

## **ARTICLE INFORMATION SHEET**

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 Energizer branded consumer batteries follow ANSI and IEC battery standards.

### **SECTION 1 - DOCUMENT INFORMATION**

**Product Name:** Energizer Battery

**Document Number:** 1117-NiMH

**Chemical System:** Nickel Metal Hydride

**Date Prepared:** November 2017

**Designed for Recharge:** Yes

**Valid Until:** November 2020


**Prepared by:** Energizer

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

Energizer Brands, LLC  
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[www.energizer.com](http://www.energizer.com)

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

Description	Nickel Metal Hydride Battery
Use	Portable power source
Brand	ENERGIZER
IEC Designations	HR6, HR03, HR9V, HR14, HR20
Sizes	AAA, AA, C, D, and 9V
Image	

# Article Information Sheet



## 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.

MATERIAL OR INGREDIENT	PEL (OSHA)	TLV (ACGIH)	%/wt.
Aluminum (CAS# 7429-90-5)	15 mg/m <sup>3</sup> TWA (total dust) 5 mg/m <sup>3</sup> TWA (respirable fraction)	10 mg/m <sup>3</sup> TWA	< 2
Cobalt as cobalt metal (CAS# 7440-48-4) as cobalt oxide (CAS# 1307-96-6) as cobalt hydroxide (CAS# 21041-93-0)	0.1 mg/m <sup>3</sup> TWA (as Co)	0.02 mg/m <sup>3</sup> TWA (as Co)	2.5-6.0
Lithium Hydroxide (CAS# 1310-65-2)	None established	None established	0-4
Manganese (CAS# 7439-96-5)	5 mg/m <sup>3</sup> Ceiling	0.2 mg/m <sup>3</sup> TWA (as Mn)	< 3
Mischmetal including: Lanthanum (CAS# 7439-91-0) Cerium (CAS# 7440-45-1) Neodymium (CAS# 7440-00-8) Praseodymium (CAS# 7440-10-0)	15 mg/m <sup>3</sup> TWA (particulates not otherwise regulated-total dust) 5 mg/m <sup>3</sup> TWA (particulates not otherwise regulated-respirable fraction)	10 mg/m <sup>3</sup> TWA (particulates not otherwise classified-inhalable) 3 mg/m <sup>3</sup> TWA (particulates not otherwise classified-respirable)	< 13
Nickel as nickel hydroxide (CAS# 12054-48-7) as nickel oxide (CAS# 1313-99-1) as nickel powder (CAS# 7440-02-0)	1 mg/m <sup>3</sup> TWA (as Ni)	1.5 mg/m <sup>3</sup> TWA (as inhalable Ni) 0.2 mg/m <sup>3</sup> TWA (as inhalable Ni, insoluble compounds)	30-50
Potassium Hydroxide (CAS# 1310-58-3)	None established	2 mg/m <sup>3</sup> Ceiling	< 7
Sodium Hydroxide (CAS# 1310-73-2)	2 mg/m <sup>3</sup> TWA	2 mg/m <sup>3</sup> Ceiling	0-4
Zinc as zinc metal (CAS# 7440-66-6) as zinc oxide (CAS# 1314-13-2) as zinc hydroxide (CAS# 20427-58-1)	15 mg/m <sup>3</sup> TWA (total dust: zinc oxide) 5 mg/m <sup>3</sup> TWA (respirable fraction: zinc oxide)	10 mg/m <sup>3</sup> TWA (total dust: zinc oxide)	< 3
Non-Hazardous Components Steel (iron CAS# 65997-19-5) Water, Paper, Plastic and Other	None established None established	None established None established	14 - 18 Balance

\* PNOR: Particulates not otherwise regulated

\*\*PNOC: Particulates not otherwise classified

# Article Information Sheet



## Applicable Battery Industry Standards

<b>North America Standards</b>	ANSI C18.2M P2	ANSI C18.2M Part 2	ANSI C18.4
<b>International Standards</b>	IEC 619651-1	IEC 62133-1	

## SECTION 5 – HEALTH AND SAFETY

**Ingestion:** Do not induce vomiting or give food or drink. Seek medical attention immediately. CALL NATIONAL BATTERY INGESTION HOTLINE for advice and follow-up (202-625-3333) collect day or night.

The following instructions apply to exposure of internal components.

**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

If fire or explosion occurs when batteries are on charge, shut off power to charger.

In case of fire where nickel metal hydride batteries are present, apply a smothering agent such as METL-X, sand, dry ground dolomite, or soda ash, or flood the area with water. A smothering agent will extinguish burning nickel metal hydride batteries. 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 nickel metal hydride batteries can be controlled with water. When water is used, however, hydrogen gas may evolve. In a confined space, hydrogen gas can form an explosive mixture. In this situation, smothering agents are recommended.

Fire fighters should wear self-contained breathing apparatus. Burning nickel metal hydride batteries can produce toxic fumes including oxides of nickel, cobalt, aluminum, manganese, lanthanum, cerium, neodymium, and praseodymium.

## SECTION 7 - HANDLING AND STORAGE

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

**Mechanical Containment:** If potting or sealing the battery in an airtight or watertight container is required, consult your Energizer Brands, LLC representative for precautionary suggestions. Batteries normally evolve hydrogen which, when combined with oxygen from the air, can produce a combustible or explosive mixture unless vented. If such a mixture is present, short circuits, high temperature, or static sparks can cause an ignition.

Do not obstruct safety release vents on batteries. Encapsulation (potting) of batteries will not allow cell venting and can cause high pressure rupture.

**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. If welding to the battery is required, consult your Energizer sales representative for proper precautions to prevent seal damage or short circuit.

**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 polarity.

**Labeling:** The label acts as an electrical insulation for the battery can. Damage to the label can increase the potential for a short circuit.

**WARNING:** Do not install backwards, charge, put in fire, or mix with other battery types. May explode or leak causing injury. **Replace all batteries at the same time.**

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## SECTION 8 – DISPOSAL CONSIDERATIONS

Dispose of in accordance with all applicable federal, state and local regulations. Appropriate disposal technologies include incineration and land filling. Nickel metal hydride batteries can also be collected as part of the Rechargeable Battery Recycling Corporation (RBRC) program. Visit [www.RBRC.org](http://www.RBRC.org) for the nearest recycling center or call 1-800-8-battery for rechargeable battery recycling and disposal information.

## 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 nickel metal hydride batteries has been designed to be compliant with these regulatory concerns.

Energizer nickel metal hydride batteries (sometimes referred to as "Dry cell" batteries) are not defined as dangerous goods under the IATA Dangerous Goods Regulations, ICAO Technical Instructions and the U.S. hazardous materials regulations (49 CFR). Nickel metal hydride batteries are defined as dangerous goods under the IMDG code. For air and ground transportation, these batteries are not subject to the dangerous goods regulations as they are compliant with the requirements contained in the following special provisions.

Regulatory Body	Special Provisions
ADR	Not Regulated
IMDG	UN3496 SP 963
UN	Not Regulated
US DOT	49 CFR 172.102 Provision 130
IATA	UN 3496 SP A123 and A199
ICAO	Not Regulated

In addition, the IATA Dangerous Goods Regulations and ICAO Technical Instructions require the words "not restricted" and the Special Provision number A123 be provided on the air waybill, when an air waybill is issued.

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

## SECTION 10 – REGULATORY INFORMATION

### 10A Battery

1. **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.
2. **USA EPA Mercury Containing & Rechargeable Battery Management Act of 1996:** No mercury added
3. **EU Battery Directive 2006/66/EC Amended 2013/56/EU:** Energizer batteries are compliant with all aspects of the Directive

### 10B General

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

### 10C Article Definitions

1. **OSHA Hazard Communication Standard, Section 1910.1200(c)**

## SECTION 11 – GHS OTHER INFORMATION

None

# Article Information Sheet



## 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

*Energizer has prepared copyrighted Article Information Sheets to provide information on the different Eveready/Energizer 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.*