

This Article Information Sheet (AIS) provides relevant battery information to retailers, consumers, OEMs and others users requesting a GHS-compliant SDS. Articles, such as batteries, are exempt from GHS SDS classification criteria. The GHS criteria is not designed or intended to be used to classify the physical, health and environmental hazards of an article. Branded consumer batteries are defined as electro-technical devices. The design, safety, manufacture, and qualification of branded consumer batteries follow ANSI and IEC battery standards. This document is based on principles set forth in the following hazard communication approaches: ANSI Z-400.1, GHS, JAMP AIS, IEC 62474, and ANSI C18.4M.

| 1. Document Information                  |  |
|--|--|
| Document Name                            | Duracell Alkaline Batteries (Major and Specialty Cells)  |
| Document ID                              | AIS-ALK  |
| Issue Date                               | 1-May-15   |
| Version                                  | 6.0  |
| Preparer                                 | Duracell North America Product Safety & Regulatory   |
| Last Revision                            | 1/1/2021   |
| Information Contact                      | SDS@duracell.com   |
| 2. Company Information                   |  |
| Name & Address                           | Duracell US Operations, 14 Research Drive, Bethel, CT USA 06801. Duracell Batteries BV, Nijverheidslaan 7, 3200 Aarschot, Belgium. Duracell International Operations Sarl, Rue du Préde-la-Bichette 1, CH-1202, Geneva, Switzerland.   |
| Global Website                           | www.duracell.com   |
| Consumer Relations: North America        | North America: 1-800-551-2355 (9:00 AM - 5:00 PM EST)  |
|  | (UK) 0800 716434, (FR) 0800 346 790 Service & appel gratuits, (IRL) 1 800 509 176, (DE) 800 101 2112, (AT) 0800 1025 1956, (CH) 0800 000 885, (BE) 0800 509 95, (NL) 0800 265 8616, (IT) 800 125 662, (ES) 900 800 522, (PT) 800 781 012, (GR) 210 66 75 000, (CY) 22-210900, (DK) 78734857, (SE) 0852503857, (FI) 0942705057, (NO) 63791957, (ZA) +27211403500, (RO) 021 3361915, (MD) 022472402, (BG) 02 40 24 500, (BIH) 033756000, (MNE) 020261920, (PL) 22 692 42 77, (LT) (8) 37 401 111, (LV) 67798667, (EE) +3726505555, (CZ) +420233332010, (SK) +42153419601, (HU) 0620 770 7099, (HR) 0800 0009, (SI) 01/588 6800, (AZ) 812 3100949, (UA) +380444909771 (ДП «CAB 92») & +380442476704 (TOB «IHBECTKOM»), (KZ) +7 727 250 05 50, (TM) 00865 530070, (KG) 0312 41 77 04 (Apple City International), (TR) 0 850 502 61 40. |
| 3. Article Information                   |  |
| Description                              | Duracell branded consumer alkaline battery   |
| Product Category                         | Electro-technical device   |
| Use<br>Global sub-brands (Retail)        | Portable power source for electronic devices  Coppertop, Plus, Quantum, Simply, Ultra, Basic, Optimum, Original, Deluxe, Chhota Power, Classic, Professional   |
| Global sub-brands (B2B)                  | Procell, OEM/OEA   |
| Physical Descriptions (IEC Designations) | Major Cells: AA (LR6), AAA (LR03), C (LR14), D (LR20) & 9V (6F22, 6LR61)   |
| Physical Descriptions (IEC Designations) | Specialty Cells: AAAA (LR8D425), MN11, MN21 (8LR932, A23, 23A), MN27, MN175, PX76/A76/76A (LR44), PX28, PX625, (LR9), 186 (LR43), 191/LR1130 (LR54), N (LR1), J (4LR61), 4.5V, 625A  |
| Physical Descriptions (IEC               | <u>Lanterns</u> : MN903, MN908, MN915, MN918; MN1203   |

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**Designations)** 



| Principles of Operation                                    | A pattery powers a dev  | vice by converting stored   | i chemical energy in   | to electrical energy.                                  |
|--|---|---|--|--|
| Representative Product Images                              | DOUBLETT OF DOUBLETT  | DURACELL' OPTIMUM EXTRAUFE EXTRAUFE EXTRAOWER                                     | DURACELL   |  |
|  | Major Cells   | Major Cells   | Lantern  | Specialty Button                                       |
| 4. Article Construction                                    |   |   |  |  |
| Applicable Battery Industry<br>Standards                   | ANSI C18.1M Part 1, Al  | NSI C18.1M Part 2, ANSI   | C18.4M, IEC 60086-   | 1, IEC 60086-2, IEC 60086-                             |
| Electro-technical System                                   | Alkaline Manganese Di   |   |  |  |
| Electrode - Negative                                       | Zinc (CAS # 7440-66-6)  |   |  |  |
| Electrode - Positive                                       | Manganese Dioxide (C/   | AS # 1313-13-9)   |  |  |
| Electrolyte  | Alkali Metal Hydroxide  | (aqueous potassium hy   | droxide - CAS # 1310   | )-58-3)  |
| CAN - NA/Europe  | Nickel Cobalt Plated St   | · · · · · ·   |  | ·  |
| CAN/China  |   | Nickel Colbait Plated Steel  Nickel Colbait Plated Steel or Mickel Plated Steel   |  |  |
|  |   | teer or wilcher Flateu Ste  | C1   |  |
| Declarable Substances<br>(IEC 62474 Criteria 1)            | None  |   |  |  |
| Mercury Free Battery<br>(ANSI C18.4M <5ppm)                | Yes   |   |  |  |
| Small Cell or Battery<br>(ANSI C18.1M Part 2; IEC 60086-5) | Sizes: AAA and Specialt long by 1.25 inches (31   |   | Illy designed test cyli  | nder 2.25 inches (57.1mn                               |
| 5. Health & Safety   |   |   |  |  |
| Ingestion/Small Parts Warning                              | Required for Small Cell swallowed, consult a p  |   | nd Specialty Cells):   | Keep away from children.                               |
| Normal Conditions of Use                                   | Exposure to contents inside the sealed battery will not occur unless the battery leaks, is exposed to high temperatures, or is mechanically abused. |   |  |  |
| Note to Physician  | A damaged battery wil   | l release concentrated a  | nd caustic potassiun   | n hydroxide.   |
| First Aid - If swallowed                                   |   | _   |  | nformation on treatment,<br>the USA and Canada are     |
| Poison Center/North America                                | USA/Canada Calls Only: 1-800-498-8666 (Toll Free) [ 24-Hour National Battery Ingestion Hotline]   |   |  |  |
| Poison Centers/World Directory                             | http://globalcrisis.info  | o/poisonemergency.htm   | nl#AAA   |  |
| First Aid - Eye Contact                                    |   | least 15 minutes. Seek r  |  | •  |
| First Aid - Skin Contact                                   | persists.   | clothing. Wash skin witl  | n soap and water. Se   | ek medical care if irritatio                           |
| First Aid - Inhalation                                     | Remove to fresh air.  |   |  |  |
| Battery Safety Standards & Testing                         | standards specify tests normal use and reason safety. These are:  1-Intended use simulated 2-Reasonably foreseed drop), over-discharge,             | ably foreseeable misuse<br>ation: Partial use, vibrat<br>able misuse: Incorrect i | lkaline batteries to e  . The test regimes a  ion, thermal shock, a  nstallation, external | nsure safe operation unde<br>ssess three conditions of |

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| Precautionary Statements  | <b>CAUTION:</b> 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.   |
| 6. Fire Hazard & Firefighting   |  |
| Fire Hazard   | Batteries may rupture or leak if involved in a fire.   |
| Extinguishing Media   | Use any extinguishing media appropriate for the surrounding area.  |
| Fires Involving Large Quantities of Batteries                                   | Large quantities of batteries involved in a fire will rupture and release caustic potassium hydroxide. Firefighters should wear self-contained breathing apparatus and protective clothing.  |
| 7. Handling & Storage   |  |
| Handling Precautions  | Avoid mechanical and 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.  |
| Storage Precautions   | Store batteries in a dry place at normal room temperature. Refrigeration does not make them last longer.   |
| Spills of Large Quantities of Loose<br>Batteries (unpackaged)                   | Notify spill personnel of large spills. Irritating and flammable vapors may be released from leaking or ruptured batteries. Spread batteries apart to stop shorting. Eliminate all ignition sources. Evacuate area and allow vapors to dissipate. Clean-up personnel should wear appropriate PPE to avoid eye and skin contact and inhalation of vapors or fumes. Increase ventilation. Carefully collect batteries and place in appropriate container for disposal. Remove any spilled liquid with absorbent material and contain for disposal. |
| 8. Disposal Considerations (GHS Sections)                                       |  |
| Collection & Proper Disposal  | Dispose of used (or excess) batteries in compliance with federal, state/provincial and local regulations. Do not accumulate large quantities of used batteries for disposal as accumulations could cause batteries to short-circuit. Do not incinerate. In countries, such as Canada and the EU, where there are regulations for the collection and recycling of batteries, consumers should dispose of their used batteries into the collection network at municipal depots and retailers.  |
| USA EPA RCRA (40 CFR 261)   | Classified as non-hazardous waste (not ignitable, corrosive, reactive or toxic). Federal Universal Waste Regulations (40 CFR 273) do not apply. State requirements may be more stringent than Federal.   |
| California Universal Waste Rule (Cal.<br>Code Regs. Title 22, Div. 4.5, Ch. 23) | California prohibits disposal of batteries as trash (including household trash).   |
| Vermont Primary Battery<br>Stewardship Law (ACT 139)                            | In Vermont, consumers must recycle alkaline batteries. For information, contact http://www.call2recycle.org.   |
| 9. Transport Information (GHS Section   | n 14)  |
| Regulatory Status   | Not regulated. Alkaline batteries (sometimes referred to as "Dry Cell" or "household" batteries) are not listed or regulated as dangerous goods under IATA Dangerous Goods Regulations, ICAO Technical Instructions, IMDG Code, UN Model Regulations, U.S. Hazardous Materials Regulations (49 CFR), and UNECE ADR.  |
| UN Identification Number/<br>Shipping Name                                      | None - Not Required  |

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| Special Provision (SP) Conformance          | Special regulatory provisions require batteries to be packaged in a manner that prevents the generation of a dangerous quantity of heat and short circuits. Shippers can prepare batteries by taping the terminals, individually packaging batteries, or otherwise segregating the batteries to prevent risk of creating a short circuit. Batteries shipped in original unopened Duracell packaging is compliant. |  |
|---|---|--|
| US DOT SP                                   | 49 CFR 172.102 Special Provision 130  |  |
| Air Transport (IATA/ICAO) SP                | Special Provision A123 (62nd Edition - 2021). NOTE: The words "NOT RESTRICTED" and "SPECIAL PROVISION A123" must be included on the description of the substance on the Air Waybill, when air way-bill is issued.   |  |
| Passenger Air Travel                        | No restrictions   |  |
| Emergency Transportation Hotline            | CHEMTREC 24-Hour Emergency Response Hotline Within the United States call +703-527-3887 Outside the United States, call +1 703-527-3887 (Collect)   |  |
| 10. Regulatory Information (GHS Section 15) |   |  |
| 10a. Battery Requirements                   |   |  |

10a. Battery Requirements

USA EPA Mercury Containing & Rechargeable Battery Management Act of 1996
EU Battery Directive 2006/66/EC & amendment 2013/56/EU

During the manufacturing process, no mercury is added.

Compliant with marking and substance restrictions for mercury (<0.0005%); cadmium (<0.0020%)I and lead (<0.0040%). Global labels are marked with the special collection symbol and the EU qualifier in accordance with EU Battery Directive 2006/66/EC, Article 11, Paragraph 1 on batteries and accumulators and waste batteries and accumulators (Annex II).

P.R.C. Provision on Mercury Content Limitation for Batteries (GB 8897.5-2005, MOD, Section 9.1(e)



P.R.C. Mercury Free Battery (GB 24427-2009) < 1ppm

Yes

| 10b. General Requirements                                      |  |  |
|--|--|--|
| USA CPSIA 2008 (PL. 11900314)                                  | Exempt   |  |
| USA CPSC FHSA (16 CFR 1500)                                    | Consumer batteries are not listed as a hazardous product.  |  |
| USA EPA TSCA Section 13 (40 CFR 707.20)                        | For customs clearance purpose, batteries are defined as an "Article".  |  |
| USA EPA RCRA (40 CFR 261)                                      | Classified as non-hazardous waste (not ignitable, corrosive, reactive or toxic). Federal Universal Waste Regulations (40 CFR 273) do not apply. State requirements may be more stringent than Federal.   |  |
| California Prop 65   | No warning required per 3rd party assessment.  |  |
| CANADA Products Containing<br>Mercury Regulations SOR/20140254 | Mercury free   |  |
| EU REACH REGULATION (EC) NO. 1907/2006 and REACH SVHC          | Regulated as an "article." No listed SVHC substances are present (>0.1% w/w) in accordance with ECJ article definition of 10 September 2015. This SVHC communication is basd on the best available information to us. Duracell is managing compliance with EU REACH as part of our daily quality, safety, and regulatory activities. The Candidate List of SVHC's is updated approximately bi-annually and Duracell will update this declaration accordingly if the updated SHVC list affects the assessment herein. |  |
| EU REACH Article 31  | SDS is not required for consumer alkaline batteries.   |  |
| 10c. Regulatory Definitions - Articles                         |  |  |
| USA OSHA   | 29 CFR 1910.1200(b)(6)(v)  |  |

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| USA TSCA                               | 40 CFR 704.3; 710.2(3)( c); and [19 CFR 12.1209a)]  |  |  |
|--|---|--|--|
| EU REACH                               | Title 1 - Chapter 2 - Article 3(3)  |  |  |
| GHS                                    | Section 1.3.2.1   |  |  |
| 11. Other Information                  |   |  |  |
| 11a. Certification & 3rd Party Approva | als   |  |  |
| Note:                                  | UL Listing applies to all 9Vand only AA manufactured in LaGrange USA and China.   |  |  |
| UL (UTGT2.S50939 Single Multiple       | AA, 9V  |  |  |
| Station Smoke Alarms - Component)      | Certification Standard: ANSI/UL 217 Single & Multiple Station Smoke Alarms  |  |  |
| otation official facility              | certification standard. Alloy of 217 single a mattiple station sincre ruling  |  |  |
| 11b. AIS Hazard Communication Appr     | oaches (consulted in developing this document):   |  |  |
| Globally Harmonized System (GHS)       | GHS SDS requirements and classification criteria do not apply to articles or products (such as                                    |  |  |
| ,                                      | batteries) that have a fixed shape, which are not intended to release a chemical. The article                                     |  |  |
|  | exemption is found in Section 1.3.2.1.1 of the GHS and reads: <i>The GHS applies to pure</i>                                      |  |  |
|  | substances and their dilute solutions and to mixtures. "Articles" as defined by the Hazard  |  |  |
|  |   |  |  |
|  | Communication Standard (29 CFR 1900.1200) of the OSHA of the USA, or by similar definition, are outside the scope of the system." |  |  |
|  | definition, are outside the scope of the system.  |  |  |
| Ioint Article Management Promotion     | JAMP is a Japanese Industry Association who developed the concept of an Article Information                                       |  |  |
| Consortium JAMP                        | Sheet as a supply chain tool to share and communicate chemical information in articles. The                                       |  |  |
|  | AlS authoring process is based on "declarable" substances to meet global regulatory   |  |  |
|  | requirements as well as substances to be reported by GADSL, JIG, etc.   |  |  |
|  | requirements as well as substances to be reported by GADSE, 310, etc.   |  |  |
|  |   |  |  |
| IEC 62474 Ed. 1.0 B:2012 Material      | An international standard that came into effect in March 2012 concerning declaration for  |  |  |
| Declaration for Products of and for    | electrical and electronic products. IEC 6274 replaces the defunct Joint Industry Guide –  |  |  |
| the Electro-technical Industry         | Material Declaration for Electro-technical Products (JIG-101-Ed 4.1 (May 21, 2012)  |  |  |
|  |   |  |  |
| IEC 62474 Database - Publically        | The general principle for a substance to be included in the database as a declarable substance                                    |  |  |
|  | is: 1) existing national laws or regulations in an IEC member country that are relevant to  |  |  |
| Environmental Standardization for      | Electro-technical products and that prohibit or restrict substances, or that have a labeling,                                     |  |  |
|  | communication, reporting or notification requirement, and 2) applying IEC 62474 criteria  |  |  |
| systems.                               | results in identification of declarable substance.  |  |  |
| systems.                               | results in identification of declarable substance.  |  |  |
|  |   |  |  |
|  | This standard provides regulatory guidance and a template to author an article information  |  |  |
| Batteries - Environmental              | sheet for a portable consumer battery. See Annex (inforamative) C.2 Safety Data Sheets and  |  |  |
|  | Annex E (Informative) E. 2 General.   |  |  |
|  |   |  |  |
| ANSI Z 400.1/Z19.1 (2010)              | 2.1 Scope: Applies to preparation of SDSs for hazardous chemicals used under occupational   |  |  |
|  | conditions. Does not address how the standard may be applied to articles. It presents basic                                       |  |  |
|  | information on how to develop and write a SDS. Additional information is provided to help   |  |  |
|  | comply with state and federal environmental and safety laws and regulations. Elements of the                                      |  |  |
|  | standard may be acceptable for International use.   |  |  |
|  |   |  |  |
| DISCLAIMER: This AIS is intended to p  | rovide a brief summary of our knowledge and guidance regarding the use of this material.  |  |  |
| The information contained here has b   | een compiled from sources considered by Duracell 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  |  |  |
|  | ed in good faith. Each user of this material needs to evaluate the conditions of use and design                                   |  |  |
|  | ns to prevent employee exposures, property damage or release to the environment. Duracel  |  |  |
|  | the recipient or third persons or for any damage to any property resulting from misuse of the                                     |  |  |
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product.