

# MATERIAL SAFETY DATA SHEET

FILE NO.: ENIRGI L3000+

---

## SECTION 1A: PRODUCT IDENTIFICATION

---

**PRODUCT NAME:** Electronically Managed Energy Storage Device (Battery)

**OTHER NAMES:** Enirgi L3000+

**PRODUCT TYPE:** Lithium ion batteries contained in equipment

<b>UN NUMBER :</b>	UN3481	<b>CAS NUMBER :</b>	See Section 3
<b>HAZCHEM Code :</b>	4W	<b>PACKAGING GROUP :</b>	II
<b>DANGEROUS GOODS CLASS :</b>	Class 9		
<b>PRODUCT USE :</b>	Standby, Cyclic Applications UPS, RV, Solar etc.		

---

## SECTION 1B: PRODUCT SUPPLIER DETAIL

---

**SUPPLIER :** Enirgi Power Storage

**A.B.N. :** 91 002 915 326

**ADDRESS :** Level 1, Building 10  
658 Church Street  
Richmond VIC 3121  
Australia

**TELEPHONE:** 1300 783 879

**EMERGENCY TELEPHONE NUMBER:** 1300 783 879

**CHEMTREC PHONE:** +703-527-3887

---

## SECTION 2: HAZARDS IDENTIFICATION

---

Not dangerous with normal use. The battery should not be disassembled or incinerated. Exposure to the ingredients contained within or their combustion products could be harmful.

**Inhalation:** Inhalation of material from a sealed battery is not an expected route of exposure. Vapors or mists from a ruptured battery may cause respiratory irritation.

**Ingestion:** Swallowing of material from a sealed battery is not an expected route of exposure. Swallowing mists from a ruptured battery may cause respiratory irritation, chemical burns of the mouth and gastrointestinal tract irritation.

**Skin:** Contact between the battery and skin will not cause any harm. Skin contact with positive and negative terminals of high voltages may cause burns to the skin. Skin contact with a ruptured battery can cause skin irritation.

**Eye:** Contact between the battery and eye will not cause any harm. Eye contact with the contents of a ruptured battery can cause severe irritation to the eye.

**Medical Conditions Aggravated by Exposure:** Not Available

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Common Chemical Name	CAS #	Percent of Content (%)	Classification & Hazard Labeling
Lithium Ferrophosphate	15365-14-7	25 - 35	Eye, Skin, Respiratory Irritant
Carbon, as Graphite	7440-44-0	12 - 18	Eye, Skin, Respiratory Irritant
Aluminum metal	7429-90-5	3 - 7	Inert
Copper metal	7440-50-8	5 - 9	Inert
Electrolyte			
Ethylene carbonate	96-49-1	12 - 17	Mixture: Flammable; Reactive; Sensitizer; Eye, Skin & Respiratory
Dimethyl carbonate	616-38-6		
Ethyl methyl carbonate	623-53-0		
Lithium Hexafluorophosphate	21324-40-3		

## SECTION 4: FIRST AID MEASURES

**Skin Contact:** Wash affected area with lukewarm water for at least 30 minutes. If irritation or pain persists, seek medical attention.

**Eye Contact:** Wash affected eye with lukewarm water for at least 30 minutes. Rinse with saline solution if possible. Seek medical attention.

**Inhalation:** Move victim to fresh air and remove source of contamination from area. Seek medical attention.

**Caution:** In all cases if irritation persists, seek medical assistance at once.

## SECTION 5: FIRE-FIGHTING MEASURES

**Flash Point:** N/A.  
**Auto-Ignition Temperature:** N/A.  
**Extinguishing Media** Dry chemical, CO<sub>2</sub>.

**Special Fire-Fighting Procedures**

Self-contained breathing apparatus.

**Unusual Fire and Explosion Hazards**

Cell may vent when subjected to excessive heat-exposing battery contents.

**Hazardous Combustion Products**

Carbon monoxide, carbon dioxide, lithium oxide fumes

---

## SECTION 6: ACCIDENTAL RELEASE MEASURES

---

The material within the batteries or cells is only expelled under abusive conditions. Use a shovel and cover battery with sand or vermiculite, place in an approved container and dispose in accordance with section 13.

Additional Information: Contact your Enirgi Power Storage representative for recycling information.

---

## SECTION 7: HANDLING AND STORAGE

---

Batteries should not be opened, destroyed or incinerated, 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.

### **Precautions to be taken in Handling and Storing**

Avoid mechanical or electrical abuse. 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, or in direct sunlight for long periods.

### **Other Precautions**

The battery may explode or cause burns if disassembled, crushed or exposed to fire or high temperatures. Do not short or install with incorrect polarity.

---

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

---

### **Respiratory Protection**

Not necessary under conditions of normal use. In case of battery rupture, provide as much ventilation as possible and avoid confined areas with venting cell cores. Respiratory Protection is not necessary under conditions of normal use.

### **Eye Protection**

Not necessary under conditions of normal use. Wear safety goggles if handling a ruptured or leaking cell or battery pack.

### **Hand Protection**

Not necessary under conditions of normal use. Wear rubber gloves if handling a ruptured or leaking cell or battery pack.

### **Skin Protection**

Not necessary under conditions of normal use. Wear rubber apron and rubber gloves if handling a ruptured or leaking cell or battery pack.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical State</b>	Solid
<b>Odor Type</b>	Odorless
<b>Appearance</b>	Battery
<b>Odor Threshold</b>	Not Applicable
<b>pH</b>	Not Applicable
<b>Evaporative Rate</b>	(n-Butyl Acetate = 1) Not Applicable
<b>Relative Density</b>	Not Applicable
<b>Auto Ignition Temperature(°C)</b>	Not Applicable
<b>Boiling Point</b>	Not Applicable
<b>Flammability Limits (%)</b>	Not Applicable
<b>Melting Point</b>	Not Applicable
<b>Vapor Pressure (mm Hg @ 20 °C)</b>	Not Applicable
<b>Viscosity</b>	Not Applicable
<b>Vapor Density (Air = 1)</b>	Not Applicable
<b>Oxidizing Properties</b>	Not Applicable
<b>Solubility in Water</b>	Insoluble
<b>Flash Point and Method (°C)</b>	Not Applicable
<b>Water/ Oil distribution coefficient</b>	Not Applicable

## SECTION 10: STABILITY AND REACTIVITY

<b>Stability</b>	Stable
<b>Conditions to Avoid</b>	Avoid exposing battery to high temperatures over 235°C. Do not incinerate, deform, mutilate, crush, pierce, short circuit or disassemble.
<b>Materials to Avoid</b>	Not Applicable
<b>Hazardous Decomposition Products</b>	Combustible vapors may be released if exposed to fire

**Possibility of Hazardous Reactions:** Not available

## SECTION 11: TOXICOLOGICAL INFORMATION

<b>Irritation</b>	Risk of irritation only occurs if cells or batteries are mechanically, thermally or electrically abused and the enclosure is compromised.
<b>Neurological Effects</b>	Not Applicable
<b>Sensitization</b>	Not Applicable
<b>Teratogenicity</b>	Not Applicable

# MATERIAL SAFETY DATA SHEET

FILE NO.: ENIRGI L3000+

**Reproductive Toxicity** Not Applicable  
**Mutagenicity (Genetic Effects)** Not Applicable  
**Toxicologically Synergistic Materials** Not Applicable

---

## SECTION 12: ECOLOGICAL INFORMATION

---

<b>Bio accumulative potential</b>	Not available
<b>Persistence and degradability</b>	Not available
<b>Mobility</b>	Not available
<b>Eco toxicity</b>	Not available
<b>Other adverse effects</b>	Not available

---

## SECTION 13: DISPOSAL CONSIDERATIONS

---

### Waste Disposal Method

Recycling is encouraged. Dispose of in accordance with local, state and federal laws and regulations. Lithium-Ion batteries should have their terminals insulated and be preferably wrapped in plastic bags prior to disposal to a licensed carrier and/or authorized recycler.

---

## SECTION 14: TRANSPORT INFORMATION

---

### Hazardous Classifications:

Enirgi L3000+ batteries are categorized in the following manner and should be packaged, labeled, documented and declared accordingly:

**UN3481, Lithium ion batteries contained in equipment, 9, II.**

The battery cells contain no metallic lithium and pass the tests defined in UN model regulation section UN38.3. Do not expose to temperatures over 235°C. or direct flame. Lithium Ferrous Phosphate based batteries are incapable of thermal runaway, or spontaneous ignition under any condition and are non-hazardous. The cells in Enirgi L3000+ cases are UN DOT certified regulation UN38.3 safe for transport.

The Enirgi L3000+ Lithium-ion batteries have been tested under provisions of the UN Manual of Tests Lithium-ion batteries can therefore be treated as "Non-dangerous goods" under the United Nations Recommendations on the Transport of Dangerous Goods, Special Provision 188, provided that packaging is strong and prevents the batteries from short-circuit.

---

## SECTION 15: OTHER INFORMATION

---

**PREPARATION INFORMATION: Prepared by Technical Officer, Enirgi Power Storage September 2017.**

The information in the MSDS was obtained from selected sources/publications which we believe are reliable, but are beyond our direct supervision or control. Enirgi Power Storage Pty Ltd makes no Warranty of merchantability, fitness for any particular purpose or any other warranty, expressed or implied, with respect to such information and we assume no liability resulting from its use. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. It is the obligation of each user of this product to determine the suitability of this product and comply with the requirements of all applicable laws regarding use and disposal of this product. For additional information concerning Enirgi Power Storage Pty Ltd's products or questions concerning the content of this MSDS please contact your Enirgi Power Storage representative. Enirgi Power Storage Pty Ltd reserves the right to revise this Material Safety Data Sheet as information becomes available. The user has the responsibility, by making contact with this company or otherwise, to make certain the Material Safety Data sheet being consulted is the latest issued.