

MATERIAL SAFETY DATA SHEET

Part # R-LFP12.8V120Ah



SECTION 1A: PRODUCT IDENTIFICATION

PRODUCT NAME: Lithium Iron Phosphate Rechargeable Battery
COMMON NAME: Lithium Iron Phosphate Battery (LiFePO4)
OTHER NAME: VOLTECH R-LFP12.8V120Ah
ITEM CODE: RICHMSDS2021004
PRODUCT USE: Standby, Cyclic Applications UPS, RV, Solar etc

UN NUMBER:	UN3480	CAS NUMBER:	See Section 3
HAZCHEM CODE:	4W	PACKAGING GROUP:	II
DANGEROUS GOODS CLASS:	Class 9		

SECTION 1B: PRODUCT SUPPLIER DETAILS

SUPPLIER: Electro Parts Australia Pty Ltd
ABN: 66 054 805 024
ADDRESS: 51 Southlink St
PARKINSON, QLD 4115
TELEPHONE: 07 3219 6655
EMERGENCY NUMBER: 07 3219 6655 or +86-734-8539135

SECTION 2: HAZARDS IDENTIFICATION

Not dangerous with normal use. Do not dismantle, open or shred the battery ingredients contained within or their ingredients products could be harmful.

Primary Route(s) of Exposure - Inhalation, Ingestion, Skin contact and Eye contact.

Potential Health Effects	
Inhalation:	Vapors or mists from a ruptured battery may cause respiratory irritation.
Ingestion:	The battery ingredients contained within or their ingredients products can cause serious chemical burns of mouth, esophagus, and gastrointestinal tract.
Skin:	Skin contact with contents of an open battery can cause severe irritation or burns to the skin.
Eye:	Eye contact with contents of an open battery can cause severe irritation or burns to the eye.

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SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name:	Concentration or concentration ranges (%)	CAS Number
Phosphoric acid,iron(2+) Lithium salt(1 :1 :1)	40.85	15365-14-7
Graphite	11.27	7782-42-5
Copper	9.11	7440-50-8
Polyethylene	0.02	9002-8-4
Stainless steel	14-16	96-49-1
Polypropylene	23.02	12597-68-1
PVC(Chloroethylene, polymer)	0.54	9002-86-2
Tin	0.49	7440-31-5
Phosphate(1-), hexanuoro-, lithium	0.2	21324-40-3
Propylene carbonate	3.5	108-32-7
Dim ethyl carbonate	11.0	616-38-6

Note: CAS number is Chemical Abstract Service Registry Number

SECTION 4: FIRST AID MEASURES

Inhalation:	Remove source of contamination or move victim to fresh air. Obtain medical advice.
Ingestion:	Please rinse mouth thoroughly with water. Induce vomiting under the guidance of professional personage. Please seek medical treatment in lime
Skin:	Remove contaminated clothes and rinse skin with plenty of water or shower for 15 minutes. Get medical aid.
Eye:	Irrigate with flowing water for 15 minutes. If irritation persists, consult a physician.

SECTION 5: FIRE FIGHTING MEASURES

Characteristics of Hazard:	Toxic fumes, gases or vapors may evolve on burning.
Hazardous Combustion Products :	Carbon monoxide, carbon dioxide, lithium oxide fumes and so on.
Fire-extinguishing Methods & Extinguishing Media:	Use extinguishing agent suitable for local conditions and the surrounding environment, such as dry powder, CO2.
Attention in Fire-extinguishing:	The firemen should put on anligas masks and full fire-fighting suits.

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SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, protective equipment, and emergency procedures:	Restrict access to area until completion of clean-up. Do not touch the spilled material. Wear adequate personal protective equipment as Indicated In Section 8.
Environmental Precautions:	Prevent material from contaminating soil and from entering sewers or waterways.
Methods and materials for Containment:	Stop the leak if safe to do so. Contain the spilled liquid with dry sand or earth. Clean up spills immediately.
Methods and materials for cleaning up:	Absorb spilled material with an Inert absorbent (dry sand or earth). Scoop contaminated absorbent Into an acceptable waste container. Collect all contaminated absorbent and dispose of according to directions in Section 13. Scrub the area with detergent and water; collect all contaminated wash water for proper disposal.

SECTION 7: HANDLING AND STORAGE

Handling:	Don't handling the batteries In manner that allows terminals to short circuit. Do not open, disassemble, crush or burn battery.
Storage:	If the battery is subject to storage for such a long term as more than 3 months, it is recommended to recharge the battery periodically. Long period storage: 0°C~+35°C, 60±25%R.H. Do not storage the battery haphazardly in a box or drawer where they may short-circuit each other or be short-circuited by other metal objects. Keep out of reach of children. Do not expose the battery lo heal or fire. Avoid storage in direct sunlight. Do not store together with oxidizing and acidic materials.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls:	No engineering controls are required for handling batteries that have not been damaged. Personal protective equipments for damaged batteries should include chemical resistant gloves and safety glasses.
Personal Protective Equipment:	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. 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 re com mended for venting battery: Respiratory Protection, Protective Gloves, Protective Clothing and safety glass with side shields.

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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Solid
Colour:	Multicolour
Odor:	Odorless
Change in condition:	No data is available
pH, with indication of the concentration:	No data is available
Melting point/freezing point:	No data is available
Boiling Point, initial boiling point:	No data is available
Flash Point:	No data is available
Upper/lower flammability or explosive limits:	No data is available
Vapor Pressure:	No data is available
Vapor Density: (Air= 1):	No data is available
Density/relative density:	No data is available
Solubility in Water:	Insoluble
n-octanol/water partition coefficient:	No data is available
Auto-ignition temperature:	No data is available
Decomposition temperature:	No data is available
Odor threshold:	No data is available
Evaporation rate:	No data is available
Flammability (soil, gas):	No data is available
Viscosity:	No data is available

SECTION 10: STABILITY AND REACTIVITY

Stability:	Stable under normal temperatures and pressures.
Conditions to Avoid:	Heat above 70°C or Incinerate, Deform, Mutilate, Crush, Disassemble, Overcharge, Short circuit, Expose over a long period to humid conditions.
Hazardous Decomposition Products:	Toxic Fumes, and may form peroxides.
Possibility of Hazardous Reaction:	If leaked, forbidden to contact with strong oxidizers, mineral acids, strong alkalis, halogenated hydrocarbons.

SECTION 11: TOXICOLOGICAL INFORMATION

Irritation:	In the event of exposure to internal contents, vapor fumes may be very irritating to the eyes and skin.
Sensitization:	No data is available
Reproductive Toxicity:	No data is available
Toxicologically Synergistic Materials :	No data is available

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SECTION 12: ECOLOGICAL INFORMATION

General note:	Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
Anticipated behavior of a chemical product in environment/possible environmental impact/ ecotoxicity:	No data is available
Mobility in soil:	No data is available
Persistence and Degradability	No data is available

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Treatment:	Recycle or dispose of in accordance with government, state & local regulations.
Attention for Waste Treatment:	Deserted batteries couldn't be treated as ordinary trash. Couldn't be thrown into fire or placed in high temperature. Couldn't be dissected, pierced, crushed or treated similarly. Best way is recycling.

SECTION 14: TRANSPORT INFORMATION

The Li-ion Battery (model: R-LFP12.8V120Ah) tested according to the requirements of the UNITED NATIONS "Recommendations on the Transport of Dangerous Goods, Manual of Tests and Criteria" Part 111, subsection 38.3;

The Li-ion Battery was protected so as to prevent short circuits. This includes protection against contact with conductive materials within the same packaging that could lead to short circuit;

The packaging shall be adequate to avoid mechanical damage during transport, handling and stacking.

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

The Battery pack can be shipped by air in according to Section IA of PACKING INSTRUCTION 965, or Section I of PACKING INSTRUCTION 966~967 of the 2020 IATA Dangerous Goods regulations 61st Edition.'

With regard to 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.
- UN number of lithium battery: UN3480 or UN3481;

UN Proper shipping name/Description (technical name): Lithium Ion batteries or Lithium Ion batteries contained in equipment or Lithium ion batteries packed with equipment;

UN Classification (Transport hazard class): Class 9

SECTION 14: TRANSPORT INFORMATION - CONT. NEXT PAGE

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SECTION 14: TRANSPORT INFORMATION - CONTINUED

- The International Maritime Dangerous Goods (IMDG) Code.

UN number of lithium battery: UN3480 or UN3481;

UN Proper shipping name/Description (technical name): Lithium ion batteries or Lithium ion batteries contained in equipment or Lithium ion batteries packed with equipment;

UN Classification (Transport hazard class): Class 9

Marine pollutant(Y/N): N

The battery is not restricted according to IMO IMDG Code (inc Arndt 39-18).

Need to meet the Special Provision: International maritime dangerous goods code (IMDG) 230, 310, 348, 360, 376,377.

SECTION 15: REGULATORY INFORMATION

{Dangerous Goods Regulations}

{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 Substance 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[IJ (302/311/312/313))] (SARA)

{Resource Conservation and Recovery Act} (RCRA)

{Safety Drinking Water Act} (CWA)

{California Proposition 65}

{Code of Federal Regulations} (CFR)

In accordance with all Federal, state and local laws.

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SECTION 16: ADDITIONAL INFORMATION

The information above is believed to be accurate and represents the best information currently available to us. However, Electro Parts Australia Pty Ltd makes no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. Although reasonable precautions have been taken in the preparation of the data contained herein, it is offered solely for your information, consideration and investigation. This material safety data sheet provides guidelines for the safe handling and use of this product; it does not and cannot advise on all possible situations, therefore, your specific use of this product should be evaluated to determine if additional precautions are required.

The data/information contained herein has been reviewed and approved for general release on the basis that this document contains no export controlled information.

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