

Article Information Sheet (AIS)

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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 Silver Oxide Batteries (Specialty Cells)
Document ID	AIS-SO
Issue Date	10-Dec-15
Preparer	Product Safety & Regulatory
Last Revision	12/15/2025
Information Contact	SDS@duracell.com

2. Company Information

NA Name & Address	Duracell US Operations , 1515 Redding Dr. LaGrange GA 30240 Duracell Batteries BV , Nijverheidslaan 7, 3200 Aarschot, Belgium Duracell International Operations Sarl , Chemin de Blandonnet 8, 1214 Vernier, Geneva Switzerland
Global Website	www.duracell.com

3. Article Information

Description	Duracell branded consumer silver oxide button cell battery
Sizes	301/386; 303/357; 309/393; 319; 361/362; 364; 370/371; 376/377; 379; 381/391, 384/392; 389/390; 394/380; 395/399; 396/397; MS76
IEC Designation	SR (43, 44, 48, 58, 60, 69, 66, 63, 55, 41, 54, 54 57, 59)

4. Article Construction

Components	Ingredients	CAS Numbers	Amount
Anode (Electrode - Negative)	Zinc	7440-66-6	
Cathode (Electrode - Positive)	Silver Oxide, Manganese Dioxide	20667-12-3, 1313-13-9	
Electrolyte	Alkali Metal Hydroxide (Aqueous Mixture: potassium hydroxide, Sodium Hydroxide)	1310-58-3, 1310-73-2	
Polytetrafluoroethylene	-	9002-84-0	less than 1%
Materials of Construction - Can	Nickel Plated Steel		
Declarable Substances (IEC 62474 Criteria 1)	None		
Mercury Free Battery (ANSI C18.4M <5ppm)	Yes		
Small Cell or Battery (ANSI C18.1M Part 2; IEC 60086-5)	All sizes of button cell batteries fit inside a specially designed test cylinder 2.25 inches (57.1mm) long by 1.25 inches (31.70 mm) wide.		

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 US 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 - Inhalation	Remove to fresh air.
Ingestion/Small Parts Warning	Required for sizes of button cell batteries: Keep away from children. If swallowed, consult a physician immediately.
Poison Center/North America	USA/CANADA Calls Only: 1-800-498-8666 (Toll Free) [24-HOUR National Battery Ingestion Hotline]
Poison Centers/World Directory	Chemical Safety and Health

6. Fire Hazard & Firefighting

Fire Hazard	Batteries may rupture or leak if involved in a fire.
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.

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 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. They should not dispose of batteries with household trash.
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.

9. Transport Information (GHS Section 14)

Regulatory Status	Not regulated. Silver oxide 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
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	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 67th Edition - SP	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	<p>CHEMTREC 24-Hour Emergency Response Hotline Within the United States call +703-527-3887 Outside the United States, call +1 703-527-3887 (Collect)</p>
10. Regulatory Information (GHS Section 15)	
10a. Applicable Battery Industry Standards	
ANSI C18.1M Part 1, ANSI C18.1M Part 2, ANSI C18.4, 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. Mercury Free Battery (GB 24427-2021) < 1ppm	Yes
Battery Regulation (EU)2023/1542	Compliant with marking and substance restrictions for mercury (<0.0005%); cadmium (<0.002%) and lead (<0.01%). Labels and/or packaging are marked with the special collection symbol in accordance with EU Battery Regulation 2023/1542, Article 13, paragraph 4. Compliant with CE marking. Labels and/or packaging are marked with the CE mark in accordance with EU Battery Regulation 2023/1542, Article 38, paragraph 3, which applies from 18 August 2024, Article 96, paragraph 2b.
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 Mercury Regulations SOR/20140254	Mercury free
EU POP regulation (Regulation (EU) 2019/1021) and their attendant amendments	Duracell cells and batteries do not contain Persistent Organic Pollutants
10c. 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. 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 62474 replaces the defunct Joint Industry Guide – Material Declaration for Electro-technical Products (July 2023)
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.	