



Material Safety Data Sheet

According to ISO 11014-2009

Report No.: JTT231225052JE

Date: 2023-12-26

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MSDS

According to ISO 11014-2009

Applicant: Shenzhen Liyawang Battery Co., Ltd

Address: Building 3, Sanwei Industrial Park, Hangcheng Street,
Baoan District, Shenzhen City

Product Name: Dry Battery

Issue Date: Dec. 26th, 2023

Edited By: Dongguan JTT Testing Technology Co., Ltd

Approved by: _____

Thomas Su



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Section 1 - Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product name: Dry Battery

Model No: R03/R6/R03P/R6P/LR03/LR6/LR20/R20P/LR14/R14P/6F22/6LR61

Nominal voltage: 1.5V

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses: No information available.

Uses advised against: No information available.

1.3 Details of the supplier of the material safety data sheet

Manufacturer/Supplier: Shenzhen Liyawang Battery Co., Ltd

Address: Building 3, Sanwei Industrial Park, Hangcheng Street, Baoan District, Shenzhen City

Tel: 18382700981

E-mail: 2208714776@qq.com

1.4 Emergency telephone number: 0755-88866979

Section 2 - Hazards identification

2.1 Classification of the substance or mixture:

Classification according to Regulation GHS

This product is not classified according to the GHS regulation.

2.2 Label elements

Labeling according to Regulation GHS

This product is not classified and labeled according to the GHS regulation.

Hazard pictograms: N/A

Signal word: N/A

Hazard statements: N/A

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Precautionary statement: N/A

Hazards not otherwise classified (HNOC): No further relevant information available.

2.3 Other hazards:

The battery is not hazardous when used according to the instructions of manufacturer under normal conditions. In case of abuse, there's risk of rupture, heat, leakage of internal components, which could cause casualty loss and harm to the environment. Abuses including but not limited to the following cases: put into fire, whacked with hard object, punctured with acute object, crushed and broken.

Section 3 - Composition/Information on Ingredient

3.1 Chemical characterization: Mixture.

Description: No information available.

Product: Consisting of the following components.

Chemical Name	CAS No.	EC No.	Concentration
Manganese Dioxide	1313-13-9	215-202-6	33%
Zinc	7440-66-6	231-175-3	24%
Carbon	7782-42-5	231-955-3	9%
Copper	7440-50-8	231-159-6	8%
Zinc chloride	7646-85-7	231-592-0	8%
Oxidation ammoniu	10196-04-0	233-484-9	5%
Polypropylene	9003-07-0	--	4%
Others	--	--	9%

Section 4 - First Aid Measures

4.1 Description of first aid measures

The battery in the product is not hazardous with eye and skin contact under normal circumstance. In case of fire or rupture, the leakage of internal hazardous substance or formation of hazardous substance would occur, take the following measures if contact with it:

After inhalation:

If feel unwell, move to fresh air immediately and keep breathing in a comfortable position. If symptoms persist, get medical aid.

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After skin contact:

Remove all contaminated clothing. Rinse skin with plenty of water and soap. Get medical advice.

After eye contact:

Rinse eyes with water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical advice.

After Ingestion:

Rinse mouth with water. Get medical aid. Do not induce vomiting unless directed by a medical professional.

Information for doctor:

Doctors need to make judgments based on the patient's reactions and provide treatment.

4.2 Most important symptoms and effects, both acute and delayed:

Contact with the contents of the battery can cause severe skin burns and serious eye damage.

4.3 Indication of any immediate medical attention and special treatment needed:

No further relevant information available.

Section 5 – Firefighting measures

5.1 Extinguishing media

Suitable extinguishing agents: Use water spray, dry chemical, carbon dioxide, chemical foam or sand.

Unsuitable extinguishing agents: No information available.

5.2 Special hazards arising from the substance or mixture:

Improper use of batteries poses a risk of content leakage. The smoke generated by heating or combustion has a certain degree of irritancy and corrosiveness.

5.3 Advice for firefighters

Firefighters should wear appropriate breathing apparatus and protective equipment. Move containers to open space if possible. Spray water to keep the container cool until the fire is over.

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Section 6 - Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures:

Quickly evacuate personnel from the contaminated area to a safe area, set up warning signs around, and strictly restrict entry and exit. It is recommended that emergency response personnel wear protective equipment as required. Avoid inhaling vapors, aerosols or gases. Do not contact the leakage directly. Cut off the source of leakage as much as possible. Flush the floor with plenty of water and put the diluted wash water into the waste water system.

6.2 Environmental precautions:

Avoid release to the environment. Avoid empty into drains, surface water and ground water.

6.3 Methods and material for containment and cleaning up:

Absorb spilled material with an inert absorbent(dry sand and earth). Sweep and shovel contaminated absorbent into a suitable container for proper disposal.

6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

Section 7 - Handling and Storage

7.1 Precautions for safe handling:

Pay attention to ventilation. Operators must be specially trained and strictly follow the operating procedures. Operators should wear safety protective equipment as required. Avoid inhaling vapors, aerosols or gases. Keep away from heat and fire. Handling should be careful to prevent damage to the packaging and containers. Equipped with corresponding varieties and quantities of fire equipment and leakage emergency treatment equipment.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool, dry and ventilated place, 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.

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7.3 Specific end use(s):

No further relevant information available.

Section 8 - Exposure controls/personal protection

Appropriate engineering controls:

Maintain adequate ventilation.

Respiratory Protection:

No required for consumer use. If there is a Hazard of contact, use self-contained full-face respiratory equipment.

Hand Protection:

No required for consumer use. If there is a Hazard of contact, wear protective gloves.

Eye protection:

No required for consumer use. If there is a Hazard of contact, wear safety goggles.

Skin Protection:

No required for consumer use. If there is a Hazard of contact, wear protective clothing.

Environmental exposure controls:

Control measures must comply with Community environmental protection legislation.

Other protection:

Attention to personal hygiene.

Section 9 - Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance: Solid

Colour: /

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Odour:	Odourless
PH-value:	/
Melting point/Melting range(°C):	/
Boiling point/Boiling range(°C):	/
Flash point(°C):	/
Vapour pressure(MPa):	/
Density(g/cm ³):	/
Solubility in water (g/l):	Insoluble in water
Log Kow value:	/
Viscosity(mPa.s):	/
Other information:	/

9.2 Additional information: No data available.

Section 10 - Stability and Reactivity

10.1 Reactivity

Stable under recommended storage and handling conditions.

10.2 Chemical stability

Stable under normal conditions of use, storage and transport.

10.3 Possibility of hazardous reactions

None under normal processing.

10.4 Conditions to avoid

Heat above 70°C or incinerate, deform, mutilate, crush, disassemble. Expose over a long period to humid conditions.

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10.5 Incompatible materials

Strong acids, Oxidizing agents.

10.6 Hazardous decomposition products

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

Section 11 - Toxicological Information

Acute toxicity:

No data available.

Skin corrosion/irritation:

Contact with internal contents may cause serious skin burns.

Serious eye damage/irritation:

Contact with internal contents may cause serious eye damage.

Respiratory or skin sensitization:

Contact with internal contents may cause respiratory or skin allergies.

Toxicokinetics, metabolism and distribution:

No data available.

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction):

No data available.

Section 12 - Ecological Information

12.1 Toxicity

Aquatic toxicity: No further relevant information available.

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12.2 Persistence and degradability

No further relevant information available.

12.3 Bioaccumulative potential

No further relevant information available.

12.4 Mobility in soil

No further relevant information available.

12.5 Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

12.6 Other adverse effects

The contents inside the battery are very toxic to aquatic life with long lasting effects.

Section 13 - Disposal Considerations

13.1 Waste treatment methods

Dispose of in accordance with applicable regional and local laws and regulations.

Section 14 - Transport Information

14.1 UN-Number

ADR, RID, ADN, IMDG, IATA

Not applicable

14.2 UN proper shipping name

ADR, RID, ADN, IMDG, IATA

Not applicable

14.3 Transport hazard class (es)

ADR, RID, ADN, IMDG, IATA

Class

Not applicable

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Label	Not applicable
14.4 Packing group	
ADR, RID, ADN, IMDG, IATA	Not applicable
14.5 Environmental hazards	Not applicable
14.6 Special precautions for user	Not applicable
14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code	Not applicable
UN "Model Regulation":	Not applicable

Section 15 - Regulatory Information

No information available.

Section 16 - Additional Information

Reference: N/A

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