

Article Information Sheet (AIS)

This Article Information Sheet (AIS) provides relevant battery information to retailers, consumers, OEMs and other 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		
Preparer	Duracell North America Product Safety & Regulatory		
Last Revision	1/1/2025		
Information Contact	SDS@duracell.com		
2. Company Information			
Name & Address	<p>Duracell US Operations, 14 Research Drive, Bethel, CT USA 06801. Duracell Batteries BV, Nijverheidslaan 7, 3200 Aarschot, Belgium. Duracell International Operations Sàrl, Rue du Pré- de-la-Bichette 1, CH-1202, Geneva, Switzerland.</p>		
Global Website	www.duracell.com		
Consumer Relations: North America	North America: 1-800-551-2355 (9:00 AM - 5:00 PM EST)		
3. Article Information			
Description	Duracell branded consumer alkaline battery		
Product Category	Electro-technical device		
Global sub-brands	Coppertop, Coppertop with PowerBoost Technology, Plus, Simply, Basic, Optimum, Original, Deluxe, Chhota Power, Classic		
Use	Portable power source for electronic devices		
Physical Descriptions (IEC Designations)	<p><u>Major Cells</u>: AA (LR6), AAA (LR03), C (LR14), D (LR20) & 9V (6LR61, 6LP3146) <u>Specialty Cells</u>: AAAA (LR8D425), MN11, MN21 (8LR932, A23, 23A), MN27, PX76/A76/76A (LR44), PX625, (LR9), 186 (LR43), 191/LR1130 (LR54), N (LR1), J (4LR61), 4.5V, 625A <u>Lanterns</u>: MN903, MN908, MN915, MN918; MN1203</p>		
4. Composition/Information on Ingredients			
Components	Ingredients	CAS Number	Amount
Electrode – Negative	Zinc	7440-66-6	10-25%
Electrode – Positive	Manganese Dioxide Nickel Compounds	1313-12-9 Proprietary	35-40% 0-6%
Electrolyte	Alkali Metal Hydroxide (Potassium Hydroxide)	1310-58-3	5-10%
Can	Nickel-pated Steel		8-15%
Other Non-Reactive Materials			10-15%
5. Health & Safety			
First Aid - If swallowed	Do not induce vomiting. Seek medical attention immediately. For information on treatment, call the National Battery Ingestion Hotline (telephone numbers for the USA and Canada are provided below).		
First Aid - Eye Contact	Flush with water for at least 15 minutes. Seek medical care if irritation persists.		
First Aid - Skin Contact	Remove contaminated clothing. Wash skin with soap and water. Seek medical care if irritation persists.		
First Aid - Inhalation	Remove to fresh air.		
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/poisonemergency.html#AAA		
6. Fire Hazard & Firefighting			
Fire Hazard	Batteries may rupture or leak if involved in a fire. 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.		

Article Information Sheet (AIS)

8. Disposal Considerations (GHS Section 13)	
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 regions/states that require recycling, dispose within the collection network.
9. Transport Information (GHS Section 14)	
Regulatory Status	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.
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 66th Edition, ICAO	Special Provision A123 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.
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. Applicable Battery Industry Standards	
ANSI C18.1M Part 1, ANSI C18.1M Part 2, ANSI C18.4M, IEC 60086-1, IEC 60086-2, IEC 60086-5	
10b. Battery Requirements	
USA EPA Mercury Containing & Rechargeable Battery Management Act of 1996	During the manufacturing process, no mercury is added.
P.R.C. Provision on Mercury Content Limitation for Batteries (GB 8897.5- 2013, MOD, Section 9.1(e))	无汞
P.R.C. Mercury Free Battery (GB 24427-2021) < 1ppm	Yes
CANADA Products Containing Mercury Regulations SOR/20140254	Mercury free
10c. Battery 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.
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 based 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 POP regulation (Regulation (EU) 2019/1021) and their attendant amendments	Duracell cells and batteries do not contain Persistent Organic Pollutants
10d. Regulatory Definitions - Articles	
USA OSHA	29 CFR 1910.1200(b)(6)(v)
USA TSCA	40 CFR 704.3; 710.2(3)(c); and [19 CFR 12.1209a]]
EU & UK REACH	Title 1 - Chapter 2 - Article 3(3)
GHS	Section 1.3.2.1
11. Other Information	
11a. Certification & 3rd Party Approvals	
Note: UL Listing applies to all 9V and only AA manufactured in USA and China.	

Article Information Sheet (AIS)

UL (UTGT2.S50939 Single Multiple Station Smoke Alarms - Component)	AA, 9V Certification Standard: ANSI/UL 217 Single & Multiple Station Smoke Alarms
11b. AIS Hazard Communication Approaches (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 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.</i>
Joint Article Management Promotion Consortium JAMP	JAMP is a Japanese Industry Association who developed the concept of an Article Information Sheet as a supply chain tool to share and communicate chemical information in articles. The AIS authoring process is based on "declarable" substances to meet global regulatory requirements as well as substances to be reported by GADSL, JIG, etc.
IEC 62474 Ed. 1.0 B:2012 Material Declaration for Products of and for the Electro-technical Industry	An international standard that came into effect in March 2012 concerning declaration for electrical and electronic products. IEC 6274 replaces the defunct Joint Industry Guide – Material Declaration for Electro-technical Products (July 2023)
IEC 62474 Database - Publicly available online (maintained by TC11: Environmental Standardization for electrical and electronic products and systems.	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 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 results in identification of declarable substance.
ANSI C18.4M-2017 Portable Cells and Batteries - Environmental	This standard provides regulatory guidance and a template to author an article information sheet for a portable consumer battery. See Annex (informative) 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 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 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 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. Duracell assumes no responsibility for injury to the recipient or third persons or for any damage to any property resulting from misuse of the product.	

ARTICLE INFORMATION SHEET/SAFETY DATA SHEET (AIS/SDS)

Alkaline Manganese Dioxide-Zinc Battery

This Article Information Sheet (AIS) provides relevant battery information to retailers, consumers, OEMs and other 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 Energizer and Rayovac branded consumer batteries follow ANSI and IEC battery standards.

SECTION 1 - Identification

Product Name: Energizer	Document Number: 1223-Alk	
Chemical System: Alkaline Manganese Dioxide-Zinc	Date Prepared: December 2024	
Designed for Recharge: No	Valid Until: December 2027	
<p>Prepared by: Energizer</p> <p>Energizer Brands, LLC 8235 Forsyth Blvd St. Louis, MO 63105</p> <p>Email for Information: customersupport@energizer.com</p> <p>1-800-383-7323</p>	Description	Alkaline Manganese Dioxide-Zinc Battery
	Use	Portable power source
	Brand	ENERGIZER/EVEREADY
	IEC Designation	Included but not limited to: LR8D425, LR03, LR6, LR14, LR20, 6LR61, LR1, 4LR25Y, 6LF22
	Sizes	Included but not limited to: AAAA, AAA, AA, C, D, 9V, N, Lantern
	Image	

SECTION 2 – Hazards Identification

Not applicable to Batteries which are classified as Articles

Articles, such as batteries, are exempt from GHS SDS classification criteria. The GHS criteria are not designed or intended to be used to classify the physical, health and environmental hazards of an article.

- Inhalation:** Contents of an open battery can cause respiratory irritation.
- Skin Contact:** Contents of an open battery can cause skin irritation.
- Eye Contact:** Contents of an open battery can cause severe irritation.

SECTION 3 – Composition / Information

The battery should not be opened or burned. Exposure to the ingredients contained within or their combustion products could be harmful.

All Energizer Alkaline Manganese Dioxide-Zinc batteries have zero added mercury.

MATERIAL OR INGREDIENT	CAS #	%/wt.
Graphite	7782-42-5	2-6
Manganese Dioxide	1313-13-9	30-45
Potassium Hydroxide	1310-58-3	4-8
Zinc	7440-66-6	12-25
Non-Hazardous Components Steel	65997-19-5	18-22
Water, Paper, Plastic and Other		Balance

SECTION 4 – First Aid Measures

Ingestion: Do not induce vomiting or give food or drink. Seek medical attention immediately. CALL NATIONAL BATTERY INGESTION HOTLINE for advice and follow-up (800-498-8666) day or night.

Skin and Eyes: In the event that a battery ruptures, flush exposed skin with flowing lukewarm water for a minimum of 15 minutes. Get immediate medical attention for eyes. Wash skin with soap and water.

SECTION 5 – Fire Hazard & Firefighting

In case of fire, it is permissible to use any class of extinguishing medium on these batteries or their packing material. Cool exterior of batteries if exposed to fire to prevent rupture.

Fire fighters should wear self-contained breathing apparatus.

SECTION 6 – Accidental Release Measures

Not applicable to Batteries which are classified as Articles

TO CONTAIN AND CLEAN UP LEAKS OR SPILLS: In the event of a battery rupture, prevent skin contact and collect all released material in a plastic lined metal container.

REPORTING PROCEDURE: Report all spills in accordance with Federal, State and Local reporting requirement.

SECTION 7 - HANDLING AND STORAGE

Storage: Store in a cool, well ventilated area. Elevated temperatures can result in shortened battery life.

Mechanical Containment: Designers of any water or air-tight device should be aware of the normal evolution of hydrogen gas from alkaline batteries. This gas must be either absorbed or allowed to escape to avoid a potential safety issue.

Handling: Accidental short circuit for a few seconds will not seriously affect the battery. Prolonged short circuit will cause the battery to lose energy through heating, and can cause the safety release vent to open. Sources of short circuits include jumbled batteries in bulk containers, metal jewelry, metal covered tables or metal belts used for assembly of batteries into devices.

Soldering directly to a battery is not recommended. If welding to the battery is required, consult your Energizer sales representative for proper precautions to prevent seal damage or short circuit.

Charging: This battery is manufactured in a charged state. It is not designed for recharging. Recharging can cause battery leakage or, in some cases, high pressure rupture. Inadvertent charging can occur if a battery is installed backwards.

Labeling: The label acts as an electrical insulation for the battery can. Damage to the label can increase the potential for a short circuit.

WARNING: Do not install backwards, charge, put in fire, or mix with other battery types as it may explode or leak causing injury. Replace all batteries at the same time.

SECTION 8 – Exposure Controls

Not applicable to Batteries which are classified as Articles

In case of rupture or leakage use hand protection. Avoid contact with skin and eyes

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Not applicable to Batteries which are classified as Articles

SECTION 10 – STABILITY AND REACTIVITY

STABLE OR UNSTABLE: Stable

INCOMPATIBILITY (MATERIALS TO AVOID): Not Applicable to articles.

HAZARDOUS DECOMPOSITION PRODUCTS: Not Applicable to articles.

DECOMPOSITION TEMPERATURE (0°F): Not Applicable to articles.

HAZARDOUS POLYMERIZATION: Will Not Occur

CONDITIONS TO AVOID: Avoid electrical shorting, puncturing or deform

SECTION 11 – TOXICOLOGICAL INFORMATION

MATERIAL OR INGREDIENT	PEL (OSHA)	TLV (ACGIH)	%/wt.
Graphite (CAS# 7782-42-5)	15 mg/m ³ TWA (total dust) 5 mg/m ³ TWA (respirable fraction)	2 mg/m ³ TWA (respirable fraction)	2-6
Manganese Dioxide (CAS# 1313-13-9)	5 mg/m ³ Ceiling (as Mn)	0.2 mg/m ³ TWA (as Mn)	30-45
Potassium Hydroxide (CAS# 1310-58-3)	None established	2 mg/m ³ Ceiling	4-8
Zinc (CAS# 7440-66-6)	15 mg/m ³ TWA PNOR* (total dust) 5 mg/m ³ TWA PNOR* (respirable fraction)	10 mg/m ³ TWA PNOC** (inhalable particulate) 3 mg/m ³ TWA PNOC** (respirable particulate)	12-25
Non-Hazardous Components			
Steel iron CAS# 65997-19-5	None established	None established	18-22
Water, Paper, Plastic and Other	None established	None established	Balance

SECTION 12 – Ecological Information

Dispose of properly when discharged. Use a recycling outlet if available. Those collecting batteries should follow state and federal regulations.

Partially discharged damaged batteries can overheat and cause fires in the presence of other combustible materials.

SECTION 13 – Disposal Considerations

Dispose of in accordance with all applicable federal, state and local regulations. Appropriate disposal technologies include incineration and land filling.

SECTION 14 – TRANSPORT INFORMATION

In general, all batteries in all forms of transportation (ground, air, or ocean) must be packaged in a safe and responsible manner. Regulatory concerns from all agencies for safe packaging require that batteries be packaged in a manner that prevents short circuits and be contained in “strong outer packaging” that prevents spillage of contents. All original packaging for Energizer alkaline batteries has been designed to be compliant with these regulatory concerns.

Alkaline batteries (sometimes referred to as “Dry cell” batteries) are not listed as dangerous goods under the ADR European Agreement Concerning the International Carriage of Dangerous Goods by Road, the IMDG International Maritime Dangerous Goods Code, UN Dangerous Good Regulations, IATA Dangerous Goods Regulations, ICAO Technical Instructions and the U.S. hazardous materials regulations (49 CFR). These batteries are not subject to the dangerous goods regulations provided they meet the requirements contained in the following special provisions.

Regulatory Body	Special Provisions
ADR	Not regulated
IMDG	Not regulated
UN	Not regulated
US DOT	49 CFR 172.102 Provision 130
IATA 66 th Edition	A123
ICAO	Not regulated

All Energizer alkaline batteries are packed in such a way to prevent short circuits or the generation of dangerous quantities of heat and meet the special provisions listed above. In addition, the IATA Dangerous Goods Regulations and ICAO Technical Instructions require the words “not restricted” and the Special Provision number A123 be provided on the air waybill, when an air waybill is issued.

For emergency information call ChemTel 1-800-526-4727 (North America) or 1-314-985-1511 (International).

SECTION 15 – REGULATORY INFORMATION

Applicable Battery Industry Standards

North America Standards	ANSI C18.1 Part 1	ANSI C18.1 Part 2	ANSI C18.4
International Standards	IEC 60086-1	IEC 60086-2	IEC 60086-5

15.1 Battery

- SARA/TITLE III:** As an article, this battery and its contents are not subject to the requirements of the Emergency Planning and Community Right-To-Know Act.
- USA EPA Mercury Containing & Rechargeable Battery Management Act of 1996:** No mercury added
- EU Battery Regulation 2023/1542:** Energizer batteries are compliant with all aspects of the Regulation that are in effect today.

Article Information Sheet/Safety Data Sheet

15.2 General

1. **CPSIA 2008:** Exempt
2. **US CPSC FHSA (16 CFR 1500):** Not applicable since batteries are defined as articles
3. **USA EPA TSCA (40 CFR 707.20):** Not applicable since batteries are defined as articles
4. **USA EPA RCRA (40 CFR 261):** Classified as non-hazardous waste per ignitable, corrosive, reactive or toxicity testing
5. **California Prop 65:** No warning required
6. **DTSC Perchlorate labeling:** No warning required
7. **EU REACH SVHC:** No REACH listed substances of very high concern are present above 0.1% w/w.

15.3 Article Definitions

1. **OSHA Hazard Communication Standard, Section 1910.1200(c)**

SECTION 16 - OTHER INFORMATION

Energizer has prepared copyrighted Article Information Sheets to provide information on the different Eveready/Energizer/Rayovac battery systems. Batteries are articles as defined under the GHS and exempt from GHS classification criteria (Section 1.3.2.1.1 of the GHS). The information and recommendations set forth herein are made in good faith, for information only, and are believed to be accurate as of the date of preparation. However, ENERGIZER BRANDS, LLC MAKES NO WARRANTY, EITHER EXPRESS OR IMPLIED, WITH RESPECT TO THIS INFORMATION AND DISCLAIMS ALL LIABILITY FROM REFERENCE ON IT.

16.1 ACRONYM GLOSSARY

1. [ANSI](#): American National Standards Institute
2. [CPSC](#): Consumer Product Safety Commission
3. [CPSIA](#): Consumer Product Safety Improvement Act
4. [DTSC](#): Department of Toxic Substances Control
5. [EPA](#): Environmental Protection Agency
6. [FHSA](#): Federal Hazardous Substances Act
7. [GHS](#): Globally Harmonized System for Hazard Communication
8. [IEC](#): International Electrotechnical Commission
9. [OSHA](#): Occupational Safety and Health Administration
10. [RCRA](#): Resource Conservation and Recovery Act
11. [SDS](#): Safety Data Sheet
12. [SVHC](#): Substances of Very high Concern
13. [TSCA](#): Toxic Substances Control Act