

Article Information Sheet (AIS)

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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 Lithium Coin Batteries (primary lithium metal cells and batteries)
Document ID	AIS-LiCoin
Issue Date	1-Jul-15
Preparer	Product Safety & Regulatory (PSR)
Last Revision	12/15/2025
Information Contact	SDS@duracell.com

2. Company Information

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

Consumer Relations: NA

North America: 1-800-551-2355 (9:00 AM - 5:00 PM EST)

3. Article Information

Description	Duracell branded consumer lithium battery
Sizes	1216, 1220, 1616, 1620, 1632, 2016, 2025, 2032, 2430, 2450, 2477
IEC Designations	CR (1216, 1220, 1616, 1620, 1632, 2016, 2025, 2032, 2430, 2450, 2477)

4. Article Construction

Components	Ingredients	CAS Number	Amount
Electrode - Negative	Lithium Alloy	7439-93-2	0.5-6%
Electrode - Positive	Manganese Dioxide	1313-13-9	12-50%
Electrolyte	Organic Electrolyte	-	2.5-7.5%
Electrolyte	1,2-Dimethoxyethane Solvent	110-71-4	1.5-3.5%
Electrolyte	Lithium Perchlorate Salt	7791-03-9	0.2-0.7%
Plastic Parts	Polypropylene	9003-07-0	0.5-10%
Polytetrafluoroethylene (PTFE)	-	9002-84-0	0.1-1%
Materials of Construction - Can	Steel	7431-89-6	30-85%

Bitterant (Denatonium benzoate; CAS# 3734-33-4)	Lithium coin sizes 2016, 2025 and 2032 have a transparent layer of bitterant (denatonium benzoate) applied to the coin cell.
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5. Health & Safety

Ingestion/Small Parts Warning	Required for all sizes of lithium coin batteries: Keep out of reach of children. If swallowed, consult a physician immediately. ANSI or IEC requirements
	 WARNING OR  OR   
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.
First Aid - If swallowed	First Aid - If battery swallowed. DO NOT GIVE IPECAC. Do not induce vomiting. Seek medical attention immediately and call 24-hour NATIONAL BATTERY INGESTION HOTLINE (800-498- 8666) for assistance with battery identification and treatment. Attempt to determine battery imprint code (or diameter) of companion or replacement battery. If no imprint code is available, measure or estimate the battery diameter based on the size of the slot the battery fits or the size of the comparable battery. Provide this information to the treating health care provider.
First Aid - Eye Contact	Flush with running water for at least 30 minutes. Seek medical attention immediately.
First Aid - Skin Contact	Remove contaminated clothing and flush skin with running water for at least 15 minutes. Seek medical attention if irritation persists
First Aid - Inhalation	Contents of leaking battery may be irritating to respiratory passages. Move to fresh air. Seek medical attention if irritation persists.
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 irritating fumes from thermal degradation

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
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Storage Precautions	accordance with equipment instructions. 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 states & countries, 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)	"Charged" lithium coin batteries meet the criteria (D003 - Reactivity) of a hazardous waste as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261.23. If recycled, lithium coin batteries are classified as Universal Waste.

9. Transport Information (GHS Section 14)				
Regulatory Status	Duracell Lithium Coin Batteries are manufactured and distributed according to current global transportation regulations. The shipping cartons for all Duracell Lithium cells/batteries are designed to prevent short circuit, displacement within the package, damage to the batteries and release of the contents of the package. Persons preparing or distributing lithium batteries for transportation are required by regulations to be trained in their level of responsibility. The information in this section has been provided for clarification. The transportation of lithium metal batteries is regulated by ICAO, IATA, IMDG, IMO, US DOT, ADR.			
	Catalog	Total Lithium Content (grams)	Type	Total Cell/Battery Weight (grams)
	1216	<0.3	Cell	<1
	1220	<0.3	Cell	<1
	1616	<0.3	Cell	1.2
	1620	<0.4	Cell	1.3
	1632	<0.3	Cell	1.8
	2016	<0.4	Cell	2
	2025	<0.3	Cell	2.4
	2032	<0.3	Cell	2.9
	2430	<0.3	Cell	4.5
	2450	<0.3	Cell	6.6
	2477	<0.3	Cell	9.0
Total Lithium Content (grams)				
UN Identification Number/ Shipping Name	UN3090 Primary lithium metal batteries UN3091 Primary lithium metal batteries packed with or contained in equipment			
UN 38.3 Transportation Tests	UN38.3 Test Summary Documents that are required by the UN Model Regulations, can be requested by sending an email request to UN38.3_duracell@duracell.com.			
Hazard Classification Number	Hazard Classification 9			
Special Provisions 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			
Air Transport IATA 67th Edition, ICAO	Packaging Instructions (PI) 968 – PI 970			
US DOT - SP	29, A54, A100, A101			
IMDG - SP	188, 230, 310, 957			
ADR - SP	188, 230, 310, 636, 656			
ANTT (National Land Transportation Agency)	Regulation 5232, 14 Dec 2016; SP 188, 230, 310, 376, 377, 384; Packaging Instructions P903 Complementary Instructions 5947/1, 1 July 2021			
Emergency Transportation Hotline	CHEMTRAC 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)				

Applicable Battery Standards	ANSI C18.3M Part 1, ANSI C18.3M Part 2, ANSI C18.4, IEC 60086,1, IEC 60086-2, IEC 60086-4
Mercury Free Battery (ANSI C18.4M <5ppm)	Yes
Small Cell or Battery (ANSI C18.1M Part 2; IEC 60086-4	Lithium coin batteries fit inside a specially designed test cylinder 2.25 inches (57.1mm) long by 1.25 inches (31.70 mm) wide.
USA EPA Mercury Containing & Rechargeable Battery Management Act	During the manufacturing process, no mercury is added.

of 1996	
CANADA Products Containing Mercury Regulations SOR/20140254	Mercury Free
EU Battery Directive 2006/66/EC & amendment 2013/56/EU	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 California Prop 65	No warning required per 3rd party assessment.
USA California Perchlorate Contamination Prevention Act of 2003	Contains perchlorate. <u>Required labeling</u> : Perchlorate material - special handling may apply. See www.dtsc.ca.gov/hazardouswaste/perchlorate
Declarable Substance (IED 62674 Criteria 1	1,2-Dimethoxyethane (CAS-110-74-1)
Battery Regulation (EU)2023/1542	Compliant with marking and substance restrictions for mercury (<0.0005%); cadmium (<0.002%) and lead (<0.004%). Labels and/or packaging are marked with the special collection symbol in accordance with EU Battery Directive 2006/66/EC, Article 21, paragraph 1 and 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.
EU POP regulation (Regulation (EU) 2019/1021) and their attendant amendments	Duracell cells and batteries do not contain Persistent Organic Pollutants
Regulatory Definitions - Articles	An SDS is not required for 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	
UL Listing	Yes
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.
DISCLAIMER: This AIS is intended to provide a brief summary of our knowledge and guidance regarding the use of this article. 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	