



MSDS Report

Report No. : CTL1404090668-O

Samples : Battery

Models : Alkaline battery

Applicant : shenzhen lusty battery technology co.,ltd

Address : 5/F, EBuilding, No.2 North, ShangXue Industrial Bantian, Longgang District, Shenzhen

Manufacturer : SHENZHEN LUSTY BATTERY CO.,LTD

Address : 5/F, EBuilding, No.2 North, ShangXue Industrial Bantian, Longgang District, Shenzhen

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Section 1- Chemical Product and Company Identification

Product Name : battery

Models : alkaline battery

Nominal Voltage : 1.5V

Typical Capacity : 1700mAh

Weight : 22g

Shape and Physical Dimension (mm) : 50.5*14.5mm

Manufacturer : shenzhen lusty battery technology co.,ltd

Address : 5/F, EBuilding, No.2 North, ShangXue Industrial Bantian, Longgang District, Shenzhen

TEL : 86-755-83423016

Emergency Telephone : 86-755-83423016

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Section 2-Composition/ Information on Ingredients

Chemical Composition	CAS No.	Weight(%)
Manganese Dioxide	1313-13-9	56
Graphite Powder	7782-42-5	3
Calcium Stearate	1592-23-0	0.5
Zinc Powder	7440-66-6	15
Zinc Oxide	1314-13-2	3.5
PA	107-10-8	4
PAA	9003-01-4	4
Potassium Hydroxide (Liquid)	1310-58-3	9
Water	7732-18-5	5

Section 3- Hazards Identification

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.



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Section 4- First Aid Measures

Skin and Eyes:

In the event that battery ruptures, flush with copious quantities of flowing lukewarm water for a minimum of 15 minutes. Get immediate medical attention for eyes. Wash skin with soap and water.

Inhalation:

If vapors or fumes from vented or leaking battery are irritating to respiratory tract, move to fresh air. Seek medical attention immediately.

Ingestion:

Ingestion of a battery can be harmful. Call The National Capital Poison Control Center or your local Poison Control Center, day or night - for advice and follow-up.

Section 5- Fire-Fighting Measures

Flash Point: N/A

Extinguishing Media: Dry chemical, CO₂

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, other irritating or toxic gases.

Section 6- Accidental Release Measures

Procedures to contain and clean up leaks or spills:

In the event of a battery rupture, prevent skin contact and collect all released material in a plastic lined metal container.

Reporting procedure:

Report all spills in accordance with Federal, State and Local reporting requirements.

Waste disposal method:

Earth or sand should be used to absorb the exudation, seal leaking battery and earth in a heavy duty polythene bag and dispose of as special waste in accordance with local regulations.



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Section 7- Handling and Storage

Handling precautions:

Do not short circuit or expose to temperatures above the temperature rating of the battery.

Do not recharge, over-discharge, force discharge, immerse, puncture or crush.

Storage:

Store in a cool place but prevent condensation on cells and batteries. Elevated temperatures can result in shortened battery life and degrade performance. Do not store batteries in high humidity environments for long periods of times.

Batteries 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:

Wear a niosh approved self contained breathing apparatus in the pressure demand mode, or a fullface supplied air respirator.

Ventilation:

Mechanical ventilation and / or local exhaust, sufficient in pattern and volume, to meet tlv requirements

Protective gloves:

Use polyethylene or nitrile gloves if frequent skin contact is likely.

Eye protection:

Safety glasses with splash guards or side shielding recommended.

Other protective clothing or equipment:

Wear impervious clothing if bodily exposure is anticipated.

Work / Hygienic practices:

Do not wear contact lenses. Wash contaminated clothing before reuse. Wear protective safety equipment as necessary to minimize contact. Wash hands with soap and water.

Section 9- Physical and Chemical Properties

Appearance characters: Silvery, Rectangle, with odorless solid battery.



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Section 10- Stability and Reactivity

Stability:

Product is stable under normal storage and handling conditions.

Conditions to avoid:

High temperatures or incinerate. Deform, mutilate, crush, Pierce, short circuit. expose over a long period to humid conditions

Materials to avoid:

Oxidizing agents, alkalis, water.

Hazardous reactions:

If leaked, forbidden to contact with strong oxidizers, mineral acids, strong alkalies, halogenated hydrocarbons.

Section 11- Toxicological Information

Inhalation, skin contact and eye contact are possible when the battery is opened. Exposure to internal contents, the corrosive fumes will be very irritating to skin, eyes and mucous membranes. Overexposure can cause symptoms of non-fibrotic lung injury and membrane irritation.

Section 12- Ecological Information

When promptly used or disposed the battery dose not present environmental hazard.

When disposed, keep away from water, rain and snow.

Section 13- Disposal Considerations

APPROPRIATE METHOD OF DISPOSAL OF SUBSTANCE OR PREPARATION

If batteries are still fully charged or only partially discharged, they can be considered a reactive hazardous waste because of significant amount of not reaction or unconsumed lithium remaining in the spent battery. The battery must be neutralized through an approved secondary treatment facility prior to disposal as a hazardous waste, Recycling of battery can be done in authorized facility, through licensed waste carrier.



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Section 14- Transport Information

ALKALINE BATTERY is exempt from dangerous goods. It is considered non-dangerous goods by the International Civil Aviation Organization (ICAO), the International Air Transport Association (IATA) Special Provisions A123, or the International Maritime Dangerous Goods regulations (IMDG).

S.P.A123 This entry applies to Batteries, electric storage, not otherwise listed in Subsection 4.2-List of Dangerous Goods. Examples of such batteries are: alkali-manganese, zinc-carbon, nickel-metal hydride and nickel-cadmium batteries. Any electrical battery or battery powered device, equipment or vehicle having the potential of dangerous evolution of heat must be prepared for transport so as to prevent

(a) a short-circuit (e.g. in the case of batteries, by the effective insulation of exposed terminals; or, in the case of equipment, by disconnection of the battery and protection of exposed terminals) is forbidden from transport; and

(b) accidental activation

The words "Not Restricted" and the Special Provision number must be included in the description of the substance on the Air Waybill as required by 8.2.6, when an Air Waybill is issued.

Separate batteries when shipping to prevent short-circuiting. They should be packed in strong packaging for support during transport.

Section 15- Regulatory Information

OSHA hazard communication standard (29 CFR 1910.1200)

Hazardous Non-hazardous

Section 16- Other Information

The above information is based on the data of which we are aware and is believed to be correct as of the data hereof. Since this information may be applied under conditions beyond our control and with which may be unfamiliar and since data made available subsequent to the data hereof may suggest modifications of the information, we do not assume any responsibility for the results of its use. This information is furnished upon condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose.

*****END OF REPORT*****