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1. IDENTIFICATION

Product Identifier

Name of Product: Alkaline Manganese Button Cell (Mercury Free)-Cell

Other means of identification

Product Models: LR44 **Nominal Voltage:**1.5V

Nominal capacity: 170mAh Nominal power: 0.255Wh

Weight: 1.95g

Recommended use of the chemical and restriction on use

Recommended Use: Toy, calculator, remote-controller, other electric product.

Restriction On Use: No information available

Information Of Supplier:

Company Name: FOSHAN JIA YING BATTERY CO., LTD.

Address: 3rd Floor BuildingC, XiongYing Logictics Park, ShiZhou Branch BaiChen

Road, ChenCun Town, ShunDe District Foshan City, Guangdong Province China.

Zip code: 528313

Contact person: Xiang xiaoyun

Tel:+86-757-23336318

E-mail: 784547726@qq.com Fax: +86 -757- 23339210 Emergency Telephone

+86-757-23336318

2. Hazard(s) Identification

Classification:

The battery is considered as an article, and this product is not classified as hazardous.

Signal Word: No signal word

Hazard Statements and Symbol

Hazard statement: No hazard statement

Pictogram(s): No pictogram

Precautionary Statements: No Precautionary Statements

Description of any hazards not otherwise classified

These chemicals are contained in a sealed can. Risk of exposure occurs only if the battery is mechanically or electrically abused. The most likely risk is acute exposure when a battery vents. Leaking material exposure to skin, eyes may cause irritation. Inhalation of fumes my cause respiratory irritation..

Skin touch

Contact with battery electrolyte may cause burns and skin irritation.

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Eye touch

Contact with battery electrolyte may cause burns. Eye damage is possible.

Inhalation

Inhalation of a large number of vapors or fumes released due to heat may cause respiratory.

Ingestion

Ingestion of battery contents may cause mouth, throat and intestinal burns and damage.

Unknown Toxicity

No information available.

3. Composition/Information on Ingredients

Chemical Name	CAS No.	Weigh%
Iron	7439-89-6	50
Manganese Dioxide	1313-13-9	23
Zinc	7440-66-6	17
Potassium Hydroxide	1310-58-3	5
Graphite	7782-42-5	5
Mercury	7439-97-6	0.0001
Cadmium	7440-43-9	0.001
Lead (Pb)	7439-92-1	0.004

4. First Aid Measures

General Advice

First aid is Applicable only in the case of cell rupture.

Skin Contact:

Washing immediately with plenty of water and soap for at least 15 minutes. In the case of skin irritation or allergic reaction see a physician.

Eye contact:

If symptoms persist, call a physician. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Remove contact lenses, if present and easy to do. Continue rinsing. Do not rub affected area.

Inhalation of Vented Gas:

Remove to fresh air. If symptoms persist, call a physician. Get medical attention immediately if symptoms occur.

Ingestion:

Do not induce vomiting. Rinse mouth immediately and drink plenty of water. Call a physician or poison control center immediately.

Most important symptoms and effects, both acute and delayed

Contact with internal components may cause allergic skin sensitizations (rash) and irritate eyes, nose, throat, respiratory system. Cobalt and cobalt compounds are considered to be possible human carcinogen(s).

Indication of any immediate medical attention and special treatment needed

No information available

5. Fire -Fighting Measures

Suitable Extinguishing Media

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Usefoam, dry powder or dry sand, CO₂ as appropriate.

Unsuitable Extinguishing Media:

CAUTION: Use of water spray when fighting fire may be inefficient.

Specific Hazards Arising from the chemical

Under fire conditions, batteries may burst and release hazardous decomposition products when exposed to fire situation. This could result in the release of flammable or corrosion materials.

Hazardous Combustion product:

CO, CO₂, Metals oxides, Irritating fumes.

Protective equipment and precautions for firefighters

Firefighters must wear fire resistant protective equipment and appropriate breathing apparatus. The staff must equipment filtermask(full mask) or isolated breathing apparatus. The staff must wear the clothes which can defense the fire and the toxic gases. Put out the fire in the upwind direction. Remove the container to open space as soon as possible. Spray water on the containers in the fireplace to keep them cool until finish extinguishment.

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

If the battery material is released, remove personnel from area until fumes dissipate. Provide maximum ventilation to clear out hazardous gases. The preferred response is to leave the area, dispose the case after the batteries cool and vapors dissipate. Provide maximum ventilation. Avoid contact with skin, eyes or inhalation of vapors.

Methods for containment

Prevent further leakage or spillage if safe to do so.

Methods for cleaning up

Collect all released material in a plastic lined container. Dispose off according to the local law and rules. Avoid leached substances to get into the earth, canalization or waters.

7. Handling and Storage

Precaution for safe handling

The batteries should not be opened, destroyed or incinerate, 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 charge the battery, forced over-discharge, throw to fire. Do not crush or puncture the battery, or immerse in liquids. Do not short or install with incorrect polarity.

Conditions for safe storage, including any incompatibilities

Storage:

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, nor expose to direct sunlight for long periods.

Incompatible products: Strong acids. Strong oxidizing agent.

8. Exposure Controls/Personal Protection

Control parameters

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CAS# 7439-89-6 NIOSH REL: TWA 1 mg/m3
OSHA PEL : none

Appropriate engineering controls

In case of battery venting, provide as much ventilation as possible. Avoid confined areas with venting batteries. Do not install these batteries in sealed, unventilated areas. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

Individual protection measures

Respiratory protection:

No personal respiratory protective equipment normally required. In case of inadequate ventilation wear respiratory protection

Eye /face protection:

No personal protective equipment normally required.

Skin protection:

Wear protective clothing to prevent contact

Hand protection:

Wear protective gloves

9. Physical and Chemical Properties

Physical State: Solid

Odor: Odorless

Odor Threshold: No information available

pH: 5.8

Melting/freezing point: 1535 °C

Boiling point/boiling range: 2575°C

Flash Point: No data available

Evaporation Rate: No data available

Flammability(Solid, gas): No data available

Flammability Limit in Air:

Upper flammability limit:No data available

Lower flammability limit:No data available

Vapor pressure: No data available

Vapor density: No data available

Specific Gravity: No data available

Solubility: Insoluble in water

Partition coefficient:n-octanol/water: No data available

Autoignition temperature: No data available

Decomposition temperature: No data available

Kinematic viscosity: No data available

Dynamic viscosity: No data available

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10. Stability and Reactivity

Reactivity:

Stable under recommended storage and handling conditions.e

Chemical stability:

Stable under recommended storage conditions.

Possibility of Hazardous Reactions:

When exposed to fire or extreme heat, batteries may emit toxic fumes

Conditions to avoid:

Do not subject battery to mechanical shock. Keep away from open flames, high temperature.

Incompatible materials:

Strong acids, strong oxidizing agents.

Hazardous decomposition products:

Under fire conditions, the electrode materials can form carcinogenic cobalt oxides .

11. Toxicological Information

Information on likely routes of exposure

Inhalation:

Inhalation of a large number of vapors or fumes released due to heat may cause respiratory.

Eye Contact:

Contact with battery electrolyte may cause burns. Eye damage is possible.

Skin Contact:

Contact with battery electrolyte may cause burns and skin irritation.

Ingestion:

No effect under routine handling and use for sealed battery. Exposure to internal contents may cause irritation.

Information on toxicological characteristics

Acute toxicity:

No data available.

Skin corrosion/irritation:

The liquid in the battery irritates.

Serious eye damage/ irritation:

The liquid in the battery irritates.

Respiratory sensitization:

The liquid in the battery may cause sensitization to some person.

Skin sensitization:

The liquid in the battery may cause sensitization to some person.

Carcinogenicity:

Cobalt and Cobalt compounds are considered to be possible human carcinogen(s)

Germ Cell Mutagencity:

No data available.

Reproductive Toxicity:

No data available.

STOT-single Exposure:

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No data available.

STOT-repeated Exposure:

No data available.

Aspiration Hazard:

No data available.

12. Ecological Information

Ecotoxicity:

No information available

Persistence and Degradability:

No information available

Bioaccumulation:

No information available

Other adverse effects:

When promptly used or disposed the battery does not present environmental hazard. When disposed, keep away from water, rain and snow

13. Disposal Considerations

Waste treatment methods

Disposal methods:

Should not be released into the environment.

Contaminated Packaging:

Dispose of in accordance with federal, state and local regulations.

14. Transportation Information

The product is not regulated as a hazardous material for transportation. (ST/SG/AC.10/1/ Rev.19; IMDG CODE 38-16 edition; IATA DGR 58th edition)

UN number: Not applicable.

UN Proper shipping name: Not applicable. Transport hazard class(es): Not applicable. Packing group (if applicable): Not applicable.

Marine pollutant (Yes/No): No

Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code): Not applicable.

Special precautions: Batteries must be separated from each other to prevent short circuits and to prevent movement that could lead to short circuits. Products must also be packed in strong packaging that can withstand the rigors normal to transportation.

15. Regulatory information

OSHA hazard com	munication sta	ndard (29 CFR 1910.1200
Hazardous	√	_Non-hazardous

16. Other Information

Disclaimer:

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information

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and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used material used in combination with any other materials or in any process, unless specified in the test

Prepared By: Guangzhou CP-UP Certification Technology Service Co., Ltd

Revision Date: Jun.23-2020

--- End of SDS ---