Products Information Data Sheet

These products are hermetically sealed state in a vessel and are exempted from Safety Data Sheet regulations. However, this manual provides you with referential information to safety use the products.

Section 1 - Products and Company Identification

Products name	:	Alkaline Button Batteries (Primary Battery)
Products sizes	:	LR44, LR43, LR41, LR1120, LR1130, 27A, 23A
Company	:	TOSHIBA LIFESTYLE PRODUCTS & SERVICES CORPORATION
Address	:	1310 Omiya-cho, Saiwai-ku, Kawasaki, Kanagawa 212-0014, Japan
Telephone	:	+81-44-577-0142
Fax	:	+81-50-3385-0617

Section 2 - Hazards Identification

GHS Classification	:	Not applicable
Toxicity	:	When the electrolyte leaked from the Cell/battery adheres to the skin, it may cause damage to the skin. In addition, when it is gotten in the eyes, it may cause damage to the eyes such as losing sight.
Hazard	:	There is a risk of explosion if cells/batteries are thrown into fire or heated. When stacking or jumbling cells/batteries may cause heat generation and explosion by external short circuits.

Section 3 - Composition/ Information on Ingredients

Ingredients	CAS#	PRTR	Weight/Content
Manganese dioxide（MnO_2）	1313-13-9	1-412	10～35wt%
Graphite（C）	7782-42-5	Not regulated	1～3wt%
Potassium hydroxide（KOH）	1310-58-3	Not regulated	1.5～5wt%
Zinc（Zn）	7440-66-6	Not regulated	5～10wt%
Lead（Pb）	7439-92-1	1-304	less than 0.004wt%

Section 4 - First Aid Measures (In case of electrolyte leakage from the cell/battery)

Inhalation of electrolyte fume	:	If a person inhaled steam, move to the place where air is fresh immediately. If you feel unwell, immediately seek medical attention.
Skin contacts by electrolyte	:	If the content adheres to skin, immediately wash it with a large amount of clean water and soap promptly. If you have pain, immediately seek medical attention.
Eyes contacts by electrolyte	:	If the content enters eyes, rinse eyes with a large amount of clean water for more than 15 minutes, and immediately seek medical attention.
Ingestion of electrolyte	:	If a cell/battery is swallowed, immediately seek medical attention.

Section 5 - Fire Fighting Measures

Fire extinguishers	:	Powder extinguisher, foam extinguisher, carbon dioxide gas extinguisher, large amount of dry sand.
Specific firefighting method	:	In the initial state of a fire, move cells/batteries from near the fire source, to a safe location. At that time, work at a windward location, as far as possible, and be sure to wear the protective equipment. (fireproof gloves, protective mask, protective eyewear, protective clothing)
Protection of firefighting personnel	:	Be wear protective equipment (fireproof gloves, protective mask, protective eyewear, protective clothing) for the keeping safe. (If possible, use atmosphere-supplying respirator)

Section 6 - Accidental Removing Measures

The cell/battery hermetically contains constituents in a vessel, so contents normally may not leak out. However, if the contents leak because of a mechanical or electrical stress, wipe with liquid-boric to absorb it, and collect in a vessel. After that, flush the site with a large amount of water. At that time, be sure to wear protective gloves and protective eyewear.

Section 7 - Handling and Storage

Handling	:	Do not solder a cell/battery body. Do not contact cell/battery terminals between each other, or with another conductor. Do not throw into fire, disassemble, heat, dent, deform, charge nor drop a battery. Do not dip a cell/battery in water or seawater.
Storage	:	Store cells/batteries without direct sunlight, high temperature, high humidity, rain, dew, etc., and select a storage location with a temperature as low as possible (preferable temperature 10-25°C and relative humidity 70% or less). In addition, keep cells away from dangerous matter such as combustible or ignitable materials. Absolutely never place a cell/battery in contact with a combustible or conductive substance. Prepare appropriate firefighting equipment.
Note	:	See handling and storing precautions described in the product catalog, specification, etc.

Section 8 - Exposure Controls/Personal Protection

Protection of respiratory organs	:	Not required in a normal operating state
Protection of eyes	:	Not required in a normal operating state
Other protective tools etc.	:	Not required in a normal operating state

Section 9 - Physical and Chemical Properties

Shape	:	Button shape (LR44, LR43, LR41, LR1120, LR1130) Cylindrical (27A, 23A) Contents are sealed in a stiff stainless-steel vessel.
PH	:	Not applicable because a cell/battery is not soluble with water.
Boiling point/boiling range	:	No information
Melting point	:	No information
Decomposition temperature	:	No information
Flash point	:	No information

Section 10 - Stability and Reactivity

If several cells/batteries are jumbled without insulating terminals, they may short and possibly electrolyte leakage, generate heat, and rupture. When the cell/battery is charged, the electrolytic solution or the like may suddenly spurt out due to the generation of gas from the inside of the cell/battery. There is also the possibility of rupture. If the cell/battery is heated or thrown into a fire, it may explode and splash the electrolyte. If the cell/battery is disassembled, it may short and possibly electrolyte leakage, generate heat, and rupture.

Section 11 - Toxicological Information

There is no toxicity because chemical substances are hermetically sealed in a metal vessel.

Section 12 - Ecological Information

No information as the cells/batteries.

Section 13 - Disposal Considerations

Disposal of the substance should be done according to the laws and regulations.

Although used cells/batteries can be discarded basically as “Non burnable rubbish” some local governments sort and collect them at their own discretion. Therefore, observe instructions of the government you belong to, to dispose of the substance.

Keep the following discarding precautions：

- Even a used cell/battery sometimes stores electric energy. Therefore, to prevent the cell/battery from short-circuit, isolate cells/batteries from each other by a method such as taping +, - terminals of cells/batteries, or using the individual housing case of a cell/battery.
- Packing cells/batteries so that they are not shorted, and prevent the package from being wetted.
- If cells/batteries must be discarded in a country other than Japan, observe the instructions of the country and local government.
- The user as business entity must contract with a firm of disposing of industrial waste, and appropriately discard the substance.

Section 14 - Transportation Information

Handling：

When transporting cells/batteries, avoid high temperatures, high humidity and condensation. Pack the cell/battery so that it does not short-circuit and fix it so that the load does not collapse.

Cell/Batteries should be stored at room temperature (45 ° C or less: 10-25 ° C recommended) with low temperature changes and a relative humidity of 70% or less. Handle the container with care and do not subject it to shocks that could leave dents in the cell/battery.

UN Number and UN Class：

Not applicable (Not Dangerous Goods)

Section 15 - Regulatory Information

The laws and ordinances about the cell/battery shall obey the latest laws and ordinances.

- EU Battery Directive (2006/66/EC, 2013/56/EU) (Europe)
- EU Battery Regulation (2023/1542) (Europe)
- Regulation (EC)No.1907/2006 on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) (Europe)
- Act on Preventing Environmental Pollution of Mercury (Japan)

Section 16 - Other Information

The cells/batteries fall in the category of “Article” defined by EPA (U.S. Environment Protection Agency), and chemical substances used in a cell/battery satisfy the application exemption conditions as part of “Article,” so the cells/batteries are not regulated by TSCA.

Please take appropriate measures according to individual conditions, uses, and usages before using. In addition, the contents of this description were created based on the materials and information available to us at the time of creation and may be revised to new information.

Preparation This Sheet : TOSHIBA LIFESTYLE PRODUCTS & SERVICES CORPORATION
Engineering Group
Planning & Procurement Dept.
Battery Business Div.