

# PRODUCT SAFETY DATASHEET

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Silver Oxide Batteries  
08/12/04

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## PRODUCT SAFETY DATA SHEET

**PRODUCT NAME:** EVEREADY Battery

**Type No.:**

**Volts:** 1.5/cell

**TRADE NAMES:** ENERGIZER; HEARWELL; OVERTIME

**Approximate Weight:**

**CHEMICAL SYSTEM:** Silver Oxide-Zinc

**Designed for Recharge:** No

### SECTION I - MANUFACTURER INFORMATION

Eveready Battery Company, Inc.  
25225 Detroit Road  
Westlake, OH 44145

Telephone Numbers for Information:  
(440) 835-7368  
(800) 383-7323 (USA)

Date Prepared: August 12, 2004

### 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.   |
|---|--|--|---------|
| Graphite<br>(CAS# 7782-42-5)            | 15 mg/m <sup>3</sup> TWA (total dust)<br>5 mg/m <sup>3</sup> TWA (respirable fraction)   | 2 mg/m <sup>3</sup> TWA (respirable fraction)  | 0-3     |
| Manganese Dioxide<br>(CAS# 1313-13-9)   | 5 mg/m <sup>3</sup> Ceiling (as Mn)  | 0.2 mg/m <sup>3</sup> TWA (as Mn)  | 0-20    |
| Mercury<br>(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.)  | 0.3-1.0 |
| Potassium Hydroxide<br>(CAS# 1310-58-3) | None established   | 2 mg/m <sup>3</sup> Ceiling  | 0-7     |
| Silver Oxide<br>(CAS# 20667-12-3)       | 0.01 mg/m <sup>3</sup> TWA (as Ag)   | 0.1 mg/m <sup>3</sup> TWA (as Ag)  | 10-35   |
| Sodium Hydroxide<br>(CAS# 1310-73-2)    | 2 mg/m <sup>3</sup> TWA  | 2 mg/m <sup>3</sup> Ceiling  | 0-7     |
| Zinc<br>(CAS# 7440-66-6)                | 15 mg/m <sup>3</sup> TWA (particulates not otherwise regulated-total dust)<br>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)<br>3 mg/m <sup>3</sup> TWA (particulates not otherwise classified-respirable) | 6-14    |

### 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.

**Mechanical Containment:** If potting or sealing the battery in an airtight or watertight container is required, consult your Eveready Battery Company 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, 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.

If soldering or welding to the battery is required, consult your Eveready Battery Company 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 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) and D011 (silver) hazardous waste. However, batteries sent to a recycler (e.g., silver, mercury recovery) in accordance with Standards for Universal Waste Management (40 CFR Part 273) are not fully regulated as hazardous wastes.

**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**

The transportation of dry cell batteries manufactured or sold by Eveready Battery Company is not regulated by the U.S. Department of Transportation or the major international regulatory bodies.

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.