

Material Safety Data Sheet (MSDS)

According to (EC) No.1907/2006 and amendment (EU) 2015/830

Report No.: DGC211228040LEA

Date: Jan. 06, 2022

Page 1 of 9

Product Name: Dry Battery

MSDS

According to

(EC) No.1907/2006 and amendment (EU) 2015/830

Applicant: Shenzhen bursto electronic technology co, LTD
Address: No. 289, Huafan Road, Dalang street, Longhua District, Shenzhen

Product Name: Dry Battery

Issue date: Jan. 06, 2022

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Page 2 of 9

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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.: RO3,R6,RO3PR6PLR03.LR6RI4PR2OPLR14LR20,6F22.6LR61

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 bursto electronic technology co, LTD

Address: No. 289, Huafan Road, Dalang street, Longhua District, Shenzhen

E-mail: sales01@busto.net

Tel: 0755-83464896

1.4 Emergency telephone number: 13590165655

Section 2 - Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP]

Manganese dioxide(CAS No.: 1313-13-9)

Acute toxicity 4 : H332; H302

Zinc (7440-66-6)

Substances and Mixtures which, in contact with water, emit flammable gases, Hazard

Category 2: H261

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Page 3 of 9

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Zinc chloride(CAS No.: 7646-85-7)

Skin corrosion/irritation, Hazard Category 1A, 1B, 1C: H314

Serious eye damage/eye irritation, Hazard Category 1: H318

Hazardous to the aquatic environment — AcuteHazard, Category 1: H400

Hazardous to the aquatic environment — Chronic Hazard, Category 1:H410

Classification according to Directive 67/548/EEC [DSD] or Directive 1999/45/EC [DPD]

Xn; R20/22

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 [CLP]

The product is classified and labelled according to the CLP regulation.

Hazard pictogram(s):



GHS07



GHS05



GHS09

Signal word: Warning; Danger

Hazard statement(s):

H332	Harmful if inhaled
H302	Harmful if swallowed
H261	In contact with water releases flammable gases.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H400	Very toxic to aquatic life.

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Page 4 of 9

Product Name: Dry Battery

Precautionary statements:

P223	Keep away from any possible contact with water,because of violent reaction and possible flash fire.
P231 + P232	Handle under inert gas. Protect from moisture.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P264	Wash ... thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301 + P330 + P331	IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P301+P312	IF SWALLOWED: Call a POISON CENTER/ doctor/.../if you feel unwell.
P302+P352	IF ON SKIN: Wash with plenty of water/...
P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER or doctor/physician.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P321	Specific treatment (see ...on this label).
P322	Specific measures (see ... this label).
P330	Rinse mouth.
P335 + P334	Brush off loose particles from skin. Immerse in cool water/wrap in wet bandages.

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Page 5 of 9

Product Name: Dry Battery

P363	Wash contaminated clothing before reuse.
P370 + P378	In case of fire: Use... to extinguish.
P391	Collect spillage.
P402 + P404	Store in a dry place. Store in a closed container.
P405	Store locked up.
P501	Dispose of contents/container to ...

2.3 Other hazards: No information available.

Section 3 – Composition/Information on Ingredient

3.1 Chemical characterization: Mixtures

Description:

Product: consisting of the following components.

Chemical Name	CAS No.	EC No.	Concentration
Manganese dioxide	1313-13-9	215-202-6	36.6%
Zinc	7440-66-6	231-175-3	26.4%
Water	7732-18-5	231-791-2	15.8%
AmmoniumChloride	2676-72-4	---	1.2%
Zinc chloride	7646-85-7	231-592-0	8.6%
Iron	7439-89-6	---	2%
Polypropylene	9003-07-0	---	3.4%
Oher	---	---	6%

Section 4 - First Aid Measures

Skin: If electrolyte leakage occurs and makes contact with skin, wash with plenty of water immediately. Get medical aid.

Eyes: If the physical contact with eyes, wash with copious amounts of water for twenty(20) minutes, and contact a physician. Get medical aid.

Inhalation: Immediately moved to fresh air, if breathing stops, artificial respiration should begin immediately. Get medical aid.

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Report No.: DGC211228040LEA

Date: Jan. 06, 2022

Page 6 of 9

Product Name: Dry Battery

Intake: Do not induce vomiting, seek immediate medical attention. Water gargle thoroughly to avoid patients with vomiting, if spontaneous vomiting in patients to ensure that their bodies forward in order to reduce inhalation risk, if the breathing stops, artificial respiration should begin immediately. Get medical aid.

Section 5 – Firefighting measures

Extinguishing agent: Anti-insoluble foam, dry powder, carbon dioxide, sand.

Hazardous combustion products: Carbon monoxide, Carbon dioxide.

Fire Fighting Procedures: In the event of a fire, wear full protective clothing and self-contained breathing apparatus with full-face piece operated in the pressure demand or other positive pressure mode. Fight fire from the maximum distance. Evacuate area.

Specific Hazards: When involved in a fire, this material may decompose and produce irritating gas which is harmful for firefighter.

Section 6 - Accidental Release Measures

Personal Precautions: Wear appropriate personal protective equipment.

Methods of Clean up: Spill and leaks are unlikely because cells are contained in a hermetically-sealed case. In the event of a battery rupture, prevent skin contact and collect all released material in a plastic lined metal container. Dispose in accordance with applicable state and federal regulations.

Section 7 - Handling and Storage

Handling Precautions: 1. Do not crush, pierce, short (+) and (-) battery terminals with conductive (i.e. metal) goods. 2. Do not directly heat or solder. Do not throw into fire. 3. Do not mix batteries of different types and brands. 4. Do not mix new and used batteries, The same type but different electrochemical or brand batteries do not mix. 5. Keep batteries in non-conductive (i.e. plastic) trays. 6. Electric and battery contacts should be clean, wipe with a damp cloth necessary, to be dried is loaded properly labeled according to the polarity. 7. Disposable battery can not be heated, or they may explode. 8. Battery is not removable. 9. Battery do not be thrown away, put in as much as possible separated from other garbage.

Storage Precautions: 1. Stored in a cool, dry, well-ventilated place. 2. Away from heat, ignition sources and materials compatibility. 3. Storage areas should be clearly marked "no obstacles." 4. Near

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Report No.: DGC211228040LEA

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Page 7 of 9

Product Name: Dry Battery

the storage areas have adequate fire extinguishers and spill clean-up equipment. 5. Avoid storing large quantities of indoor, as much as possible stored in the isolation of the fire building. 6. Small parts, Avoid contact with children, to avoid being swallowed children.

Section 8 - Exposure controls/personal protection

Exposure guidelines: Manganese Dioxide(as Mn):5.0 mg/m³ (OSHA);0.2mg/m³(ACGIH)
Zinc(as ZnO,dust):2mg/m³(ACGIH)

Engineering measure: Use general ventilation under normal use condition.

Respiratory protection: Not necessary under normal use. In case of battery rupture, use self-contained full-face respiratory equipment. equipment with type ABEK filter.

Hand protection: Not necessary under normal use. Use rubber gloves if handling a leaking or ruptured battery.

Eye protection: Not necessary under normal use. Wear protective safety glasses if handling a leaking or ruptured battery.

Skin protection: Not necessary under normal use. Use rubber apron and protective working in case of handling of a ruptured battery.

Other protection: 1. In the workplace non-smoking or eating. 2. To maintain clean workplace.

Section 9 - Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance: /

Colour: /

Odour: /

9.2 Additional information: No data available.

Section 10 - Stability and Reactivity

Stability: normal conditions and stability

Avoid material: Corrosive liquids

Stability Condition to Avoid: Avoid heat, open flames, moisture, crush, disassemble, short circuit or recharge.

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Page 8 of 9

Product Name: Dry Battery

Hazardous Decomposition Products: Burning can produce carbon monoxide, carbon dioxide. Carbon monoxide is highly toxic if inhaled; carbon dioxide in sufficient concentrations can act as an asphyxiant. Acute overexposure to the products of combustion may result in irritation of the respiratory tract.

Section 11 - Toxicological Information

Manganese Dioxide: Harmful by inhalation or ingestion. Long term exposure to manganese compounds may reduce fertility in men.

Toxicity data: ORL-RAT LD50>3478mg/kg

Zinc: May be harmful if swallowed or inhaled. May act as an irritant.

Section 12 - Ecological Information

Leaking metals will easily penetrate the soil, polluting groundwater, and then into the fish life, crops, the destruction of the human living environment, an indirect threat to human health. More importantly, the contaminated soil will be permanently lose its use value.

The waste batteries contain heavy metals can not be biodegradable and can accumulate in vivo.

Section 13 - Disposal Considerations

The nature of waste: Serious pollution of solid waste.

Waste disposal methods: Sent to a special recycling bins of used batteries, or sent to EPA.

Notes waste: Do not waste batteries and garbage mixed together, to be dealt with separately.

Section 14 - Transport Information

Dry cell are not subject to dangerous goods regulation for the purpose of transportation by the U.S. Department of Transportation(DOT),the International Civil Aviation Organization(ICAO),the International Air Transport Association(IATA) or the International Maritime Dangerous Goods regulations(IMDG).The only DOT requirement for shipping Carbon batteries is Special Provision 123 which states: "Batteries, dry are not subject to the requirements of this subchapter only when they are offered for transportation in a manner that prevents the dangerous evolution of heat(for example, by the effective insulation of exposed terminals)."

IATA requires that batteries being transported by air must be protected from short-circuiting and protected from movement that could lead to short-circuiting.

The products has passed the special procision A123 .

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Page 9 of 9

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Packaging requirement: The good are packaged according to the packaging requirement of Non-restricted Goods.

Suggestion according to IMDG: The goods are not subject to IMDG.

Section 15 - Regulatory Information

Overview: Do not dispose in fire, mix with other battery types, recharge, connect improperly, or short circuit, which may result in heating, explosion or leakage of cell contents. Observe all warnings and precautions listed for the product before use. The children should be instructed before they make use of the product.

Manganese Dioxide:

European Priority Lists and Risk Assessment Information(Council Regulation(EEC)793/93):This chemical substance is not listed in a priority list(as foreseen under Council Regulation(EEC) No793/93 on the evaluation and control of the risks of existing substances.)

Zinc:

European Priority Lists and Risk Assessment Information(Council Regulation(EEC)793/93):

Rapporteur: Netherlands

Priority List#: 2

Section 16 - Additional Information

We believe that the information contained herein is current as of the date of this Material Safety Data Sheet, and is offered in good faith. Since the use of this information and of these opinions and the conditions of the use of the product are not within the control of Technology, it is the user's obligation to determine the conditions of safe use of the product.

End of document

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