 8-Exposure Controls/Personal Protection**

Respiratory Protection	NA	
Ventilation	Local Exhaust	NA
	Mechanical	NA
	Special	NA
	Other	NA
Eye Protection	NA	
Protective Glove	NA	
Other protective clothing		

### **Section 9-Physical/Chemical Characteristics**

Nominal Voltage: 3.0V

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**Section 10-Stability and Reactivity**

Stability	Stable
Incompatibility	Water
Hazardous polymerization	Will not occur
Condition to avoid	See section 7
Hazardous Decomposition or Byproducts	Hydrogen

**Section 11-Toxicological Information**

NA

**Section 12-Ecological Information**

NA

**Section 13-Disposal condition**

The battery may be regulated by national or local regulation. Please follow the instructions of proper regulation. As electric capacity is left in a discarded battery and it meets other metals, it could lead to distortion, leakage, overheating, or explosion, so make sure to cover the (+) and (-) terminals with friction tape or some other insulator before disposal.

**Section 14-Transportation Information ( Air, Sea, Land )**

1. Battery must be of a design type proven to meet testing requirements as per Manual of test and criteria, Part III, subsection 38.3.
2. Battery, according to Section IB of PACKING INSTRUCTION 968 of the 2023 IATA Dangerous Goods Regulations 64th Edition, may be transported/applicable to U.S D.O.T regulations for the safe transport of Lithium Battery.
3. Battery to be protected to prevent short circuit. This includes protection against contact with conductive materials within the same packaging that could lead to short circuit.
4. Cells and batteries, offered for transport, must be packed in inner packaging that completely enclose the cell or battery; To provide protection form damage or compression of the batteries, the inner packaging must be placed in a strong rigid outer

packaging.

5. The packaging shall be adequate to avoid mechanical damage during transport, handling, and stacking & Stock on shelves. The material and pack design shall be chosen to prevent the development of unintentional electrical conduction, corrosion of the terminals and ingress of moisture.

6. The package must be handled with care as a flammability hazard exists if the package is damaged.

7. Regarding transport, the following regulations are cited and considered

-The International Civil Aviation Organization (ICAO) Technical Instructions.

-The International Air Transport Association (IATA) Dangerous Goods Regulations.

8. UN Number lithium metal batteries (UN3090)

lithium metal batteries packed with equipment (UN3091)

lithium metal batteries contained in equipment (UN3091)

UN Proper shipping name /Description (technical name): Lithium Primary/Metal batteries

Marine pollutant(Y/N): Y

Special Provision:

International maritime dangerous goods code (IMDG) 188,230,310,348,957;

-The US Hazardous Materials Regulation (HMR) pursuant to a final rule issued by RSPA.

-The Office of Hazardous Materials Safety within the US Department of Transportation's (DOT) Research and Special Programs Administration (RSPA)

### **Section 15-Regulatory Information**

OSHA hazard communication standard (29 CFR 1910.1200)

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

### **Section 16-Other Information**

If you want further information, please contact Pairdeer sales representative.

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