

## **ARTICLE INFORMATION SHEET**

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 - DOCUMENT INFORMATION**

**Product Name:** Eveready / Energizer Battery / Rayovac

**Document Number:** 1219-Ion

**Chemical System:** Lithium Ion

**Date Prepared:** December 2019

**Designed for Recharge:** Yes

**Valid Until:** December 2022

**Prepared by:** Energizer

### **SECTION 2 – COMPANY INFORMATION**

Energizer Brands, LLC  
533 Maryville University Drive  
St. Louis, MO 63141

Email for Information:  
[energizer@custhelp.com](mailto:energizer@custhelp.com)  
[www.energizer.com](http://www.energizer.com)

### **SECTION 3 – ARTICLE INFORMATION**

Description	Lithium Ion battery
Use	Portable power source
Brand	ENERGIZER, EVEREADY, RAYOVAC
Sizes	Included but not limited to: 18650, 103040, 26650

### **SECTION 4 – ARTICLE CONSTRUCTION**

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

<b>MATERIAL OR INGREDIENT</b>	<b>CAS #</b>	<b>TLV (ACGIH)</b>	<b>%/wt.</b>
Lithium Cobalt Nickel Dioxide	12031-55-1; 12031-65-1	None established	<25
Steel	---	None established	15-30
Lithiated Manganese Dioxide	12057-17-9	5.0 mg/m3 (Mn)	<25
Graphite	7782-42-5	15 mppcf	3-5
Copper	7440-50-8	0.1 mg/m3 (Fume)	5-15
Nickel	7440-02-0	0.1 mg/m3 (Elemental)	2-5
Aluminum	7429-90-5	15 mg/m3 (Dust)	2-8
Lithium Hexafluorophosphate	21324-40-3	None established	1-5
Ethylene Carbonate	96-49-1	None established	<15
Methyl Ethyl Carbonate	623-53-0	None established	<15
Dimethyl Carbonate	616-38-6	None established	<15

**All Energizer/Rayovac Lithium Ion have zero added mercury.**

## Applicable Battery Industry Standards

<b>North America Standards</b>	ANSI C18.2M Part 1	ANSI C18.2M Part 2	ANSI C18.4
<b>International Standards</b>	IEC 62133-2		

## SECTION 5 – HEALTH AND SAFETY

**Inhalation:** Provide fresh air and seek medical attention.

**Skin Contact:** Remove contaminated clothing and wash skin with soap and water. If a chemical burn occurs or if irritation persists, seek medical attention.

**Eye Contact:** Immediately flush eyes thoroughly with water for at least 15 minutes, lifting upper and lower lids, until no evidence of the chemical remains. Seek medical attention.

## SECTION 6 – FIRE HAZARD & FIREFIGHTING

In case of fire where lithium batteries are present, flood area with water or smother with a Class D fire extinguishant appropriate for lithium metal, such as Lith-X. Water may not extinguish burning batteries but will cool the adjacent batteries and control the spread of fire. Burning batteries will burn themselves out. Virtually all fires involving lithium batteries can be controlled by flooding with water. However, the contents of the battery will react with water and form hydrogen gas. In a confined space, hydrogen gas can form an explosive mixture. In this situation, smothering agents are recommended. A smothering agent will extinguish burning lithium batteries.

Emergency responders should wear self-contained breathing apparatus. Burning lithium ion batteries produce toxic and corrosive lithium hydroxide fumes and sulfur dioxide gas.

## SECTION 7 - HANDLING AND STORAGE

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

**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.

**Charging:** This battery is made to be charged many times. Because it gradually loses its charge over a few months, it is good practice to charge battery before use. Use recommended charger. Improper charging can cause heat damage or even high-pressure rupture. Observe proper charging instructions.

## SECTION 8 – DISPOSAL CONSIDERATIONS

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

## SECTION 9 – 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 batteries has been designed to be compliant with these regulatory concerns.

Lithium Ion (Li-ion) batteries, also known as secondary or rechargeable lithium are regulated in transport. Energizer and Rayovac Lithium ion batteries unless exempted are shipped as Class 9 UN3480. Li-ion must be offered for transport at a state of charge (SOC) not exceeding 30% of their rated design capacity.

Regulatory Body	Special Provisions or regulation references
IMDG	188, 230
US DOT	49 CFR 173.185
IATA	PI 965, PI 966, PI 967
ICAO 63 <sup>rd</sup> Edition	PI 965, PI 966, PI 967

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

## SECTION 10 – REGULATORY INFORMATION

### 10A 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 Directive 2006/66/EC Amended 2013/56/EU:** Energizer batteries are compliant with all aspects of the Directive

### 10B General

- CPSIA 2008:** Exempt
- US CPSC FHSA (16 CFR 1500):** Not applicable since batteries are defined as articles
- USA EPA TSCA (40 CFR 707.20):** Not applicable since batteries are defined as articles
- USA EPA RCRA (40 CFR 261):** Classified as non-hazardous waste per ignitable, corrosive, reactive or toxicity testing
- California Prop 65:** No warning required
- DTSC Perchlorate labeling:** No warning required
- EU REACH SVHC:** No REACH listed substances of very high concern are present above 0.01% w/w

### 10C Article Definitions

- OSHA Hazard Communication Standard, Section 1910.1200(c)**

## SECTION 11 – GHS OTHER INFORMATION

None

## Acronym Glossary

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

# Article Information Sheet



Page 4 of 4  
Lithium Ion Batteries

*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.*