



# SAFETY DATA SHEET

in accordance with 29 CFR 1910.1200 and ANSI standard Z400.1-2010

## BLUFIXX MGS

Material number BF-405-01

Revision date: 6/26/2017

Version: 5

Language: en-US

Date of print: 7/4/2017

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## 1. Product and company identification

### Product identifier

Trade name: BLUFIXX MGS

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

General use: Adhesive

### Details of the supplier of the safety data sheet

Company name: BLULIGHT LP

Street/POB-No.: 1900 West Loop South, Suite 1550

Postal Code, city: Houston, TX 77027

USA

WWW: www.blufixx.com

E-mail: info(at)blufixx.com

Telephone: 713-325-9130

Dept. responsible for information:

E-mail: info(at)blufixx.com, Telephone: 713-325-9130

### Emergency phone number

GIZ-Nord, Göttingen, Germany,

Telephone: +49 551-19240

## 2. Hazards identification

### Emergency overview

Appearance: Form: liquid

Color: yellowish

Odor: No data available

Classification: Skin Irritation - Category 2; Eye Irritation - Category 2A; Sensitization - skin - Category 1;

Hazard symbols:



Signal word:

**Warning**

Hazard statements:

Causes skin irritation.

May cause an allergic skin reaction.

Causes serious eye irritation.



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### Precautionary statements:

If medical advice is needed, have product container or label at hand.  
Keep out of reach of children.  
Avoid breathing mist/vapors/spray.  
Wash hands and face thoroughly after handling.  
Contaminated work clothing should not be allowed out of the workplace.  
Wear protective gloves/protective clothing/eye protection.  
IF ON SKIN: Wash with plenty of water/soap.  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
Specific treatment (see on this label).  
If skin irritation occurs: Get medical advice/attention.  
If skin irritation or rash occurs: Get medical advice/attention.  
If eye irritation persists: Get medical advice/attention.  
Take off contaminated clothing.  
Dispose of contents/container to hazardous or special waste collection point.

### Regulatory status

This material is considered hazardous by the U.S. OSHA Hazard Communication Standard (29 CFR 1910.1200) and SIMDUT in Canada.

### Hazards not otherwise classified

see section 11: Toxicological information

## 3. Composition / Information on ingredients

#### Chemical characterization:

Mixture of the substances listed below with non-hazardous additions

#### Relevant ingredients:

CAS No.	Designation	Content	Classification
CAS 52628-03-2	2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, phosphate	< 15 %	Skin Irritation - Category 2. Eye Irritation - Category 2A. Specific Target Organ Toxicity (Single Exposure) - Category 3.
CAS 868-77-9	2-Hydroxyethyl methacrylate	< 2 %	Skin Irritation - Category 2. Eye Irritation - Category 2A. Sensitization - skin - Category 1.

## 4. First aid measures

General information: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

In case of inhalation: Move victim to fresh air; if necessary, provide artificial respiration or oxygen. Put victim at rest and keep warm. Consult physician immediately. If victim is at risk of losing consciousness, position and transport on their side.

Following skin contact: After contact with skin, wash immediately with soap and plenty of water. Take off contaminated clothing and wash it before reuse. In case of skin reactions, consult a physician.

After eye contact: Remove contact lenses, if any. Immediately flush eyes with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Subsequently consult an ophthalmologist.

After swallowing: If swallowed, rinse mouth with water (only if the person is conscious). Do not induce vomiting. Consult physician immediately.



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### Most important symptoms/effects, acute and delayed

Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation.

### Information to physician

Treat symptomatically.

## 5. Fire fighting measures

Flash point/flash point range:

> 212 °F

Auto-ignition temperature:

No data available

Suitable extinguishing media:

Dry chemical powder, water fog, carbon dioxide.

Extinguishing media which must not be used for safety reasons:

Full water jet.

### Specific hazards arising from the chemical

May form dangerous gases and vapours in case of fire.

Furthermore, there may develop: Carbon monoxide and carbon dioxide

Protective equipment and precautions for firefighters:

Wear a self-contained breathing apparatus and chemical protective clothing.

Additional information:

Keep public away from danger area. Do not breathe fumes. Cool exposed containers with water spray. Fire residuals and contaminated extinguishing water must be disposed of in accordance with the regulations of the local authorities.

## 6. Accidental release measures

Personal precautions:

Wear appropriate protective equipment. Do not breathe vapor. Take off contaminated clothing.

Provide adequate ventilation. Avoid contact with skin and eyes. Keep unprotected people away. Eliminate all ignition sources if safe to do so.

Environmental precautions:

Avoid release to the environment. Inform the relevant authorities in case of leakage into sewers, aquatic environment or soil.

Methods for clean-up:

For containment: Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents) and place in closed containers for disposal.

Methods for cleaning up: Take up mechanically, placing in appropriate containers for disposal. Final cleaning.

## 7. Handling and storage

### Handling

Advices on safe handling: Avoid contact with skin, eyes and clothes. Do not breathe vapor.

Wear appropriate protective equipment. When using do not eat or drink.

Provide adequate ventilation, and local exhaust as needed. Wash hands before breaks and after work.

Take off contaminated clothing and wash it before reuse. Have eye wash bottle or eye rinse ready at work place.

Precautions against fire and explosion:

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.



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### Storage

Requirements for storerooms and containers:

Store container tightly closed in a dry and cool place.  
Protect from heat and direct sunlight.

Hints on joint storage:

Keep away from food, drink and animal feedingstuffs.  
Do not store together with: Free radical polymerization initiator, strong alkalis, reactive metals and bases.

## 8. Exposure controls / personal protection

### Engineering controls

Provide good ventilation and/or an exhaust system in the work area.  
See also information in chapter 7, section storage.

### Personal protection equipment (PPE)

Respiratory protection: When vapors form, use respiratory protection.

The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, self-contained breathing apparatus must be used.

General hygiene considerations:

Do not breathe vapor. Avoid contact with the substance.  
Take off immediately all contaminated clothing. Wash clothing before further use.  
When using do not eat, drink or smoke. Wash hands before breaks and after work.  
Keep away from sources of heat (e.g. hot surfaces), sparks and open flames.  
Have eye wash bottle or eye rinse ready at work place.

## 9. Physical and chemical properties

### Information on basic physical and chemical properties

Appearance:	Form: liquid Color: yellowish
Odor:	No data available
Odor threshold:	No data available
pH value:	No data available
Melting point/freezing point:	No data available
Initial boiling point and boiling range:	> 212 °F
Flash point/flash point range:	> 212 °F
Evaporation rate:	No data available
Flammability:	No data available
Explosion limits:	No data available
Vapor pressure:	No data available
Vapor density:	No data available
Density:	No data available
Solubility:	No data available
Partition coefficient: n-octanol/water:	No data available
Auto-ignition temperature:	No data available
Thermal decomposition:	No data available
Additional information:	No data available



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## 10. Stability and reactivity

- Reactivity: No data available
- Chemical stability: Stable under recommended storage conditions.
- Possibility of hazardous reactions  
Hazardous polymerisation: UV-radiation/sunlight, heat.
- Conditions to avoid: Protect from heat and direct sunlight. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- Incompatible materials: Free radical polymerization initiator, oxidizing agents, peroxides and reactive metals.
- Hazardous decomposition products:  
No hazardous decomposition products when regulations for storage and handling are observed.
- Thermal decomposition: No data available

## 11. Toxicological information

### Toxicological tests

- Toxicological effects: The statements are derived from the properties of the single components. No toxicological data is available for the product as such.
- Acute toxicity (oral): Lack of data.
- Acute toxicity (dermal): Lack of data.
- Acute toxicity (inhalative): Lack of data.
- Skin corrosion/irritation: Skin Irritation - Category 2 = Causes skin irritation.
- Eye damage/irritation: Eye Irritation - Category 2A = Causes serious eye irritation.
- Sensitisation to the respiratory tract: Based on available data, the classification criteria are not met.
- Skin sensitisation: Sensitization - skin - Category 1 = May cause an allergic skin reaction.
- Germ cell mutagenicity/Genotoxicity: Based on available data, the classification criteria are not met.
- Carcinogenicity: Based on available data, the classification criteria are not met.
- Reproductive toxicity: Based on available data, the classification criteria are not met.
- Effects on or via lactation: Based on available data, the classification criteria are not met.
- Specific target organ toxicity (single exposure): Based on available data, the classification criteria are not met.
- Specific target organ toxicity (repeated exposure): Based on available data, the classification criteria are not met.
- Aspiration hazard: Based on available data, the classification criteria are not met.

## 12. Ecological information

### Ecotoxicity

- Further details: No data available

### Mobility in soil

- No data available



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### Persistence and degradability

Further details: No data available

### Additional ecological information

General information: Do not allow to enter into ground-water, surface water or drains.

## 13. Disposal considerations

### Product

Recommendation: Dispose of waste according to applicable legislation. Do not dispose of with household waste. Do not allow to enter into surface water or drains.

### Contaminated packaging

Recommendation: Dispose of waste according to applicable legislation. Non-contaminated packages may be recycled.

## 14. Transport information

### USA: Department of Transportation (DOT)

Proper shipping name: Not restricted

### Sea transport (IMDG)

Proper shipping name: Not restricted

Marine pollutant: no

### Air transport (IATA)

Proper shipping name: Not restricted

### Further information

No dangerous good in sense of these transport regulations.

## 15. Regulatory information

### National regulations - U.S. Federal Regulations

2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, phosphate: TSCA Inventory: listed  
TSCA HPVC: not listed  
TSCA: listed

2-Hydroxyethyl methacrylate: TSCA Inventory: listed  
TSCA HPVC: not listed

### National regulations - Great Britain

Hazchem-Code: -

## 16. Other information

Text for labeling: Contains < 15 % 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, phosphate, < 2 % 2-Hydroxyethyl methacrylate. Safety data sheet available on request.



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Hazard rating systems:



NFPA Hazard Rating:

Health: 2 (Moderate)

Fire: 1 (Slight)

Reactivity: 1 (Slight)

HMIS Version III Rating:

Health: 2 (Moderate)

Flammability: 1 (Slight)

Physical Hazard: 1 (Slight)

Personal Protection: X = Consult your supervisor

HEALTH	2
FLAMMABILITY	1
PHYSICAL HAZARD	1
	X

Reason of change:

Changes in section 2: Classification, labeling

Changes in section 3: Changes in labeling CAS No. 52628-03-2

General revision

Date of first version:

1/20/2016

### Department issuing data sheet

Contact person:

see section 1: Dept. responsible for information

The information in this data sheet has been established to our best knowledge and was up-to-date at time of revision. It does not represent a guarantee for the properties of the product described in terms of the legal warranty regulations.



# 新利達電池有限公司 NEW LEADER BATTERY LIMITED.

## Safety Data Sheet for Alkaline Battery 0.%Hg (LR) Series 29 CFR 1910.1200

**Document Number : SDS - LR Series \*\*Not for recharge\*\*** (Version : 2018)

### SECTION 1 – Identification

**Manufacturer's Name** : New Leader Battery Limited

**Emergency & Information Phone No** : 852 - 2790 6280

**Address** : Rm A, 4/F, Block 1, Camelpaint Building, 62 Hoi Yuen Road, Kwun Tong, Kowloon, Hong Kong.

**Product Name**: Alkaline Manganese Button Cell (Mercury Free)

**Model** : LR521,LR621,LR736,LR41,LR626,LR754,LR921,LR927,LR1120,LR936,LR1130,LR721,LR43,LR44,4LR44  
SR521,SR621,SR726,SR41,SR626,SR754,SR921,SR1120,SR936,SR1130,SR721,SR43,SR44,  
LR03,LR6,23A,27A

**Recommended use of the chemical and restrictions on use:**

**Application of the substance / the preparation** : Electronic products

**Details of the supplier of the safety data sheet**

**Email** : newleader@newleader.com.hk

**Other US contact point** : Not available

**Further information obtainable from**: New Leader Battery Limited

**Emergency telephone number**: USA Poison Center Tel : +1 800 222 1222

**Remark:**

This sample is likely to be classified as article and is out of scope of a SDS as set out in 29 CFR Part 1910.1200. This SDS is generated for client's reference Only

### SECTION 2 – Hazardous Identification 危險識別

**Classification of the substance or mixture :**

Classification according to OSHA Hazard Communication Standard (29CFR 1910.1200)



GHS08 Health hazard

Carc. 2            H351            Suspected of causing Cancer.

STOT RE 1        H372            Causes damage to organs through prolonged or repeated exposure.



GHS05 Corrosion

Skin Corr. 1A        H314            Cause severe skin burns and eye damage.

Eye Dam. 1         H318            Cause serious eye damage.



GHS07

Acute Tox. 4        H302            Harmful if swallowed.

Acute Tox 4         H332            Harmful if inhaled





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Skin Sens      1      H317      May cause an allergic skin reaction.

**Information concerning particular hazards for human and environment:**

The product has to be labeled due to the calculation procedure of OSHA Harzard 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.

**Label Elements**

**Labeling according to OSHA Harzard Communication Standard (29 CFR 1910.1200)**

**Hazard Pictograms**



GHS05



GHS07



GHS08

**Signed word** : Danger

**Hazard-determining components of labeling:**

Manganese dioxide

Potassium hydroxide

Nickle

**Hazard statements**

H302+H332      Harmful if swallowed or if inhaled

H314      Causes severe skin burns and eye damage

H317      May cause an allergic skin reaction

H351      Suspected of causing cancer

H372      Causes damage to organs through prolonged or repeated exposure

**Precautionary statements**

P260      Do not breathe dusts or mists

P303+P361+P353      If not skin/hair : Take off immediately all contaminated clothing. Rinse skin with water/shower

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/doctor.

P405      Store locked up.

P501      Dispose of contents/container in accordance with local/regional/national/international regulations

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



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**SECTION 3 –Composition/ information on ingredients**

**Chemical characterization** : Mixtures

Description :

Mixture of the substances listed below with nonhazardous additions.

For the wording of listed risk phrases refer to section 16

<b>Compositions</b>		
	<b>Manganese Dioxide</b>	
<b>1313-13-9</b>	 <b>Acute Tox.4 H302; Acute Tox.4 H332</b>	<b>25~30%</b>
<b>7439-89-6</b>	Iron	40~48%
<b>7440-66-6</b>	Zinc	9~10%
<b>7732-18-5</b>	Water	4~6%
	<b>Potassium Hydroxide</b>	
<b>1310-58-3</b>	 Skin Corr.1A, H314;  Acute Tox.4, H302	3~5%
<b>7782-42-5</b>	Graphite	3~5%
	<b>Nickel</b>	
<b>7440-02-0</b>	 Carc 2, H351; STOT RE 1, H372:  Skin Sens.1, H317	1~1.5%
<b>9004-34-6</b>	Cellulose	0.3~0.85
<b>1314-13-2</b>	Zinc Oxide	0.35~0.65%



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**SECTION 4 – First Aid Measures**

**Description of first aid measures**

**General description:**

Immediately remove any clothing soiled by the product.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

**After inhalation:**

In case of unconsciousness place patient stably in side position for transportation .

Get medical aid immediately. Remove from exposure and move to fresh air immediately. Use oxygen if available.

Use oxygen device such as mask or bag.

**After skin contact:**

Get medical aid at once. Immediately remove contaminated clothes and rinsed skin with plenty of water or shower for 15 minutes. Discard contaminated clothing in a manner which limits further exposure.

**After eye contact:**

Flush eyes with plenty of water for at least 15 minutes., occasionally lifting the upper and lower eyelids. Get medical aid.

**After swallowing :**

Drink copious amounts of water and provide fresh air. Immediately all a doctor.

Do not induce vomiting: immediately call for medical help.

**Most important symptoms and effects both acute and delayed:**

No further relevant information available.

**Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

**SECTION 5 –Fire-fighting measures**

**Suitable extinguishing agents:**

CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

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

**Special protective equipment and precautions for firefighters**

**Protective equipment:** Mouth respiratory protective device.



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### **SECTION 6 – Accidental release measures**

**Personal precautions, protective equipment and emergency procedures:**

Wear protective equipment. Keep unprotected persons away.

**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 sewer/surface or ground water.

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

Use neutralizing agent.

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

### **SECTION 7 – Handling and Storage**

**Precautions for sales handling:**

Through dedusting

Ensure good ventilation/exhaustion at the workplace.

For the general occupational hygienic measures refer to Section 8.

**Information about protection against explosions and fires:** No special measures required

**Conditions for safe storage, including any incompatibilities**

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

**Information about storage in one common storage facility:** No required

**Further information about storage conditions:** Keep receptacle tightly sealed.

### **SECTION 8 – Exposure Controls / Person Protection**

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

**1313-13-9 Manganese Dioxide (25~30%)**

PEL (USA)	Ceiling limit value: 5mg/m <sup>3</sup> as Mn
REL (USA)	Short-term: 3mg/m <sup>3</sup> Long-term : 1mg/m <sup>3</sup>
TLV (USA)	Long-term : 0.2*0.1*mg/m <sup>3</sup> as Mn; *respirable **inhalable fraction



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<b>1310-58-3 Potassium Hydroxide (3~5%)</b>	
REL (USA)	Ceiling limit value : 2mg/m <sup>3</sup>
TLV (USA)	Ceiling limit value : 2mg/m <sup>3</sup>
<b>7782-42-5 Graphite (3~5%)</b>	
PEL (USA)	Long-term value: 15mppcf*mg/m <sup>3</sup> *impinge samples counted by light field techn.
REL (USA)	Long-term value: 2.5mg/m <sup>3</sup> *repirable dust
TLV (USA)	Long-term value: 2*mg/m <sup>3</sup> All forms except graphite fibers;*resp. fraction
<b>7440-02-0 Nickle (1~1.5%)</b>	
PEL (USA)	Long-term value: 1mg/m <sup>3</sup>
REL (USA)	Long-term value: 0.015mg/m <sup>3</sup> As Ni; See Pocket Guide App.A
TLV (USA)	Long-term value: 1.5mg/m <sup>3</sup> Elemental , *inhalable fraction
<b>9004-34-6 Cellulose (0.3~0.85%)</b>	
PEL (USA)	Long-term value: 15*5**mg/m <sup>3</sup> *total dust **respirable fraction
REL (USA)	Long-term value: 10*5**mg/m <sup>3</sup> *total dust **respirable fraction
TLV (USA)	Long-term value: 10mg/m <sup>3</sup>
<b>1314-13-2 Zinc Oxide (0.35~0.65%)</b>	
PEL (USA)	Long-term value: 15*5**mg/m <sup>3</sup> *total dust **respirable fraction and fume
REL (USA)	Short-term value: 10**mg/m <sup>3</sup> Long-term value: 5*5**mg/m <sup>3</sup> Ceiling limit value : 15mg/m <sup>3</sup> *dust only **fume
TLV (USA)	Short-term value: 10*mg/m <sup>3</sup> Long-term value: 2*mg/m <sup>3</sup> *as respirable fraction



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

**Based on the composition shown in Section 3, the following measures are suggested for occupational safety measure.**

**Appropriate engineering controls:**

Keep away from foodstuffs beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of works

Avoid contact with the eyes and skin

See Section 7 for information about design of technical facilities.

**Personal protective equipment:**

**Breathing equipment:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

**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 cannot be calculated in advance and has therefore to be checked prior the application.

**Penetration time of glove material:**

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

**Eyes protection:**



Tightly sealed goggles



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<b>SECTION 9 Physical and Chemical properties</b>	
<b>General Information</b>	
<b>Appearance:</b>	
Form:	Solid, button cell
Color:	Silvery
Odor:	Odorless
Odour threshold	Not available
pH-value:	Not applicable Not available
<b>Change in condition</b>	
Melting point/melting range	Not available
Freezing point	Not available
Boiling point/Boiling range:	Not available
Flash point:	Not available
Flammability (solid,gaseous):	Not available
Auto-ignition temperature:	Not available
Decomposition temperature:	Not available
<b>Explosion limits:</b>	
Lower:	Not available
Upper:	Not available
Vapor pressure:	Not available
Density:	Not available
Relative density:	Not available
Vapour density:	Not available
Evaporation rate:	Not available
Solubility in/Miscibility with Water	Not available
Partition coefficient (n-octanol/water)	Not available
<b>Viscosity:</b>	
Dynamic:	Not available
Kinematic:	Not available
Other information	Voltage: 1.5V



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### **SECTION 10 Stability and reactivity**

**Reactivity :** Data not available

**Chemical stability:** Stable under normal operation and storage conditions.

**Possibility of hazardous reactions:** No dangerous reactions known.

**Conditions to avoid:** No further relevant information available

**Incompatible materials :** No further relevant information available

**Hazardous decomposition products :** No dangerous decomposition products known.

### **SECTION 11 Toxicological information**

**Acute toxicity:**

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

**1310-58-3 Potassium hydroxide**

Oral	LD50	372 mg/kg (rat)
------	------	-----------------

**7439-89-6 Iron**

Oral	LD50	30000 mg/kg (rat)
------	------	-------------------

**9004-34-6 Cellulose**

Oral	LD50	5000 mg/kg (rat)
------	------	------------------

**Skin corrosion /irritation:** Caustic effect on shin and mucous membrane

**Serious eye damage/irritation:** Strong caustic effect.

**Respiratory or skin sensitization:** Sensitizing possible through skin contact

**Additional toxicological information:**

The product shows the following dangers according to internally approved calculation methods for preparations

Harmful

Corrosive

Irritant

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.





# 新利達電池有限公司 NEW LEADER BATTERY LIMITED.

## Safety Data Sheet for Alkaline Battery 0.%Hg (LR) Series 29 CFR 1910.1200

**Document Number : SDS - LR Series \*\*Not for recharge\*\*** (Version : 2018)

### Carcinogenic categories

IARC (International Agency for Research on Cancer)		
7440-02-0	Nickel	1
7789-23-3	Potassium fluoride	3
NTP (National Toxicology Program)		
7440-02-0	Nickel	R
OSHA-Ca (Occupational Safety & Health Administration)		
None of the ingredients is listed.		

### SECTION 12– Ecological Information

#### Toxicity

**Aquatic toxicity:** No further relevant information available.

**Persistence and degradability :** No further relevant information available.

**Bioaccumulative potential:** No further relevant information available.

**Mobility in soil:** No further relevant information available.

**Other adverse effects:** No further relevant information available.

### SECTION 13–Disposal considerations :

#### Water treatment methods

#### Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

#### Uncleaned packagings:

**Recommendation:** Disposal must be made according to official regulations

### SECTION 14 – Transport Information

Alkaline Manganese Button Cell (Mercury Free ) is exempt from dangerous goods It is considered non –

Dangerous goods by the International Civil Aviation Organization (ICAO), the International Air Transport Association (IATA), International Maritime Dangerous Goods regulations (IMDG) the <<recommendations on the Transport of Dangerous Goods Model Regulations>> (18<sup>th</sup>)and also is not classified as dangerous goods under the 58<sup>th</sup> Edition of the IATA Dangerous Goods Regulation 2017 Special Provision A123.

Separate batteries when shipping to prevent short-circuiting. They should be packed in strong packaging for support during transport . Take in a cargo of them without falling, dropping, and breakage. Prevent collapse of cargo piles and wet by rain.

Transport Fashion: By air, By sea , By road



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### **SECTION 15 – Regulatory information**

Safety, health and environmental regulations/legislation specific for the substance or mixture

Sara

#### **Section 335 (extremely hazardous substances)**

None of the ingredients is listed

#### **Section 313 (specific toxic chemical listings):**

1313-13-9	Manganese Dioxide
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7440-02-0	Nickel
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1314-13-2	Zinc Oxide
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#### **TSCA (Toxic Substances Control Act):**

7439-89-6	Iron
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1313-13-9	Manganese Dioxide
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1310-58-3	Potassium Hydroxide
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7782-42-5	Graphite
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7440-02-0	Nickel
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9004-34-6	Cellulose
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1314-13-2	Zinc Oxide
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7732-18-5	Water
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#### **Proposition 65**

##### **Chemical known to cause cancer:**

7440-02-0	Nickel
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##### **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

#### **Carcinogenicity categories**

##### **EPA (Environmental Protection Agency)**

1313-13-9	Manganese Dioxide	D
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7440-66-6	Zinc	II
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1314-13-2	Zinc Oxide	D, I, II
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<b>TLV (Threshold Limit Value established by ACGIH)</b>		
7440-02-0	Nickel	A5
<b>NIOSH-CA (National Institution for Occupational Safety &amp; Health)</b>		
7440-02-0	Nickel	

**SECTION 16 – Other information**

**Relevant phrases**

H301 Toxic if swallowed  
H302 Harmful if swallowed  
H311 Toxic in contact with skin  
H314 Causes severe skin burns and eye damage  
H317 May cause an allergic skin reaction  
H331 Toxic if inhaled  
H332 Harmful if inhales  
H351 Suspected of causing cancer  
H372 Cause damage to organs through prolonged or repeated exposure.

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

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Remark:  
\*This sample is likely to be classified as article and is out of scope of a SDS as set out in 29 CFR Part 1910.1200  
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