DURACELL

Article Information Sheet (AIS)

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 Nickel Metal Hydride (NiMH) Rechargeable Batteries**
Document ID	AIS-NiMH
Issue Date	1-Dec-15
Version	5.0
Preparer	Product Safety & Regulatory
Last Revision	1/1/2019
2. Company Information	
Name & Address	Duracell US Operations, Inc., 14 Research Drive, Bethel, CT USA 06801
Website	www.duracell. com
Consumer Relations	North America: 1-800-551-2355 (9:00 AM - 5:00 PM EST)
3. Article Information	
Description	Duracell branded consumer nickel metal hydride rechargeable battery
Product Category	Electro-technical device
Use	Portable power source for electronic devices
Global sub-brands (Retail)	**RECHARGEABLE**
Sizes	AA, AAA, C, D & 9V
IEC Designations (IEC 62133)	HR6, HR03, HR9V, HR14, HR20
Principles of Operation	A battery powers a device by converting stored chemical energy into electrical energy.
Representative Product Image	
4. Article Construction	
Applicable Battery Industry Standards	ANSI C18.2M Part 1, ANSI C18.2M Part 2, ANSI C18.4, IEC 61951-2, IEC 62133
Electro-technical System	Nickel Metal Hydride
Anode (Electrode - Negative)	Metal hydride
Cathode (Electrode - Positive)	Nickel oxides
Electrolyte	Alkali Metal Hydroxide (aqueous potassium hydroxide - CAS # 1310-58-3)
Materials of Construction - Can	Nickel Plated Steel
Declarable Substances (IEC 62474 Criteria 1)	None - See Section 10b (EU REACH ANNEX XVII) of this document (page 4)
Mercury Free Battery (ANSI C18.4M <5ppm)	Yes
Small Cell or Battery (ANSI C18.1M Part 2; IEC 60086-5)	Size AAA fits inside a specially designed test cylinder 2.25 inches (57.1mm) long by 1.25 inches (31.70 mm) wide.
5. Health & Safety	

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Ingestion/Small Parts Warning	Required for Battery Size AAA: Keep away from children. If swallowed, consult a physician immediately.
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 will release concentrated and caustic potassium hydroxide.
First Aid - If swallowed	Do not induce vomiting. Seek medical attention immediately. For information on treatment, call 24-Hour National Battery Ingestion Hotline (telephone number below).
24-Hour National Battery Ingestion Hotline	USA/CANADA CALLS ONLY:: 800-498-8666
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.
Battery Safety Standards & Testing	Duracell batteries meet the requirements of ANSI C18. 2M Part 2; IEC 61951-2, and IEC 62133. These standards specify tests and requirements for alkaline batteries to ensure safe operation under normal use and reasonably foreseeable misuse. The test regimes assess three conditions of safety. These are: **1-Intended use simulation:** Partial use, vibration, thermal shock, and mechanical shock **2-Reasonably foreseeable misuse:** Incorrect installation, external short-circuit, free fall (user-drop), over-discharge, and crush **3-Design consideration:** Thermal abuse, mold stress
Precautionary Statements	(For AAA & Smaller) “CAUTION: Keep batteries away from children. If swallowed, consult a physician at once. For information on treatment, call (202) 625-3333 collect.” (All sizes)” CAUTION: Never use different battery brands, types, capacities, or systems at the same time. For proper insertion, please observe pole indications (+/-). Duracell battery charger recommended. Keep batteries away from fire, or explosion may occur.”
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 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 Section 13)	

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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)	Nickel metal hydride rechargeable batteries are considered RCRA Universal Waste as long as they are recycled. In some states (California, New York, Minnesota, and Maine) Nickel metal hydride batteries must be recycled by state law.
California Universal Waste Rule (Cal. Code Regs. Title 22, Div. 4.5, Ch. 23)	California prohibits disposal of batteries as trash (including household trash).
9. Transport Information (GHS Section 14)	
Regulatory Status	Nickel metal hydride (NiMH) batteries are not defined as dangerous goods under IATA, ICAO, and DOT. For air and ground transportation these batteries are not subject to dangerous goods regulations. Shipping packages for all Duracell NiMH batteries are designed to prevent: short circuits, movement withn the package, damage to the cells/batteries, and release of the package contents. **NIMH batteries are defined as dangerous goods under IMDG code for sea transportation.**
UN Identification Number/ Shipping Name	UN3496 - Batteries, Nickel Metal Hydride
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.
Internation Maritme Dangerous Goods (IMDG)	CODE: UN-3496, SP-117 & SP-963 [2016 EDITION]
US DOT SP	49 CFR 172.102 Special Provisions 130 and 340
Air Transport (IATA/ICAO) SP	Special Provision A199 (IATA 60th Edition - 2019). NOTE: The words "NOT RESTRICTED" and "SPECIAL PROVISION A199" 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	
USA EPA Mercury Containing & Rechargeable Battery Management Act of 1996	During the manufacturing process, no mercury is added.
EU Battery Directive 2006/66/EC & amendment 2013/56/EU	Compliant with marking and substance restrictions for mercury (<0.0005%); cadmium (<0.0020%)l 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).
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".

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California Prop 65	No warning required per 3rd party assessment.
CANADA Products Containing Mercury Regulations SOR/20140254	Mercury free
EU REACH REGULATION (EC) NO. 1907/2006	Regulated as an "article." No listed substances are present (>0.1% w/w) in accordance with ECJ article definition of 10 September 2015.
EU REACH Annex XVII	The use of nickel in batteries does not meet the conditions of restriction described for Annex XVII Item #27 - Nickel. The use restriction applies for articles intended to come into direct and prolonged contact with the skin, specifically pierced earring posts and other types of jewelry.
EU REACH Article 31	SDS is not required consumer alkaline batteries.

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 REACH	Title 1 - Chapter 2 - Article 3(3)
GHS	Section 1.3.2.1

11. Other Information

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: ***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."***
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 (JIG-101-Ed 4.1 (May 21, 2012)
IEC 62474 Database - Publically 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 C.2 (Informational) Safety Data Sheets and Annex E (Informative) Article Information Sheet.
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.

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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.