Rayovac Corporation 601 Rayovac Drive Madison WI 53711 Phone: 608-275-3340 Fax: 608-275-4577 http://www.rayovac.com



The sheets are supplied as a service to you. For related information, visit: http://www.rayovac.com/Consumer-Services/Technical-OEM/Material-Safety-Data-Sheets.aspx

1. IDENTIFICATION

PRODUCT NAME: Rechargeable Alkaline Batteries

SIZES: All

EMERGENCY TELEPHONE NUMBER: 800-424-9300 (24 hr, Chemtrec)

Environmental Health & Safety Information: 1-800-237-7000

2. HAZARD IDENTIFICATION

We would like to inform our customers that these batteries are exempt articles and are not subject to the 29 CFR 1910.1200 OSHA requirements, Canadian WHMIS requirements or GHS requirements.

Emergency Overview

OSHA Hazards-not applicable

Target Organs-not applicable

GHS Classification-not applicable

GHS Label Elements, including precautionary Statement-not applicable

Pictogram-not applicable

Signal words-not applicable

Hazard statements-not applicable

Precautionary statements-not applicable

3. COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT NAME	CAS#	%	TWA/TLV
Manganese Dioxide	1313-13-9	32 - 38	C5.0 mg/m ³ (Mn, TWA)
Steel	7439-89-6	19 - 23	Not Listed
Zinc	7440-66-6	11 - 16	5 mg/m ³ (ZnO as Fume)
Potassium Hydroxide	1310-58-3	5 - 9	Not Listed (for solution)
Graphite	7782-42-5	3 - 5	15 mppcf
Barium Sulfate	7727-43-7	< 5	15 mg/m ³ (TWA)
Silver (soluble, as Ag)	7440-22-4	< 0.5	$0.01 \text{ mg/m}^3 \text{ (TWA)}$
Water, paper, plastic, other		Balance	

Source: OSHA 29 CFR 1910.1000 Table Z-1, 2 or 3 11-01-2012

4. FIRST AID INFORMATION

EFFECTS OF OVEREXPOSURE: None

EMERGENCY FIRST AID PROCEDURES:

Skin and Eyes:

In the event that battery ruptures, flush exposed skin with copious quantities of flowing lukewarm water for a minimum of 15 minutes. Get immediate medical attention for eyes. Wash skin with soap and water. Swallowing: If you or your doctor suspects that a battery has been ingested-for assistance in the US call the NATIONAL BATTERY INGESTION HOTLINE any time at (202) 625-3333: in Canada call 416-813-5900.

For more information, visit: http://www.nema.org/Policy/Environmental-Stewardship/Documents/batteryingest.pdf

5. FIRE FIGHTING MEASURES

FLASH POINT: NA
LOWER (LEL): NA
FLAMMABLE LIMITS IN AIR (%): NA
UPPER (UEL): NA

EXTINGUISHING MEDIA: Use water, foam or dry powder, as appropriate.

<u>AUTO-IGNITION</u>: NA

<u>SPECIAL FIRE FIGHTING PROCEDURES</u>: As with any fire, wear self-contained breathing apparatus to avoid inhalation of hazardous decomposition products. <u>SPECIAL FIRE EXPLOSION HAZARDS</u>: Like any sealed container, battery cells may rupture when exposed to excessive heat; this could result in the release of flammable or corrosive materials.

6. ACCIDENTAL RELEASE MEASURES

<u>PROCEDURES TO CONTAIN AND CLEAN UP LEAKS OR SPILLS</u>: In the event of a battery rupture, prevent skin contact and collect all released material in a plastic lined metal container.

<u>REPORTING PROCEDURE</u>: Report all spills in accordance with Federal, State and Local reporting requirements.

7. HANDLING AND STORAGE

Store in a dry place. Storing unpackaged cells together could result in cell shorting and heat build-up. Charge Rayovac Rechargeable Alkaline (Renewal) Batteries only in a Rayovac battery charger designed specifically for Rechargeable Alkaline batteries. See back of charger for details. Placing these batteries in any other charging device may cause the batteries to burst and leak.

8. EXPOSURE CONTROL/PERSONAL PROTECTION

RESPIRATORY PROTECTION (SPECIFY TYPE): NA

<u>VENTILATION</u>: Local Exhaust: NA

Mechanical (General): NA Special: NA Other: NA

PROTECTIVE GLOVES: NA

EYE PROTECTION: NA

OTHER PROTECTIVE CLOTHING: NA

9. PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point @ 760 mm Hg (°C):	NA	Evaporation Rate (Butyl Acetate = 1):	NA
Vapor Pressure (mm Hg @ 25°C):	NA	Physical State:	NA
Density (grams/cc):	NA	Solubility in Water (% by Weight):	NA
Percent Volatile by Volume (%):	NA	pH:	NA
Appearance and Odor:	geometric solid object		

10. STABILITY AND REACTIVITY

STABLE OR UNSTABLE: Stable
INCOMPATIBILITY (MATERIALS TO AVOID): NA
HAZARDOUS DECOMPOSITION PRODUCTS: NA
DECOMPOSITION TEMPERATURE (0°F): NA

<u>HAZARDOUS POLYMERIZATION</u>: Will Not Occur

<u>CONDITIONS TO AVOID</u>: Avoid electrical shorting

11. TOXICOLOGICAL INFORMATION

INGREDIENT NAME	CAS#	%	TWA/TLV
Manganese Dioxide	1313-13-9	32 - 38	C5.0 mg/m ³ (Mn, TWA)
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^{*}Source: OSHA 29 CFR 1910.1000 Table Z-1, 2 or 3 11-01-2012

12. ECOLOGICAL INFORMATION

Under normal use these batteries do not release their ingredients into the environment. Damaged or abused batteries can release small amounts of zinc, manganese and potassium hydroxide. Damaged batteries carelessly discarded could release small amounts of zinc to storm or surface water. Do not place in fires-dispose of properly to prevent release.

13. DISPOSAL CONSIDERATIONS

<u>WASTE DISPOSAL METHOD</u>: When shredded per Toxicity Characteristic Leachate Procedure (TCLP) parameters and tested per SW 846, 3rd Edition, <u>Test Methods for Evaluating Solid Waste</u>, independent certified laboratory analyses have indicated Rayovac Rechargeable Alkaline Batteries have no hazardous waste characteristics (per 40 CFR, Part 261.24). Always comply with Federal, State and Local regulations.

http://www.nema.org/Policy/Environmental-

Stewardship/Documents/Companies%20Claiming%20to%20Recycle.MARCH2005.pdf

14. TRANSPORTATION INFORMATION

<u>TRANSPORTATION-SHIPPING</u>: These are considered dry-cell batteries and they are non-dangerous goods for transportation. These batteries must be packed in a way to prevent short circuits or generation of a dangerous quantity of heat.

USDOT – See Special Provision 130

IMDG/Ocean - Not listed

ICAO/IATA – See Special Provision A123. It also states to put the words "not restricted" and special provision A123 on the air waybill when an air waybill is issued.

15. REGULATORY INFORMATION

SARA 313: Notification is not required because these products are article(s) that do not release a covered toxic chemical under the normal conditions of processing or use.

16. SDS INFORMATION

Environmental Health & Safety Information: 1-800-237-7000

EDITION DATE: 02-14-2013

APPROVED BY: Kevin J. Domack

NOTICE: The information and recommendations set forth are made in good faith and are believed to be accurate at the date of preparation. Rayovac Corporation makes no warranty expressed or implied.