

# PRODUCT SAFETY DATASHEET

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Zinc-Air Mercury Batteries  
May 2009

As a courtesy to our customers, Energizer has prepared copyrighted Product Safety Datasheets to provide information on the different Eveready/Energizer battery systems. As defined in OSHA Hazard Communication Standard, Section 1910.1200 (c), Eveready/Energizer batteries are manufactured "articles", which do not result in exposure to a hazardous chemical under normal conditions of use. For this reason, Material Safety Datasheets are not required. 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 BATTERY MANUFACTURING, INC., MAKES NO WARRANTY, EITHER EXPRESS OR IMPLIED, WITH RESPECT TO THIS INFORMATION AND DISCLAIMS ALL LIABILITY FROM REFERENCE ON IT.

## PRODUCT SAFETY DATA SHEET

**PRODUCT NAME:** EVEREADY Battery

**Type No.:**                      **Volts:** 1.4/cell

**TRADE NAME:** ENERGIZER; AMPLIFIER

**Approximate Weight:**

**CHEMICAL SYSTEM:** Alkaline Zinc-Air (Mercury)

**Designed for Recharge:** No

**PRODUCT SIZE:** AC10/230, AC13, AC146X, AC312, AC5, AC675

### SECTION I - MANUFACTURER INFORMATION

Energizer Battery Manufacturing, Inc.  
1359 Columbia Rd.  
Westlake, OH 44145

Telephone Number for Information:  
800-383-7323 (USA / CANADA)

Date Prepared: May 2009

### SECTION II - HAZARDOUS INGREDIENTS

**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.
Mercury (CAS# 7439-97-6)	0.1 mg/m <sup>3</sup> Ceiling (as Hg)	0.025 mg/m <sup>3</sup> TWA (as Hg: elemental, inorganic compounds, and vapor)	1.0-1.4
Potassium Hydroxide (CAS# 1310-58-3)	None established	2 mg/m <sup>3</sup> Ceiling	3-4
Zinc (CAS# 7440-66-6)	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)	31-44

### SECTION III - FIRE AND EXPLOSION HAZARD DATA

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. Battery contains mercury, which produces highly toxic mercury vapors under fire conditions.

### SECTION IV - HEALTH HAZARD DATA

Under normal conditions of use, the battery is hermetically sealed.

**Ingestion:** Swallowing a battery can be harmful.

Contents of an open battery can cause serious chemical burns of mouth, esophagus, and gastrointestinal tract. Contents include mercury, which can cause abdominal pain, vomiting, diarrhea, liver and kidney damage, and central nervous system disorders.

If battery or open battery is ingested, 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.

**Inhalation:** Contents of an open battery can cause respiratory irritation. Provide fresh air and seek medical attention.

**Skin Contact:** Contents of an open battery can cause skin irritation and/or chemical burns. Remove contaminated clothing and wash skin with soap and water. If a chemical burn occurs or if irritation persists, seek medical attention.

**Skin Absorption:** Mercury can be absorbed through intact skin causing symptoms similar to those of ingestion.

**Eye Contact:** Contents of an open battery can cause severe irritation and chemical burns. 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 V - PRECAUTIONS FOR SAFE HANDLING AND USE

**Storage:** Store in a cool, well ventilated area. Elevated temperatures can result in shortened battery life. Removal of sealing tab prior to use can result in reduced service.

**Mechanical Containment:** Zinc-air batteries require oxygen for operation. Do not pot or seal the battery in an airtight or watertight container. This could result in blockage of air access holes and premature battery failure. Subsequent attempted use will result in hydrogen generation which, when combined with oxygen from the air, can potentially produce a combustible or explosive mixture, unless adequately vented. Short circuits, high temperature, or static sparks could potentially lead to the ignition of this mixture. If such an application is required, consult your Energizer Battery Manufacturing, Inc. representative for alternative suggestions.

**Handling:** Accidental short circuit for a few seconds will not seriously affect the battery. Prolonged short circuit will cause the battery to lose energy, and can cause the cell to vent and possibly disassemble. 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.

If soldering or welding to the battery is required, consult your Energizer Battery Manufacturing, Inc. 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:** If the Eveready label or package warnings are not visible, it is important to provide a package and/or device label stating:

**WARNING: (1) KEEP AWAY FROM SMALL CHILDREN. IF SWALLOWED, PROMPTLY SEE A DOCTOR: HAVE DOCTOR PHONE (202) 625-3333 COLLECT. (2) DO NOT DISPOSE OF IN FIRE OR RECHARGE - MAY EXPLODE OR LEAK AND CAUSE PERSONAL INJURY.**

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

The contents of this battery, as a waste, may be regulated by the Resource Conservation and Recovery Act (RCRA) as a D009 (mercury) hazardous waste.

#### SECTION VI - SPECIAL PROTECTION INFORMATION

**Ventilation Requirements:** Not necessary under normal conditions.

**Respiratory Protection:** Not necessary under normal conditions.

**Eye Protection:** Not necessary under normal conditions. Wear safety glasses with side shields if handling an open or leaking battery.

**Gloves:** Not necessary under normal conditions. Use neoprene or natural rubber gloves if handling an open or leaking battery.

#### SECTION VII - REGULATORY INFORMATION

Batteries marketed by Energizer Battery Manufacturing, Inc. have been classified as non-dangerous goods by the US Department of Transportation and the major international regulatory bodies and are therefore not regulated.

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.