

## Material Safety Data Sheet

Printing date 13/01/2016

Reviewed on 05/01/2016

### 1 Identification of the substance/mixture and of the company/undertaking

- **Product identifier**
- **Trade name:** ALKALINE BATTERIES
- **Article number:** LR03; LR6; LR14; LR20; 6LR61; LR1; LR61; LR44; 23A; 27A;
- **Application of the substance / the preparation:** Digital and electronic devices
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:** SHENZHEN GASSNER BATTERY CO.,LTD
- **Name:** Anthony
- **Full address:**  
3<sup>rd</sup> FLOOR, B2, BAO'AN FOREIGN TRADE INDUSTRY CITY, FOURTH INDUSTRY AREA, LONGHUA,  
SHENZHEN, CHINA, 518109.
- **Phone number:** +86-755-27742873
- **Further information obtainable from:** SHENZHEN GASSNER BATTERY CO.,LTD
- **Emergency telephone number:** +86-13926578384
- **Email:** gassner@cngassner.com
- **Reference Number:** GZHG1601009328OT; CANHG1601516834

### 2 Composition/information on ingredients

- **Chemical characterization:** Mixtures
- **Description:** Mixture of the substances listed below with nonhazardous additions.

· <b>Dangerous components:</b>		
1313-13-9	manganese dioxide	63.8%
7440-66-6	zinc powder -zinc dust (pyrophoric)	26.3%
1310-58-3	potassium hydroxide	9.9%

### 3 Hazards identification

- **Information pertaining to particular dangers for man and environment:**  
This product is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
- **Classification system:**  
The classification is according to the latest edition of OSHA Hazard Communication Standard (29 CFR 1910.1200), and extended by company and literature data.
- **NFPA ratings (scale 0 - 4)**



Health = 0  
Fire = 0  
Reactivity = 0

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**· HMIS-ratings (scale 0 - 4)**

HEALTH	0
FIRE	0
REACTIVITY	0

Health = 0

Fire = 0

Reactivity = 0

**· Other hazards**

*A sealed Alkaline battery is not hazardous in normal use on principle.*

*The materials contained in this product may only represent below hazard if the integrity of the battery is compromised, physically or electrically abused:*

**NFPA ratings (scale 0 - 4)**

*The substance demonstrates unusual reactivity with water.*

Health = 4

Fire = 4

Reactivity = 2

**HMIS-ratings (scale 0 - 4)**

Health = 4

Fire = 4

Reactivity = 2

**4 First aid measures****· General information:**

*If exposure to internal materials within battery due to damaged outer casing, the following actions are recommended.*

*Immediately remove any clothing soiled by the product.*

*No special measures required.*

**· After inhalation:** *Supply fresh air; consult doctor in case of complaints.*

**· After skin contact:** *Immediately rinse with water.*

**· After eye contact:** *Rinse opened eye for several minutes under running water. Then consult a doctor.*

**· After swallowing:** *If symptoms persist consult doctor.*

**5 Firefighting measures**

**· Suitable extinguishing agents:** *CO<sub>2</sub>, sand, extinguishing powder. Do not use water.*

**· For safety reasons unsuitable extinguishing agents:** *Water*

**· Special hazards arising from the substance or mixture** *No further relevant information available.*

**· Protective equipment:** *No special measures required.*

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### 6 Accidental release measures

· **Personal precautions, protective equipment and emergency procedures** Not required.

· **Environmental precautions:**

*Do not allow product to reach sewage system or any water course.*

*Inform respective authorities in case of seepage into water course or sewage system.*

*Do not allow to enter sewers/ surface or ground water.*

· **Methods and material for containment and cleaning up:**

*Do not flush with water or aqueous cleansing agents*

· **Reference to other sections**

*No dangerous substances are released.*

*See Section 7 for information on safe handling.*

*See Section 8 for information on personal protection equipment.*

*See Section 13 for disposal information.*

### 7 Handling and storage

· **Handling:**

· **Precautions for safe handling** No special measures required.

· **Information about protection against explosions and fires:** Protect against electrostatic charges.

· **Storage:**

· **Requirements to be met by storerooms and receptacles:** No special requirements.

· **Information about storage in one common storage facility:** Not required.

· **Further information about storage conditions:**

*Keep receptacle tightly sealed.*

*Store in cool, dry conditions in well sealed receptacles.*

· **Specific end use(s)** No further relevant information available.

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### 8 Exposure controls/personal protection

· **Additional information about design of technical systems:** No further data; see item 7.

· **Components with limit values that require monitoring at the workplace:**

#### 1313-13-9 manganese dioxide

PEL (USA)	Short-term value: C 5 mg/m <sup>3</sup> as Mn
REL (USA)	Short-term value: 3 mg/m <sup>3</sup> Long-term value: 1 mg/m <sup>3</sup> as Mn
TLV (USA)	0.2 mg/m <sup>3</sup> as Mn
WEL (Great Britain)	5 mg/m <sup>3</sup> as Mn

#### 1310-58-3 potassium hydroxide

REL (USA)	C2 mg/m <sup>3</sup>
TLV (USA)	Short-term value: C 2 mg/m <sup>3</sup>
WEL (Great Britain)	Short-term value: 2 mg/m <sup>3</sup>

· **Additional information:** The lists that were valid during the creation were used as basis.

· **Personal protective equipment:**

· **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

· **Breathing equipment:** Not required.

· **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer and has to be observed.

· **Eye protection:** Not required.

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**Trade name: ALKALINE BATTERIES****9 Physical and chemical properties**

· <b>General Information</b>	
· <b>Appearance:</b>	
<b>Form:</b>	<i>Solid</i>
<b>Color:</b>	<i>golden</i>
· <b>Odor:</b>	<i>Odorless</i>
· <b>Odour threshold:</b>	<i>Not available</i>
· <b>pH-value:</b>	<i>Not available</i>
· <b>Change in condition</b>	
<b>Melting point/Melting range:</b>	<i>Not available</i>
<b>Boiling point/Boiling range:</b>	<i>Not available</i>
· <b>Flash point:</b>	<i>Not available</i>
· <b>Flammability (solid, gaseous):</b>	<i>Not available</i>
· <b>Ignition temperature:</b>	<i>Not available</i>
· <b>Decomposition temperature:</b>	<i>Not available</i>
· <b>Auto igniting:</b>	<i>Product is not self-igniting.</i>
· <b>Danger of explosion:</b>	<i>Product does not present an explosion hazard.</i>
· <b>Explosion limits:</b>	
<b>Lower:</b>	<i>Not available</i>
<b>Upper:</b>	<i>Not available</i>
· <b>Oxidizing properties</b>	<i>Not available</i>
· <b>Vapor pressure:</b>	<i>Not available</i>
· <b>Density:</b>	<i>Not available</i>
· <b>Relative density</b>	<i>Not available</i>
· <b>Vapour density</b>	<i>Not available</i>
· <b>Evaporation rate</b>	<i>Not available</i>
· <b>Solubility in / Miscibility with</b>	
<b>Water:</b>	<i>Not available</i>
· <b>Segregation coefficient (n-octanol/water):</b>	<i>Not available</i>
· <b>Viscosity:</b>	
<b>Dynamic:</b>	<i>Not available.</i>
<b>Kinematic:</b>	<i>Not applicable.</i>
· <b>Other information</b>	<i>No further relevant information available.</i>

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**Trade name: ALKALINE BATTERIES****10 Stability and reactivity**

- **Chemical stability** Data not available
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

**11 Toxicological information**

- **Acute toxicity:**

- **LD/LC50 values that are relevant for classification:**

1310-58-3 potassium hydroxide

Oral	LD50	273 mg/kg (rat)
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- **Primary irritant effect:**
- **on the skin:** Contact with battery contents may cause caustic effect on skin and mucous membranes.
- **on the eye:** Contact with battery contents may cause strong caustic effect.
- **Sensitization:**
  - Sensitization possible through inhalation.
  - Sensitization possible through skin contact.

**12 Ecological information**

- **Persistence and degradability** No further relevant information available.
- **Bioaccumulative potential** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
  - Water hazard class 2 (Self-assessment): hazardous for water
  - Do not allow product to reach ground water, water course or sewage system.
  - Danger to drinking water if even small quantities leak into the ground.

**13 Disposal considerations**

- **Waste treatment methods**
- **Recommendation:** Smaller quantities can be disposed of with household waste.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

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**Trade name: ALKALINE BATTERIES****14 Transport information**

· <b>UN-Number</b> · <b>DOT, ADR, IMDG, IATA</b>	<i>Not applicable</i>
· <b>UN proper shipping name</b> · <b>DOT, ADR, IMDG, IATA</b>	<i>Not applicable</i>
· <b>Transport hazard class(es)</b> · <b>DOT, ADR, IMDG, IATA</b> · <b>Class</b> · <b>Label</b>	<i>Not applicable</i> <i>Not applicable</i>
· <b>Packing group</b> · <b>DOT, ADR, IMDG, IATA</b>	<i>Not applicable</i>
· <b>Environmental hazards:</b> · <b>Marine pollutant:</b>	<i>Not applicable</i> <i>No</i>
· <b>Special precautions for user</b> · <b>Danger code (Kemler):</b>	<i>Not applicable.</i> <i>Not applicable</i>
· <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>	<i>Not applicable.</i>
· <b>Transport/Additional information:</b>	<b>Alkaline batteries (sometimes referred to as “Dry cell” or “household” batteries) are not listed or regulated as dangerous goods under the IATA Dangerous Goods Regulations, ICAO Technical Instructions, IMDG Code, UN Model Regulations or U.S. hazardous regulations (49CFR). However, special regulatory provisions apply that require batteries to be packaged in a manner that prevents the generation of a dangerous quantity of heat and short circuits. Product shipped in its original unopened packaging is compliant with the following packaging special provisions: <b>Ground Transport (US DOT):</b> 49 CFR172.102 Special Provision 130; <b>Air Transport (IATA)/ICAO:</b> Special Provision A123 (56<sup>th</sup> Edition – 2015) The words ‘NOT RESTRICTED’ and the ‘Special Provision A123’ must be included on the description of the substance on the Air Waybill, when air waybill is issued. <b>Sea -Marine/Water Transport (IMDG):</b> <b>NONE</b> (Not Applicable - No Requirements).</b>

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### 15 Regulatory information

· **Sara**

· **Section 355 (extremely hazardous substances):**

None of the ingredients is listed.

· **Section 313 (Specific toxic chemical listings):**

7440-66-6	zinc powder -zinc dust (pyrophoric)
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· **TSCA (Toxic Substances Control Act):**

All ingredients are listed.

· **Proposition 65**

· **Chemicals known to cause cancer:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

· **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

· **Carcinogeny categories**

· **EPA (Environmental Protection Agency)**

1313-13-9	manganese dioxide	D
7440-66-6	zinc powder -zinc dust (pyrophoric)	II

· **IARC (International Agency for Research on Cancer)**

None of the ingredients is listed.

· **NTP (National Toxicology Program)**

None of the ingredients is listed.

· **TLV (Threshold Limit Value established by ACGIH)**

None of the ingredients is listed.

· **MAK (German Maximum Workplace Concentration)**

None of the ingredients is listed.

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

· **Hazard-determining components of labeling:**

manganese dioxide  
potassium hydroxide

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**Safety phrases:**

- Keep locked up and out of the reach of children.*
- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.*
- Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point.*
- Wear suitable protective clothing, gloves and eye/face protection.*
- In case of fire, use sand, carbon dioxide or powdered extinguishing agent. Never use water.*
- In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).*

## 16 Other information

\*\*\*\*\*  
*The contents and format of this MSDS/SDS are in accordance with 29 CFR 1910.1200(g)*

**DISCLAIMER OF LIABILITY**

*The information in this MSDS/SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in anyway connected with the handling, storage, use or disposal of the product. This MSDS/SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this MSDS/SDS information may not be applicable.*

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