

PRODUCT SAFETY DATA SHEET

JUN 13 1997

PRODUCT NAME: Energizer Rechargeable Power Systems Battery Type No.: **Volts:****TRADE NAME:** Nickel Cadmium Battery **Approximate Weight:****CHEMICAL SYSTEM:** Nickel-Cadmium **Designed for Recharge:** Yes**SECTION I - MANUFACTURER INFORMATION**Energizer Power Systems
US Highway 441N
Alachua, FL 32615Telephone Number for Information
(216) 835-7368
Date Prepared: November 29, 1994**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.
Cadmium as cadmium metal (CAS# 7440-43-9) cadmium oxide (CAS# 1306-19-0) cadmium hydroxide (CAS# 21041-95-2)	5 µg/m ³ TWA (as Cd)	0.01 mg/m ³ TWA (as Cd) 0.002 mg/m ³ TWA (as Cd respirable fraction)	13-22
Cobalt as cobalt metal (CAS# 7440-48-4) cobalt oxide (CAS# 1307-96-6) cobalt hydroxide (CAS# 21041-93-0)	0.1 mg/m ³ TWA (as Co)	0.02 mg/m ³ TWA (as Co)	0.5-2
Lithium Hydroxide (CAS# 1310-65-2)	None established	None established	0-4

The information contained within is provided for your information only. This battery is an article and, as such, is not subject to the OSHA Hazard Communication Standard requirement for preparation of a material safety data sheet. The information and recommendations set forth herein are made in good faith and are believed to be accurate as of the date of preparation. However, EVEREADY BATTERY COMPANY, INC., MAKES NO WARRANTY, EITHER EXPRESS OR IMPLIED, WITH RESPECT TO THIS INFORMATION AND DISCLAIMS ALL LIABILITY FROM RELIANCE ON IT.

MATERIAL OR INGREDIENT	PEL (OSHA)	TLV (ACGIH)	%/wt.
Nickel as nickel metal (CAS# 7440-02-0) nickel oxide (CAS# 1313-99-1) nickel hydroxide (CAS# 12054-48-7)	1 mg/m ³ TWA (as Ni)	1 mg/m ³ TWA (as Ni)	20-32
Potassium Hydroxide (CAS# 1310-58-3)	None established	2 mg/m ³ Ceiling	0-4
Sodium Hydroxide (CAS# 1310-73-2)	2 mg/m ³ TWA	2 mg/m ³ Ceiling	0-4

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. Burning nickel-cadmium batteries can produce toxic fumes including nickel, nickel oxides, cadmium, cadmium oxides, and cobalt oxides.

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 toxic cadmium and cadmium compounds which can cause salivation, choking, nausea, persistent vomiting, diarrhea, abdominal pain, dizziness, faintness, unconsciousness, and possible liver and kidney injury.

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. Cadmium oxide fumes can cause metal fume fever. Hypersensitivity to nickel can cause allergic pulmonary asthma. Provide fresh air and seek medical attention.

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

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. Seek medical attention.

Note: Nickel, cadmium, nickel compounds, cadmium compounds, and cobalt compounds are listed as possible carcinogens by International Agency for Research on Cancer (IARC) or National Toxicology Program (NTP).

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. However, this battery is capable of delivering very high short circuit currents. Prolonged short circuits will cause high cell temperatures which can cause skin burns. 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, use of tabbed batteries is recommended. If this cannot be done, consult your Eveready Battery Company 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: If the Eveready label or package warnings are not visible, it is important to provide a package and/or device label stating:

Nickel Cadmium Consumer Round Cells

AA and larger

WARNING: CHARGE ONLY WITH STANDARD HOUSEHOLD NICKEL CADMIUM BATTERY CHARGERS. DO NOT OPEN BATTERY, DISPOSE OF IN FIRE, PUT IN BACKWARDS, MIX WITH OTHER BATTERY TYPES OR SHORT CIRCUIT - MAY EXPLODE, LEAK OR GET HOT CAUSING PERSONAL INJURY.

AAA and smaller

WARNING: (1) KEEP AWAY FROM SMALL CHILDREN. IF SWALLOWED, PROMPTLY SEE DOCTOR; HAVE DOCTOR PHONE (202) 625-3333 COLLECT. (2) CHARGE ONLY WITH STANDARD HOUSEHOLD NICKEL CADMIUM BATTERY CHARGERS. DO NOT OPEN BATTERY, DISPOSE OF IN FIRE, PUT IN BACKWARDS, MIX WITH OTHER BATTERY TYPES OR SHORT CIRCUIT - MAY EXPLODE, LEAK OR GET HOT CAUSING PERSONAL INJURY.

Nickel Cadmium Industrial Round Cells

WARNING: CHARGE ONLY AT SPECIFIED CHARGE RATE. DO NOT OPEN BATTERY, DISPOSE OF IN FIRE, PUT IN BACKWARDS, MIX WITH OTHER BATTERY TYPES OR SHORT CIRCUIT - MAY EXPLODE, LEAK OR GET HOT CAUSING PERSONAL INJURY.

Nickel Cadmium Camcorder, Cordless and Cellular Packs

(The "cracked case" caution statement will not be on any cordless types except the P5256.)

WARNING: USE ONLY WITH SPECIFIED CHARGERS ACCORDING TO CHARGER MANUFACTURER'S INSTRUCTIONS. DO NOT OPEN BATTERY, DISPOSE OF IN FIRE OR SHORT CIRCUIT - MAY EXPLODE, LEAK OR GET HOT CAUSING PERSONAL INJURY. CAUTION: DO NOT USE IF CASE IS CRACKED.

Disposal: Dispose in accordance with all applicable federal, state and local regulations.

The contents of this battery, as a waste, may be regulated by the Resource Conservation and Recovery Act (RCRA) as a D006 (cadmium) hazardous waste.

SECTION VI - SPECIAL PROTECTION INFORMATION

Ventilation Requirements: Not necessary under normal conditions.

Respiratory Protection: Not necessary under normal conditions.

Eye: 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

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.