新利達電池實業(德慶)有限公司
New Leader Battery Industry (Deqing) Co., Ltd.

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

Document Number: SDS-LR (0.%Hg) Series **Not for recharge* (Version : 2021)

SECTION 1 – Identification

Manufacturer's Name : New Leader Battery Industry (Deqing) Co., Ltd.

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 No : LR521, LR621, LR736,LR41,LR626,LR754,LR921,LR927,LR1120,LR1130,LR721, LR43,LR44,LR932,LR732

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
Skin Sens	1	H317	May cause an allergic skin reaction.

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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

Compositions		
1313-13-9	***Manganese Dioxide*** ***Acute Tox.4 H302; Acute Tox.4 H332***	***25~30%***
7439-89-6	Iron	40~48%
7440-66-6	Zinc	9~10%
7732-18-5	Water	4~6%
1310-58-3	Potassium Hydroxide Skin Corr.1A, H314; Acute Tox.4, H302	3~5%
7782-42-5	Graphite	3~5%
7440-02-0	Nickel Carc 2, H351; STOT RE 1, H372: Skin Sens.1, H317	1~1.5%
9004-34-6	Cellulose	0.3~0.85
1314-13-2	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_2, 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^3 as Mn
REL (USA)	Short-term: 3mg/m^3 Long-term : 1mg/m^3
TLV (USA)	Long-term : 0.2*0.1*mg/m^3 as Mn; *respirable **inhalable fraction

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1310-58-3 Potassium Hydroxide (3~5%)	
REL (USA)	Ceiling limit value : 2mg/m^3
TLV (USA)	Ceiling limit value : 2mg/m^3
7782-42-5 Graphite (3~5%)	
PEL (USA)	Long-term value: 15mppcf*mg/m^3 *impinge samples counted by light field techn.
REL (USA)	Long-term value: 2.5mg/m^3 *repirable dust
TLV (USA)	Long-term value: 2*mg/m^3 All forms except graphite fibers;*resp. fraction
7440-02-0 Nickle (1~1.5%)	
PEL (USA)	Long-term value: 1mg/m^3
REL (USA)	Long-term value: 0.015mg/m^3 As Ni; See Pocket Guide App.A
TLV (USA)	Long-term value: 1.5mg/m^3 Elemental , *inhalable fraction
9004-34-6 Cellulose (0.3~0.85%)	
PEL (USA)	Long-term value: 15*5**mg/m^3 *total dust **respirable fraction
REL (USA)	Long-term value: 10*5**mg/m^3 *total dust **respirable fraction
TLV (USA)	Long-term value: 10mg/m^3
1314-13-2 Zinc Oxide (0.35~0.65%)	
PEL (USA)	Long-term value: 15*5**mg/m^3 *total dust **respirable fraction and fume
REL (USA)	Short-term value: 10**mg/m^3 Long-term value: 5*5**mg/m^3 Ceiling limit value : 15mg/m^3 *dust only **fume
TLV (USA)	Short-term value: 10*mg/m^3 Long-term value: 2*mg/m^3 *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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SECTION 9 Physical and Chemical properties	
General Information	
Appearance:	
Form:	Solid, button cell
Color:	Silvery
Odor:	Odorless
Odour threshold	Not available
pH-value:	Not applicable Not available
Change in condition	
Melting point/melting range	Not available
Freezing point	Not available
Boiling point/Boiling range:	Not available
Flash point:	Not available
Flammabliity (soild,gaseous):	Not available
Auto-Ignition temperature:	Not available
Decomposition temperature:	Not available
Explosion limits:	
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
Viscosity:	
Dynamic:	Not available
Kinematic:	Not available
Other information	Voltage: 1.5V

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SECTION 10 Stability and reacivity

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.

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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 Martine Dangerous Goods regulations (IMDG) the <<recommendations on the Transport of Dangerous Goods Model Regulations>> (19th)and also is not classified as dangerous goods under the 62nd Edition of the IATA Dangerous Goods Regulation 2021 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
7440-02-0	Nickel
1314-13-2	Zinc Oxide
TSCA (Toxic Substances Control Act):	
7439-89-6	Iron
1313-13-9	Manganese Dioxide
1310-58-3	Potassium Hydroxide
7782-42-5	Graphite
7440-02-0	Nickel
9004-34-6	Celluslose
1314-13-2	Zinc Oxide
7732-18-5	Water

Proposition 65

Chemical known to cause cancer:	
7440-02-0	Nickel
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	

Cancerogenity categories

EPA (Environmental Protection Agency)		
1313-13-9	Manganese Dioxide	**D**
7440-66-6	Zinc	**II**
1314-13-2	Zinc Oxide	**D, I, II**

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TLV (Threshold Limit Value established by ACGIH)		
7440-02-0	Nickel	**A5**
NIOSH-CA (National Institution for Occupational Safety & Health)		
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.

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

Disclaimer of Liability

The information in this 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 SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable.

Remark:

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