

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 and rechargeable USB charger & backup 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 Mobile Backup Battery (embedded Lithium-ion Battery)
Document ID	AIS-Duracell Mobile Li-ion
Issue Date	1-Jan-19
Version	1.0 (North America)
Preparer	Product Safety & Regulatory
Last Revision	New

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 rechargeable USB charger & backup battery for Smartphones & Tablets
Product Category	Electro-technical device
Use	Portable power source for electronic devices
Global sub-brands (Retail)	Duracell Mobile Power Banks
Principles of Operation	A battery powers a device by converting stored chemical energy into electrical energy.



Model Number	PB1	PB2	PB3	PB7
Description	1 DAY	2 DAYS	3 DAYS	7 DAYS
mAh	3,350 mAh	6,700 mAh	10,500 mAh	10,500 mAh
Watt hours	12.2 WH	24.3 WH	36.5 WH	73.0 WH

4. Article Construction

Applicable Battery Industry Standards	UL 1642, IEC 62133, ANSI C18.2M, and IEC 60950-1
Electro-technical System	Rechargeable Lithium-ion
Electrode - Negative	Proprietary
Electrode - Positive	Proprietary
Electrolyte	Proprietary
Materials of Construction - Cell	ABS Plastic

Article Information Sheet (AIS)

Materials of Construction - Battery Case	Plastic or aluminum depending on model
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)	No
5. Health & Safety	
Ingestion/Small Parts Warning	N/A
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	Inhalation of vapors or fumes released due to a large number of leaking batteries may cause respiratory and eye irritation. High concentrations may cause central nervous system effects including headache, dizziness, and nausea. Provide fresh air and seek medical attention.
First Aid - If swallowed	Swallowing is not anticipated due to battery size. Irritation to the internal/external mouth area may occur following exposure to a leaking battery. Do not induce vomiting, give food or drink. Seek medical attention immediately.
24-Hour National Battery Ingestion Hotline	USA/CANADA CALLS ONLY: 1-800-498-8666 (Toll-Free)
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. Inhalation of vapor
Battery Safety Standards & Testing	Duracell rechargeable lithium-ion batteries meet the requirements of [UL 1642, IEC 62133, and ANSI C18.2M]. These standards specify tests and requirements to ensure safe operation of batteries under normal use and reasonably foreseeable misuse. The test regimes assess three conditions of safety. These are: <u>1-Intended use simulation:</u> Partial use, vibration, thermal shock, and mechanical shock <u>2-Reasonably foreseeable misuse:</u> Incorrect installation, external short-circuit, free fall (user-drop), over-discharge, and crush <u>3-Design consideration:</u> Thermal abuse, mold stress
Precautionary Statements	CAUTION: The lithium-ion battery used in this charging device may present a risk of fire or chemical burn if mistreated. Do not disassemble, expose to heat above 100° C (212° F), or incinerate. Misusing or incorrectly connecting the charging device may cause electric shock to users and damage equipment. Read instructions carefully. The charging device may become warm and may reach 50°C (122°F) under extended high power operation. During operation, keep the charging device away from materials that may be affected by these temperatures
6. Fire Hazard & Firefighting	
Fire Hazard	Batteries may rupture or leak if involved in a fire.

Article Information Sheet (AIS)

Extinguishing Media	In case of fire, you can use fire extinguishers appropriate for a solid material fire; the recommended sequence is water or water mist, sand, CO2, powder. Use any extinguishing media appropriate for the surrounding materials. For incipient (beginning) fires copious amounts of water are effective in cooling burning lithium ion batteries. Fire fighters should use appropriate PPE for the fumes and heat.
Fires Involving Large Quantities of Batteries	Large quantities of batteries involved in a fire will rupture and release irritating fumes from thermal degradation If using water, use enough to smother the fire. Cooling exterior of batteries will help prevent rupturing. Burning batteries generate toxic and corrosive lithium hydroxide fumes. Firefighters should wear self-contained breathing apparatus. Detailed information on fighting a lithium-ion fire can be found in US DOT Emergency Response Guide 147 (Lithium-Ion Batteries).
7. Handling & Storage	
Handling Precautions	Do not drop or subject the charging device to strong mechanical shock. Do not expose the battery to excessive shock or vibration. Do not expose the battery to moisture. Do not insert any object into the parts or openings of the battery. Do not operate the battery if it has received a sharp blow, been dropped, or otherwise has been damaged in any way. Do not use or store in environments where the temperature is 40°C/ (104°F) or greater. Keep out of reach of children.
Storage Precautions	Store batteries in a dry place at normal room temperature.
8. Disposal Considerations (GHS Section 13)	
Collection & Proper Disposal	Dispose of batteries in compliance with federal, state or provincial and local regulations. Do not accumulate large quantities of used batteries for disposal. Do not incinerate. 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)	Lithium-ion batteries are classified as Universal Waste when recycled through a battery recycler.
9. Transport Information (GHS Section 14)	
Regulatory Status	Duracell rechargeable lithium-ion batteries are produced and delivered in accordance with current IATA/ICAO regulations. Duracell lithium ion batteries can be shipped in accordance with the most recent ICAO and IATA editions. Shipping packages for all Duracell lithium cells/batteries are designed to prevent: short circuits, movement within the package, damage to the cells/batteries, and release of the package contents. Persons who prepare or offer lithium batteries for transport are required by regulation to be trained to the extent of their responsibility. The information in this section is provided for informational purposes only. The transportation of lithium ion batteries is regulated by ICAO, IATA, IMO and US DOT. Duracell lithium ion batteries are not subject to the other provisions of the Dangerous Goods regulations as long as they are packaged and marked in accordance with the applicable regulations.
DEFECTIVE Lithium Batteries	Defective Lithium batteries are forbidden on both Passenger and Cargo Aircraft. For all other modes of transportation, defective Lithium batteries are fully regulated as Dangerous Goods .

Article Information Sheet (AIS)

Total Lithium Content (grams)	N/A
Lithium ion Watt Hour Rating	See Section 3 - Images
UN Identification Number/ Shipping Name	UN3480 Lithium Ion battery
UN 38.3 Transportation Tests	Duracell certifies that this lithium ion battery meets the requirements of the UN Manual of Tests and Criteria, Part III subsection 38.3. For documentation requests, please see Section 2.
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.
US DOT Special Provisions	49 CFR 173.185(c)
Air Transport (IATA/ICAO) Packing Instructions	PI 965 – Lithium ion batteries Lithium Ion cells/batteries are limited to a 30% "State of Charge" (SoC) and forbidden on passenger aircraft thus "Cargo Aircraft Only" label is required.PI 965 Section II will have a quantity limit of 1 package offered for consignment, overpack quantity limit of 1 package and package must be offered separately from other cargo.
Marine/Water Transport (IMDG) Special Provision	188
ADR Special Provisions	188, 230
Passenger Air Travel	Air travelers should consult the US Department of Transportation (DOT) Safety Travel web site at http://safetravel.dot.gov for guidance regarding carry on of lithium batteries.
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.

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) Lithium ion batteries are classified as Universal Waste when recycled through a battery recycle
USA California Prop 65 No warning required per 3rd party assessment.
USA California Perchlorate Prevention Act of 2003 N/A
Canada Products Containing Mercury Regulations SOR/20140254 Mercury free

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]

Article Information Sheet (AIS)

GHS

Section 1.3.2.1

11. Other Information	
11a. Certification & 3rd Party Approvals	
UL	Lithium Batteries - Component BBCV2.MH27725 (ATI 505974; 505672)
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 (JIG-101-Ed 4.1 (May 21, 2012)
IEC 62474 Database - Publically available online (http://std.iec.ch/iec62474). 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 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.
ANSI C18.4M-2018 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 (Informative) Safety Data Sheets and ANNEX E (Informative) Article Information Sheet.
ANSI C18.4M-2018 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 (Informative) Safety Data Sheets and ANNEX E (Informative) Article Information Sheet.

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.