



## Safety Data Sheet

### SECTION 1 – PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** OneCharge Lithium-ion battery

**Chemical Trade Name:** Lithium-ion Battery

**Manufacture Name/Address**

OneCharge Inc.  
16600 Aston  
Irvine, CA, 92606  
+1 (833) 895-8624

**Emergency Contact**

CHEMTREC Phone: 1-800-424-9300

### SECTION 2 – HAZARD IDENTIFICATION

**Physical**

The Lithium-Ion rechargeable batteries described in this Safety Data Sheet are sealed units which are not hazardous when used according to the recommendations of the manufacturer. The battery is considered an article under OSHA regulations, and an SDS is not required but provided as a courtesy. Under normal conditions of use, the solid electrode materials and liquid electrolyte contained in the batteries are non-reactive provided the battery integrity is maintained and seals remain intact. The batteries can become flammable in cases of abuse (mechanical, thermal, electrical), which leads to the activation of the safety valve and/or the rupture of the battery container. Electrolyte leakage, electrode materials reaction with moisture/water or battery vent/fire may follow, depending upon the circumstances.

Batteries are fitted with a safety vent for protection in case of excessive internal pressure and/or temperature.

**Hazard Pictogram**

None

**Hazard Statements**

Not applicable

**Precautionary Statements**

Health hazards (Acute and Chronic): these chemicals are contained in a sealed can. Risk of exposure occurs only if the battery is mechanically or electrically abused. Contact of electrolyte and extruded lithium with skin and eyes should be avoided.

Sign/Symptoms of Exposure: a shorted lithium battery can cause thermal and chemical burns upon contact with the skin may be a reproductive hazard

### SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENT

Chemical Name	Molecular Formula	CAS Number	Weight %
Lithium Iron Phosphate	LiFePO <sub>4</sub>	15365-14-7	31
Graphite	C	7782-42-5	18
Copper	Cu	7740-50-8	12
Aluminum	AL	7429-90-5	8
Lithium Hexafluorophosphate	LiPF <sub>6</sub>	21324-40-3	4
Carbonate	--	--	8
Polypropylene	(C <sub>3</sub> H <sub>6</sub> ) <sub>n</sub>	9003-07-0	19

### SECTION 4 – FIRST AID MEASURE

#### Eye contact

- Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid

#### Skin contact

- Remove contaminated clothes and rinse skin with plenty of water or shower for 15 minutes. Get medical aid

#### Ingestion

- Give at least 2 glasses of milk or water. Induce vomiting unless patient is unconscious

#### Inhalation

- Remove from exposure and move to fresh air immediately. Use oxygen if available.

### SECTION 5 – FIRE FIGHTING MEASURES

**Flash Point:** N/A

**Auto-Ignition Temperature:** N/A

#### Extinguishing Media

Class D, dry powder

#### 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 MEASURE

### **Personal precautions, protective equipment and emergency procedures**

#### **For non-emergency personnel**

Emergency procedures: evacuate personnel to safe areas. Ensure adequate ventilation, especially in confined areas. Remove all sources of ignition. Avoid contact with skin, eyes, and inhalation of vapors

#### **For emergency responders**

Protective equipment: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: “exposure controls/personal protection.”

Emergency procedures: Stop leak if safe to do so.

#### **Environmental precautions**

Avoid release to the environment.

#### **Methods and material for containment and cleaning up**

For containment: Such containers shall be stored in suitable locations for the purpose of handling or disposing in accordance with national law

Methods for cleaning up : Use a clean shovel to collect it in a properly sealed waste container with a label and completely sealed.

Other information: dispose of materials or solid residues at an authorized site.

#### **Reference to other sections**

For further information refer to section 13

## SECTION 7 – HANDLING AND STORAGE

The batteries should not be opened, destroyed or incinerated since they may leak or rupture.

Handling: Do not crush, pierce, short (+) and (-) battery terminals with conductive (i.e. metal) objects. Do not directly heat or solder. Do not throw into fire.

Storage: Store in a cool (preferably below 30°C) and ventilated area away from moisture, direct sunlight, sources of heat, open flames, food and drink. Keep adequate clearance between walls and batteries. Temperature above 100°C may result in battery leakage and rupture. Since short circuit can cause a fire, leakage and battery container rupture hazard, keep batteries in their original packaging until use, and do not jumble them.

Other: Follow manufacturer recommendations regarding maximum recommended currents and operating temperature range.

Applying pressure or deforming the battery may lead to the rupture of the battery container and disassembly followed by eye, skin and throat irritation.

Do not completely discharge the battery and then let it sit for an extended period of time. Complete discharge of a lithium-ion battery will damage the battery and may completely destroy the lithium-ion cells.

## SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

### **Respiratory protection**

Not necessary under normal use. In case of battery rupture, use self-contained full-face respiratory equipment.

### **Hand protection**

Not necessary under normal use. Use chemical resistant rubber gloves if handling a leaking battery.

### **Eye protection**

Not necessary under normal use. Wear safety goggles or glasses with side shields if handling a leaking or ruptured battery.

### **Skin protection**

Not necessary under normal use. Use rubber apron and protective clothing in case of handling of a ruptured battery.

## **SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES**

### **Appearance**

Black steel box, the lithium-ion cells inside are plastic prismatic cases with ribs, hermetically sealed and fitted with metallic terminals/connections.

**Nominal Voltage:** 3.2V per cell

**Rated Capacity:** 105/180/200Ah per cell

## **SECTION 10 – STABILITY AND REACTIVITY**

### **Reactivity**

The product is non-reactive under normal conditions of use, storage and transport.

### **Chemical stability**

Stable under normal conditions.

### **Possibility of hazardous reactions**

No dangerous reactions known under normal conditions of use.

### **Conditions to avoid**

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Avoid deformation, destruction, crushing, disassemble, overcharge, short circuit. Prolonged exposure to damp conditions.

### **Incompatible materials**

Strong acid, strong bases. Oxidizing agent.

### **Hazardous decomposition products**

Under normal conditions of storage and use, hazardous decomposition products should not happen.

	Continuous	Occasional
During Storage	-20°C / +20°C	-20°C / +45°C
During Discharge	-20°C / +55°C	
During Charge	0°C / +45°C	

## **SECTION 11 – TOXICOLOGICAL INFORMATION**

None, unless battery ruptures. In the event of exposure to internal contents, corrosive fumes will be very irritating to skin, eyes and mucous membranes.

## **SECTION 12 – ECOLOGICAL INFORMATION**



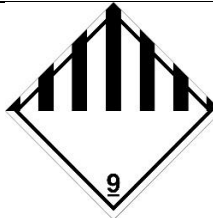


When properly used or disposed, lithium ion batteries can be recycled and do not present an environmental hazard during their lifetime.

## SECTION 13 – DISPOSAL CONSIDERATIONS

Dispose in accordance with applicable regulations, which vary from state to state.

Lithium-Ion batteries should have their terminals insulated and be preferably wrapped in individual plastic bags prior to disposal.

## SECTION 14 – TRANSPORT INFORMATION

ADR	IMDG	IATA	ADN	RID
<b>UN number</b>				
3481	3481	3481	3481	3481
<b>UN proper shipping name</b>				
Lithium ion batteries contained in equipment/lithium ion batteries packed with equipment	Lithium ion batteries contained in equipment	Lithium ion batteries contained in equipment	Lithium ion batteries contained in equipment	Lithium ion batteries contained in equipment
<b>Transport document description</b>				
UN 3481 lithium ion batteries contained in equipment/ lithium ion batteries packed with equipment. 9A,(E)	UN 3481 lithium ion batteries contained in equipment, 9	UN 3481 lithium ion batteries contained in equipment, 9	UN 3481 lithium ion batteries contained in equipment, 9A	UN 3481 lithium ion batteries contained in equipment, 9A
<b>Transport hazard class(es)</b>				
9A	9	9	9A	9A
				
<b>Packing group</b>				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
<b>Environmental hazards</b>				
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No	Dangerous for the environment: No	Dangerous for the environment: No

## SECTION 15 – REGULATORY INFORMATION

### Law information

- Dangerous goods regulation
- Recommendation on the transport of dangerous good model Regulation
- 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 III (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

## SECTION 16 – OTHER INFORMATION / DISCLAIMER

This information has been compiled from sources considered to be dependable and is to the best of our knowledge and belief, accurate and reliable as of the date compiled. However, no representation, warranty (either expressed or implied) or guarantee is made to the accuracy, reliability or completeness of the information contained herein including, but not limited to, the complete chemical composition of the product. This information relates to the specific materials designated and may not be valid for such material used in combination with any other materials or in any process. It is the user's responsibility to satisfy themselves as to the suitability and completeness of this information for their particular use. Onecharge Inc. does not accept liability for any loss or damage that may occur whether direct, indirect, incidental or consequential, from the use of this information. Onecharge Inc. does not offer any warranty against patent infringement.

Additional information is available by calling Onecharge Lithium Batteries at +1 (833) 895-8624