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January 2, 2018

OHSA and Material Safety Data Sheets for Manufactured Articles

Energizer flashlights, chargers, and batteries are defined as *Articles* and <u>do not</u> require a Safety Data Sheet (SDS) to be provided. Per the OSHA Hazard Communication Standard, Section 1910.1200(c), an *Article* is defined as:

"...a manufactured item other than a fluid or particle: (i) which is formed to a specific shape or design during manufacture; (ii) which has end use function(s) dependent in whole or in part upon its shape or design during end use; and (iii) which under normal conditions of use does not release more than very small quantities, *e.g.*, minute or trace amounts of a hazardous chemical, and does not pose a physical hazard or health risk to employees."

Per Section 1910.1200(a)(2) the Standard necessitates the classification of potential hazards of chemicals and the requirement for an SDS prepared in alignment with the Globally Harmonized System (GHS) format. Under 1910.1200(c), a Chemical is defined as:

"any substance, or mixture of substances."

The Standard further defines a substance as a:

"chemical elements and their compounds in the natural state or obtained by any production process, including any additive necessary to preserve the stability of the product and any impurities deriving from the process used, but excluding any solvent which may be separated without affecting the stability of the substance or changing its composition."

Per 1910.1200(b)(6)(v), *Articles* are excluded from the requirements of the Hazard Communication Standard and therefore, *Articles* are not required to have a SDS.

However, because this question often arises, Energizer has prepared Article Information Sheets (AIS) to communicate similar information. The Energizer AIS are available at http://data.energizer.com/



Below is a table that correlates the former PSDS sections to those found in the new AIS documents. The new AIS documents are intended to better align with Sections applicable to Articles. Therefore, many sections in the former PSDS that were applicable to substances but not articles have been removed from the AIS. In addition sections 1 and 3 were added to the AIS.

PSDS Section	AIS Section
1 Manufacturer Information	2 Company Information
2 Hazards Identification	Not applicable
3 Ingredients	4 Article Construction
4 First Aid Measurers	5 Health and Safety
5 Fire Fighting Measures	6 Fire Hazard and Firefighting
6 Accidental Release Measures	Not applicable
7 Handling and Storage	7 Handling and Storage
8 Exposure Controls/Personal Protection	Not applicable
9 Physical and Chemical Properties	Not applicable
10 Stability and Reactivity	Not applicable
11 Toxicological Information	Not applicable
12 Ecological Information	Not applicable
13 Disposal Considerations	8 Disposal Considerations
14 Transport Information	9 Transport Information
15 Regulatory Information	10 Regulatory Information
16 Other information	11 GHS Other Information



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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 branded consumer batteries follow ANSI and IEC battery standards.

SECTION 1 - DOCUMENT INFORMATION

Product Name: Eveready / Energizer Battery

Chemical System: Alkaline Manganese Dioxide-Zinc

Designed for Recharge: No

Prepared by: Energizer

SECTION 2 – COMPANY INFORMATION

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

Email for Information: energizer@custhelp.com www.energizer.com

SECTION 3 – ARTICLE INFORMATION

Description	Alkaline Manganese Dioxide-Zinc Battery	
Use	Portable power source	
Brand	ENERGIZER, EVEREADY	
IEC Designation	Included but not limited to: LR8D425, LR03, LR6, LR14, LR20, 6LR61, LR1, 4LR25Y, 6LF22	
Sizes	Included but not limited to: AAAA, AAA, AA, C, D, 9V, N, Lantern	
Image		

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Valid Until: January 2021

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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.
Graphite (CAS# 7782-42-5)	15 mg/m ³ TWA (total dust) 5 mg/m ³ TWA (respirable fraction)	2 mg/m ³ TWA (respirable fraction)	2-6
Manganese Dioxide (CAS# 1313-13-9)	5 mg/m ³ Ceiling (as Mn)	0.2 mg/m ³ TWA (as Mn)	30-45
Potassium Hydroxide (CAS# 1310-58-3)	None established	2 mg/m ³ Ceiling	4-8
Zinc (CAS# 7440-66-6)	15 mg/m ³ TWA PNOR* (total dust) 5 mg/m ³ TWA PNOR* (respirable fraction)	10 mg/m ³ TWA PNOC** (inhalable particulate) 3 mg/m ³ TWA PNOC** (respirable particulate)	12-25
Non-Hazardous Components Steel (iron CAS# 65997-19-5	None established	None established	18-22
Water, Paper, Plastic and Other	None established	None established	Balance

* PNOR: Particulates not otherwise regulated **PNOC: Particulates not otherwise classified

Applicable Battery Industry Standards

North America Standards	ANSI C18.1M Part 1	ANSI C18.1M Part 2	ANSI C18.4
International Standards	IEC 60086-1	IEC 60086-2	IEC 60086-5

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

In case of fire, it is permissible to use any class of extinguishing medium on these batteries or their packing material. Cool exterior of batteries if exposed to fire to prevent rupture.

Fire fighters should wear self-contained breathing apparatus.

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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 manufactured in a charged state. It is not designed for recharging. Recharging can cause battery leakage or, in some cases, high pressure rupture. Inadvertent charging can occur if a battery is installed backwards.

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 as it may explode or leak causing injury. **Replace all batteries at the same time.**

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 alkaline batteries has been designed to be compliant with these regulatory concerns.

Alkaline batteries (sometimes referred to as "Dry cell" batteries) are not listed as dangerous goods under the ADR European Agreement Concerning the International Carriage of Dangerous Goods by Road, the IMDG International Maritime Dangerous Goods Code, UN Dangerous Good Regulations, IATA Dangerous Goods Regulations, ICAO Technical Instructions and the U.S. hazardous materials regulations (49 CFR). These batteries are not subject to the dangerous goods regulations provided they meet the requirements contained in the following special provisions.

Regulatory Body	Special Provisions	
ADR	Not regulated	
IMDG	Not regulated	
UN	Not regulated	
US DOT	49 CFR 172.102 Provision 130	
ΙΑΤΑ	A123	
ICAO	Not regulated	

All Energizer alkaline batteries are packed in such a way to prevent short circuits or the generation dangerous quantities of heat and meet the special provisions listed above. 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).

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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

Acronym Glossary

ANSI: American National Standards Institute <u>CPSC:</u> Consumer Product Safety Commission <u>CPSIA:</u> Consumer Product Safety Improvement Act <u>DTSC:</u> Department of Toxic Substances Control <u>EPA:</u> Environmental Protection Agency <u>FHSA:</u> Federal Hazardous Substances Act <u>GHS:</u> Globally Harmonized System for Hazard Communication <u>IEC:</u> International Electrotechnical Commission <u>OSHA:</u> Occupational Safety and Health Administration <u>RCRA:</u> Resource Conservation and Recovery Act <u>SDS:</u> Safety Data Sheet <u>SVHC</u>: 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.