



# Wuhan Voltec Energy Sources Co.,Ltd

## SAFETY DATA SHEET

### Lithium Thionyl Chlorine Battery ER14335 3.6V 1650mAh

#### SECTION1 PRODUCT AND COMPANY IDENTIFICATION

Product name: Lithium Thionyl Chlorine Battery ER14335 3.6V 1650mAh  
Company: Wuhan Voltec Energy Sources Co.,Ltd  
Address: No.231, Xingsan Road, Hannan Economic Development Zone, Wuhan City,  
430090, P. R. China  
Email: sunmoon@voltec-sunmoon.com  
Fax: 86-27-84662179  
Emergency Phone: 86-27-84732116  
SDS Number: 2619011019  
SDS Date: 2019-01-10

#### SECTION2 HAZARDS IDENTIFICATION

##### Hazards Identification:

The battery has passed the test items of UN Model Regulations, Manual of Test and Criteria Section UN 38.3. It is not restricted to IATA Dangerous Goods Regulations (DGR) 60th Edition and IMO International Maritime Dangerous Goods Code (2010 Edition).

##### Emergency Overview:

Caution: Avoid contact and inhalation the electrolyte contained inside the battery.

#### SECTION3 INFORMATION ON INGREDIENTS

Product name: Lithium Thionyl Chlorine Battery ER14335 3.6V 1650mAh

| Ingredient                                 | Concentration | CAS No.    | EC No.    |
|--|---------------|------------|-----------|
| Thionyl dichloride                         | 32.5%         | 7719-09-7  | 231-748-8 |
| Lithium tetrachloroaluminate               | 5.2%          | 14024-11-4 | 237-850-9 |
| Lithium                                    | 3.5%          | 7439-93-2  | 231-102-5 |
| Carbon black                               | 5%            | 1333-86-4  | 215-609-9 |
| Stainless Steel, Nickel and inert material | remainder     | N/A        | N/A       |

Battery Weight: 13g

#### SECTION4 FIRST-AID MEASURES

##### Skin Exposure:

If the internal battery materials of an opened battery cell come into contact with the skin, immediately flush with plenty of water.

**Eye Exposure:**

In case of the internal battery materials come into contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

**Inhalation Exposure:**

In case of inhale the internal battery materials, remove immediately to fresh air and seek medical attention.

**Oral Exposure:**

If swallow the internal battery materials, do not induce vomiting. Seek immediate medical attention.

## **SECTION5 FIRE FIGHTING MEASURES**

**Extinguishing Media:**

Suitable: Dry chemical, Sandy soil, Carbon dioxide.

**Firefighting:**

Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

Specific hazards: Emit toxic fumes under fire conditions.

## **SECTION6 ACCIDENTAL RELEASE MEASURES**

**Procedure of Personal Precaution:**

If batteries show signs of leaking, avoid skin or eye contact with the material leaking from the battery. Use chemical resistant rubber gloves and non-flammable absorbent materials for clean up. Mix with inert material (e.g. dry sand, vermiculite) and transfer to sealed container for disposal.

## **SECTION7 HANDLING AND STORAGE**

**Handling:**

Keep away from ignition sources, heat and flame. Such batteries must be packed in inner packages in such a manner as to effectively prevent short circuits and to prevent movement which could lead to short circuits. Avoid mechanical or electrical abuse. More than a momentary short circuit will generally reduce the battery service life. Avoid reversing battery polarity within the battery assembly. In case of a battery unintentionally be crushed, rubber gloves must be used to handle all battery components. Avoid contact with eyes, skin. Avoid inhalation. No smoking at working site. Materials to Avoid: Strong oxidizing agents, Corrosives.

**Storage:**

Store in a cool, well-ventilated area. Keep away from ignition sources, heat and flame. Such batteries must be packed in inner packages in such a manner as to effectively prevent short circuits and to prevent movement which could lead to short circuits. Materials to Avoid: Strong oxidizing agents, Corrosives.

## **SECTION8 EXPOSURE CONTROL/PPE**

**Engineering Controls:**

Use ventilation equipment if available. Safety shower and eye bath.

**Personal Protective Equipment:**

Respiratory System: Not necessary under conditions of normal use.

Eyes: Not necessary under conditions of normal use.

Clothing: Wear appropriate protective clothing.

Hand: Safety gloves.



## Other Protect:

No smoking, drinking and eating at working site. Wash thoroughly after handling.

**SECTION9 PHYSICAL/CHEMICAL PROPERTIES**

Appearance: Green cylinder plastics film shell  
Odor: Odorless  
Melting Point/°C: >300°C  
Solubility: Partial soluble in water

**SECTION10 STABILITY AND REACTIVITY**

## Stability:

Stable under normal temperatures and pressures.

## Conditions to Avoid:

Avoid exposure to heat and open flame. Avoid mechanical or electrical abuse. Prevent short circuits. Prevent movement which could lead to short circuits.

## Materials to Avoid:

Strong oxidizing agents, Corrosives.

## Hazardous Polymerization:

Will not occur.

## Hazardous Decomposition Products:

Metal oxides, CO, CO<sub>2</sub>.

**SECTION11 TOXICOLOGICAL INFORMATION**

## Toxicity Data:

Not available.

## Irritation Data:

The internal battery materials may cause irritation to eyes and skin.

**SECTION12 ECOLOGICAL INFORMATION**

No data available.

**SECTION13 DISPOSAL CONSIDERATION**

## Appropriate Method of Disposal of Substance:

Lithium batteries are best disposed of as a non-hazardous waste when fully or mostly discharged. Contact a licensed professional waste disposal service to dispose of large quantities materials.

**SECTION14 TRANSPORT INFORMATION**

IATA: Shipping Name: Lithium Metal Battery  
Hazard Class: Class 9  
UN Number: 3090  
Packing Group: N/A

Lithium metal content exceeds the standard. So it belongs to dangerous goods. The goods are packaged according to the packaging Instruction 968-970 of IATA DGR 60<sup>th</sup> Edition for transportation, Cargo aircraft only.



IMO: Shipping Name: Lithium Metal Battery  
Hazard Class: N/A  
UN Number: 3090  
Packing Group:N/A  
The product is not restricted to IMO International Maritime Dangerous Goods Code (2010 Edition) according to special provision 188.

### **SECTION15 REGULATORY INFORMATION**

No information.

### **SECTION16 OTHER INFORMATION**

Date: 2019-01-10  
Department: Wuhan Voltec Energy Sources Co.,Ltd  
Safety and Reliability lab

Revision: Tel (Fax) :+86-27-84732116/84662179/

Other Information: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. We make 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 investigation to determine the suitability of the information for their particular purposes. In no way shall we be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental consequential or exemplary damages, howsoever arising from using the above information.