



Product Safety Data Sheet (PSDS)

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SECTION I – PRODUCT IDENTIFICATION



The battery products referenced in this PSDS document are consumer products. Batteries are considered “articles” under the Global Harmonized System and are exempted from the GHS labeling and SDS classification criteria. This PSDS document is provided as service in response to requests for information on battery use, safety and regulatory compliance.

Representative Product Image/
 Packaging

| Identity: Alkaline Batteries | | Description: Consumer Product | |
|--|------|--------------------------------------|-----------------|
| Duracell® Sub-Brands: Plus Power, Ultra Power, Simply, Procell, OEA | | | |
| Duracell Designation | Size | Nominal Voltage | IEC Designation |
| MN/MX2400 | AAA | 1.5V | LR03 |
| MN/MX1500 | AA | 1.5V | LR6 |
| MN/MX1400 | C | 1.5V | LR14 |
| MN/MX1300 | D | 1.5V | LR20 |
| MN/MX1604 | 9V | 9V | 6LR61 |
| MN2500/ MX2500 | AAAA | 1.5 V | LR8D425 |
| Other alkaline designations covered by this PSDS: 7K67, MN1203, MN908, MN918, MN9100 | | | |

SECTION II - HAZARDS IDENTIFICATION

CAUTION: Batteries may explode or leak, and cause burn injury, if recharged, disposed of in fire, mixed with a different battery type, inserted backwards or disassembled. Replace all used batteries at the same time. Do not carry batteries loose in your pocket or purse. Do not remove the battery label. Keep small batteries (i.e., AAA) away from children. If swallowed, consult a physician at once.

SECTION III - COMPOSITION AND INGREDIENTS

The chemicals and metals in this product are contained in a sealed can. Exposure to the contents will not

occur unless the battery leaks, is exposed to high temperatures or is mechanically, physically, or electrically abused. *Note: Some Duracell batteries contain a Duracell Power CheckTM energy gauge, which is a small conductive strip located underneath the battery label that indicates the amount of charge in the battery. It is composed of minute quantities of conductive materials. Due to the small quantity of materials and their solid form, a health or environmental risk is unlikely.*

| Chemical Name | CAS Number | EINECS Number | Amount | Classification | Exposure Limits |
|---------------------------------|-------------------------|------------------------|---------|-----------------|---|
| Manganese Dioxide | 1313-13-9 | 215-202-6 | 35-40 % | Xn, R20/22 | 0,5 mg/m ³ TWA UK WEL 0,5 mg/m ³ TWA (inhalable) DFG MAK 0,2 mg/m ³ VL Belgium 0,2 mg/m ³ TWA Denmark LV |
| Zinc | 7440-66-6 | 231-175-3 | 10-25 % | N, R50/53 | None established for zinc metal |
| Potassium Hydroxide (35%) | 1310-58-3 | 215-181-3 | 5-10 % | C, Xn, R22, R35 | 2 mg/m ³ STEL UK WEL 2 mg/m ³ VCD Belgium 2 mg/m ³ Ceiling Denmark LV |
| Graphite (natural or synthetic) | 7782-42-5, 7440-44-0 | 231-955-3 231-153-3 | 1-5 % | None | 4 mg/m ³ TWA UK WEL (respirable dust) 10 mg/m ³ TWA UK WEL (inhalable dust) 1,5 mg/m ³ TWA DFG MAK (respirable dust) 4 mg/m ³ TWA DFG MAK (inhalable dust) 2 mg/m ³ VL Belgium (respirable dust) |

SECTION IV – FIRST AID INFORMATION

Damaged battery will release concentrated potassium hydroxide, which is caustic.

Ingestion: Do not induce vomiting. Seek medical attention immediately.

Eye Contact: Immediately flush eyes thoroughly with water for at least 15 minutes. Seek medical attention if irritation persists.

Skin Contact: Remove contaminated clothing and wash skin with soap and water. If irritation persists, seek medical attention.

Inhalation: Move to fresh air. If irritation persists, seek medical attention.

SECTION V - FIRE FIGHTING INFORMATION

Hazardous Combustion Products: Thermal degradation may produce hazardous fumes of zinc and manganese; hydrogen gas, caustic vapors of potassium hydroxide and other toxic by-products.

Extinguishing Media: Use any extinguishing media that is appropriate for the surrounding area.

Protection of Firefighters:
Specific Hazards Arising from the Material: Batteries may burst and release hazardous decomposition products when exposed to a fire situation.
Protective Equipment and Precautions for Firefighters: Firefighters should wear positive pressure self-contained breathing apparatus and full protective clothing.

SECTION VI - ACCIDENTAL RELEASE MEASURES

Notify safety personnel of large spills. Caustic potassium hydroxide may be released from leaking or ruptured batteries. Clean-up personnel should wear appropriate clothing to avoid eye and skin contact and inhalation of vapors and fumes. Ventilate area. Carefully collect batteries and place in an appropriate container for disposal.

SECTION VII – HANDLING AND STORAGE

Precautions To Be Taken in Handling: Avoid mechanical or electrical abuse. DO NOT short circuit or install incorrectly. Batteries may rupture or vent if disassembled, crushed, recharged or exposed to high temperatures. Install batteries in accordance with equipment instructions.

Precautions To Be Taken in Storage: Store batteries in a dry place at normal room temperature. Do not refrigerate – this will not make them last longer.

SECTION VIII - EXPOSURE CONTROLS / PERSONAL PROTECTION

NOT APPLICABLE – Finished consumer product

SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES

Appearance (color, physical form, shape): Finished consumer product. AA, AAA, C & D size batteries have cylindrical (round) shape with Duracell[®] label. 9V battery has rectangular shape with Duracell[®] label.

SECTION X - STABILITY AND REACTIVITY

Finished consumer product – stable under normal conditions of use. Contents are incompatible with strong oxidizing agents. Do not heat, crush, disassemble, short circuit or recharge.

SECTION XI - TOXICOLOGICAL INFORMATION

Finished consumer product:

Chronic Effects: No chronic health effects reported.

Target Organs: No target organs reported.

Carcinogenicity: This finished consumer product is not carcinogenic.

SECTION XII - ECOLOGICAL INFORMATION

No eco-toxicity data are available. This product is not expected to present an environmental hazard. Duracell alkaline batteries do not contain any added mercury, cadmium or lead.

SECTION XIII - DISPOSAL CONSIDERATIONS

Do not incinerate. Disposal should be in accordance with the EU Battery Directive 2006/66/EC. Duracell alkaline batteries are labeled with “special collection” symbol (as shown) in accordance with the EU Battery Directive:



SECTION XIV - TRANSPORT INFORMATION

Alkaline battery products, covered by this PSDS, in their original form, are considered “dry cell” batteries and are not regulated for transportation as “DANGEROUS GOODS.” 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 Duracell packaging is compliant with the following packaging special provisions:

Ground Transport (ADR/RID): NONE

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| Air Transport (IATA): Special Provision A123 (54 th Edition- 2013) 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. |
| Marine/Water Transport (IMDG/ICAO): NONE |
| For Transportation Emergencies: CALL 1+703-527-3887 (CHEMTREC) |

| SECTION XV - REGULATORY INFORMATION |
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| EU Classification of Preparation: Not classified as a dangerous preparation |
| EU Battery Directive: Duracell alkaline batteries comply with the substance restriction limits and labeling requirements set forth in the EU Battery Directive 2006/66/EC and as a result contain <0.0005% (5 ppm) mercury, <0.002% (20 ppm) cadmium and <0.004% (40 ppm) lead. The chemical symbols Hg, Cd and Pb are therefore not required below the separate collection symbol. |
| EU RoHS Directive: Batteries are not subject regulation. |
| EU REACH: Subject battery products are "articles" under REACH and not subject to REACH registration or e-SDS requirements. To the best of our knowledge, Duracell alkaline batteries do not contain any of the 84 SVHCs per the ECHA updated Candidate List of June 18, 2012. |
| EU Labeling: None required. Labeling is not required because batteries are classified as articles under both REACH and the Dangerous Preparations Directive and as such are exempt from the requirement for labeling. |

| SECTION XVI - OTHER INFORMATION | |
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| P&G Hazard Rating*: Health: 0 Flammability: 0 Reactivity: 0 | 4=EXTREME 3=HIGH 2=MODERATE 1=SLIGHT 0=NOT SIGNIFICANT |
| <i>*Hazard Ratings are supplied for use only in connection with occupational safety and health.</i> | |
| <u>EU Classes and Risk Phrases for Reference (See Sections 2 and 3)</u> C Corrosive N Dangerous for the Environment Xn Harmful R20/22: Harmful by inhalation and if swallowed. R22: Harmful if swallowed. R35: Causes severe burns R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. | |

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| DISCLAIMER: This PSDS is intended to provide a brief summary of our knowledge and guidance regarding the use of this material. The information contained here has been compiled from sources considered by Procter & Gamble to be dependable and is accurate to the best of the Company's knowledge. It is not meant to be an all-inclusive document on worldwide hazard communication regulations. This information is offered in good faith. Each user of this material needs to evaluate the conditions of use and design the appropriate protective mechanisms to prevent employee exposures, property damage or release to the environment. Procter & Gamble assumed no responsibility for injury to the recipient or third persons or for any damage to any property resulting from misuse of the product. |
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