

MATERIAL SAFETY DATA SHEET (MSDS)

Product Name: LR6 AA Alkaline Battery 1.5v

Issued and Revised Date: 16th-January-2018

Report Number: S2617120156

1. PRODUCTS AND COMPANY IDENTIFICATION

Product Name: AA Alkaline Battery 1.5v

Applicable Models/Sizes: WL6 & AB100

Supplier Identification:

Cluson Engineering Limited Limited Unit 6 Bedford Road Petersfield Hampshire GU32 3LJ

Tel: 01730 264672 E-mail: sales@clulite.co.uk

2. HAZARDS IDENTIFICATION

The battery is not restricted to IATA DGR according to special provision A123.

This substance is considered to be non-hazardous for transport.

3 COMPOSITION / INFORMATION ON INGREDIENTS

Information about the chemical nature of product:

Ingredient Name	Concentration (%)	CAS No.	EC No.
Manganese Dioxide	40	1313-13-9	215-202-6
Zinc	18	7440-66-6	231-175-3
Iron	18	7439-89-6	231-096-4
Water	9	7732-18-5	231-791-2
Potassium Hydroxide	6	1310-58-3	215-181-3
Carbon	3	7440-44-0	231-153-3
Copper	2.2	7440-50-8	231-159-6

4. FIRST AID MEASURES

Hazard categories	Not dangerous with normal use. Do not dismantle, open or shred, Lithium ion Cell the ingredients contained within or their ingredients could be harmful.
First Aid measures	Skin: If the internal battery materials of an opened battery cell come into contact with the skin, immediately flush with plenty of water. Inhalation. In case of inhale battery materials, remove immediately to fresh air and seek medical attention. Eye: In case of the internal battery materials in contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Seek medical advice. Oral Exposure: If swallowed the internal battery materials, do not induce vomiting. Seek immediate medical attention.

5. FIRE-FIGHTING MEASURE

► Extinguishing Media:

Suitable: Dry chemical dioxide and appropriate foam.

► Firefighting:

Protective equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

Specific hazards: Emit toxic fumes under fire conditions.

► Specific Hazards:

The leaking electrolyte may corrosive. Under the conditions of short-circuited, overcharged, overdischarged, punctured, crushed, and exposed on the temperature higher than that specified by manufacture, the battery may burn or explode.

6. ACCIDENTAL RELEASE MEASURES

► Personal Precautions, Exercise appropriate precautions to minimise direct contact with skin and eyes

► Methods and materials for cleaning up: In case of internal materials leak, mix with inert material (e.g dry sand, vermiculite) and transfer to a dry, clean, lidded container for disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete. Avoid directly release the cleaning waste water into the environment.

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7. HANDLING AND STORAGE

► Handling

Wear appropriate protective clothing and safety gloves. Avoid contact and inhalation the internal materials. Keep away from ignition sources, heat and flame. No smoking at working site. Incompatibilities: strong oxidising agents, corrosives and foods. If it is not intend to d, do not short-circuit, overcharge, overdischarge, puncture and crush the battery. Do not expose the battery on the temperature higher than that specified by manufacture.

► Storage

Store in a cool, dry and well ventilated area. Keep away from ignition sources, head and flame. Store in a tightly closed container. Incompatibilities, strong oxidizing agents, corrosives and foods.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

► Engineering controls: Use ventilation equipment if available. Safety shower and eye bath.

► Personal Protective: Respiratory Protection: Approved respiratory if needed. Eye Protection: Not necessary under normal conditions. Wear safety glasses if handling an open or leaking battery. Hand wear protective gloves if leaking battery.

► Other protective Equipment: Do not eat, drink, or smoke in work area. Maintain good housekeeping.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Multicolour cylinder plastics film shell Odor: Odorless

Melting point 300°C

Solubility: Partial soluble in water

10. STABILITY AND REACTIVITY

► Stability: The product is stable under normal conditions.

► Conditions to Avoid: Aovid exposure to heat and open flame. Do not puncture, crush or incinerate. Prevent short circuits. Prevent movement which could lead to short circuits. Do not attempt to recharge this battery.

► Materials to Avoid: Strong oxidizing agents, corrosives., Oxidizing agents, Bases

► Hazardous Polymerization: Will not occur

► Hazardous Decomposition Products: When exposed to extreme heat/fire batteries may rupture leaking corrosive material and/or emit toxic fumes. Burning batteries may emit toxic fumes and zinc oxide and manganese oxide.

11. TOXICOLOGICAL INFORMATION

► Toxicity Data: No data available.

► Irritation Data: The internal battery materials may cause irritation to eyes and skin

12. ECOLOGICAL INFORMATION

No data available

13. DISPOSAL CONSIDERATIONS

Appropriate method of disposal of substance: Dispose of in accordance with all applicable federal, state and local regulations.

14. TRANSPORT INFORMATION

Transport information:

IATA: Not restricted to IATA DGR according to special provision

IMO: Non-hazardous for Sea Transport

15. REGULATORY INFORMATION

Manganese Dioxide Battery, is unregulated for purpose of transportation by U.S. Department of Transportation (DOT). International Civil Aviation Administration (ICAA). International Air Transport Association (IATA) and the International Maritime Dangerous Goods regulations (IMDG). The requirements for shipping these batteries, in all modes of transportation, are that they be separated from each other to prevent short-circuits and to prevent movement that could lead to short-circuits. Products must also be packed in strong packaging that can withstand the rigors normal to transportation.

16. ADDITIONAL INFORMATION

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. We make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigation to determine the suitability of the information for their particular purposes. In no way shall we be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising from using the above information.

*****End of Report*****