Document #: Silver Oxide NoHg NA PSDS

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Product Safety Data Sheet (PSDS)

US Office

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SECTION I - PRODUCT IDENTIFICATION



The battery products referenced in this PSDS document are consumer products. Under OSHA regulations, batteries are considered "articles" and are not subject to the OSHA Hazard Communication Standard MSDS/SDS requirements which apply for "hazardous chemicals in the workplace." Additionally, batteries are considered "articles" under the Global Harmonized System and are exempted from the GHS labeling and SDS classification criteria. This PSDS document is provided as service in response to requests for information on battery use, safety and regulatory compliance.

Representative Product Image/ Packaging

Identity: Primary Silver Oxide Button Cell Batteries, 0% Mercury

Description: Consumer Product

Sizes: [D] 301/386; 303/357; 309/393; 319; 361/362; 364; 371; 376; 377; 379; 381-391; 384/392;

389/390; 394; 395/399; 396/397; MS76

Nominal Voltage: 1.5

Consumer Relations: 1-800-551-2355 (9:00 AM – 5:00 PM EST)

SECTION II - HAZARDS IDENTIFICATION

CAUTION: Do not recharge or dispose of batteries in fire. Do not carry batteries loose in your pocket or purse. Keep batteries away from children. If swallowed, consult a physician at once. For information on treatment, call the NATIONAL BUTTON BATTERY INGESTION HOTLINE collect, day or night, at (202) 625-3333.

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SECTION III - COMPOSITION AND INGREDIENTS

The chemicals and metals in this product are contained in a sealed can. Exposure to the contents will not occur unless the battery leaks, is exposed to high temperatures or is mechanically, physically, or electrically abused. Hazardous Ingredients as defined by OSHA, 29 CFR 1910.1200. and/or WHMIS under the HPA:

Chemical Name	CAS No.	Composition Range	<u>LD50/LC50</u>	Exposure Limits
Silver oxide	20667-12-3	<47%	LD50 oral rat 2820 mg/kg	0.01 mg/m3 OSHA OEL (as Ag) 0.1 mg/m3 TWA ACGIH TLV (as Ag)
Zinc	7440-66-6	<14%		None established for zinc metal
Potassium Hydroxide and Sodium Hydroxide mixture 32.6%	1310-58-3 1310-73-2	<11%	LD50 oral rat 273 mg/kg (KOH) LDLo oral rabbit 500 mg/kg (NaOH)	2 mg/m3 Ceiling ACGIH TLV (KOH) 2 mg/m3 TWA OSAH PEL (NaOH) 2 mg?m3 Ceiling ACGIH TLV (NaOH)

SECTION IV - FIRST AID INFORMATION

Damaged battery will release concentrated potassium hydroxide, which is caustic.

Ingestion: Do not induce vomiting. Do not give ipecac. Seek medical attention immediately. CALL NATIONAL BATTERY INGESTION HOTLINE at (202)-625-3333 collect, day or night. Batteries lodged in the esophasgus should be removed immediately since leakage, caustic burns and perforation can occur as soon as two hours after ingestion. If mouth area irritation or burning has occurred, rinse the mouth and surrounding area with water for at least 15 minutes. Do not give ipecac.

Eye Contact: If battery is leaking and material contacts the eye, flush the eye with plenty of water for at least 15 minutes. Seek immediate medical attention.

Skin Contact: If battery is leaking and material contacts the skin, flush affected areas with plenty of water. Remove contaminated clothing immediately. Seek immediate medical attention.

Inhalation: If battery is leaking, contents may be irritating to respiratory tract. Move to fresh air. If irritation persists, seek medical attention.

SECTION V - FIRE FIGHTING INFORMATION

Hazardous Combustion Products: Thermal decomposition may produce hazardous fumes.

Extinguishing Media: Use any extinguishing media that is appropriate for the surrounding area.

Protection of Firefighters:

Specific Hazards Arising from the Material: Batteries may burst and release hazardous decomposition products when exposed to a fire situation.

Protective Equipment and Precautions for Firefighters: Firefighters should wear positive pressure selfcontained breathing apparatus and full protective clothing.

SECTION VI - ACCIDENTAL RELEASE MEASURES

Notify safety personnel of large spills. Caustic potassium hydroxide may be released from leaking or ruptured batteries. Clean-up personnel should wear appropriate clothing to avoid eye and skin contact and inhalation of vapors and fumes. Ventilate area. Carefully collect batteries and place in an appropriate container for disposal.

SECTION VII - HANDLING AND STORAGE

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Precautions To Be Taken in Handling: Avoid mechanical or electrical abuse. DO NOT short circuit or install incorrectly. Batteries may rupture or vent if disassembled, crushed, recharged or exposed to high temperatures. Install batteries in accordance with equipment instructions.

Precautions To Be Taken in Storage: Store batteries in a dry place at normal room temperature. Do not refrigerate – this will not make them last longer.

SECTION VIII - EXPOSURE CONTROLS / PERSONAL PROTECTION

NOT APPLICABLE – Finished consumer product

SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES

Appearance (color, physical form, shape): Finished consumer product – small, sealed, round, button battery.

Volatile Organic Compound (VOC): Not applicable - Product not regulated for VOC Content at State or Federal level

SECTION X - STABILITY AND REACTIVITY

Finished consumer product – stable under normal conditions of use. Contents are incompatible with strong oxidizing agents. Do not heat, crush, disassemble, short circuit or recharge.

SECTION XI - TOXICOLOGICAL INFORMATION

This battery product is a finished consumer product. It is classified as an "article" and exempt under the federal OSHA Hazard Communication standard.

Chronic Effects: No chronic health effects reported.

Target Organs: No target organs reported.

Carcinogenicity: This finished consumer product is not carcinogenic.

SECTION XII - ECOLOGICAL INFORMATION

No eco-toxicity data are available. This product is not expected to present an environmental hazard.

SECTION XIII - DISPOSAL CONSIDERATIONS

Waste Disposal Method: Dispose of in compliance with federal, state/provincial and local regulations. *Non-Household Setting (US Federal)*: Silver oxide hearing batteries covered by this PSDS, in their original form (finished consumer product), when disposed of as waste, are considered **non-hazardous** waste according to Federal RCRA regulation (40 CFR 261).

Non-Household Setting (California): None

Household Use: Silver oxide batteries can be safely disposed of with normal household waste. Do not accumulate large quantities of used batteries for disposal as accumulation could cause batteries to short-circuit. Do not incinerate.

SECTION XIV - TRANSPORT INFORMATION

Silver oxide battery products, covered by this PSDS, in their original form, are considered "dry cell" batteries and are not regulated for transportation as "DANGEROUS GOODS." However, special regulatory provisions apply that require batteries to be packaged in a manner that prevents the generation of a dangerous quantity of heat and short circuits. Product shipped in its original unopened Duracell packaging is compliant with the packaging special provisions.

Ground Transport (US DOT): 49 CFR172.102 Special Provision 130

Air Transport (IATA): Special Provision A123

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Marine/Water Transport (IMDG/ICAO): Provisions 295 and 304

For Transportation Emergencies, call:

CHEMTREC Emergency Response Hotline 1-800-424-9300 (US & Canada)

SECTION XV - REGULATORY INFORMATION

United States:

OSHA: The finished silver oxide battery product is considered an article and not covered by the OSHA Hazard Communication Standard, 29 CFR 1910.1200

CPSIA 2008: Batteries are exempt. See CPSC Exemption Letter posted on P&G web site.

EPA Mercury Containing and Rechargeable Battery Management Act of 1996: Compliant

EPA TSCA: All intentionally-added components of this product are listed on the US TSCA Inventory.

EPA SARA 313/302/304/311/312 chemicals: Silver oxide (Silver Compounds) <47%; Zinc <14%

California: This product has been evaluated and does not require warning labeling under California Proposition 65.

State Right-to-Know and CERCLA: The following ingredients present in the finished product are listed on state right-to-know lists or state worker exposure lists:

Ingredient	CAS#	Level	CERCLA RQ	State				
_				IL	MA	NJ	PA	RI
Silver Oxide	20677-12-3	<47%	None	N	N	N	N	N
Zinc	7440-66-6	<14%	1000 lbs	Y	Y	Y	Y	N
Potassium Hydroxide	1310-58-3	<11%	1000 lbs	Y	Y	Y	Y	Y
Sodium Hydroxide	1310-73-2	<11%	1000 lbs	Y	Y	Y	Y	Y

Canada:

All ingredients are CEPA approved for import to Canada by Procter & Gamble. This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and this MSDS contains all information required by the Controlled Products Regulations.

SECTION XVI - OTHER INFORMATION								
P&G Hazard Rating:	Health:	0	4=EXTREME					
	Flammability:	0	3=HIGH					
	Reactivity:	0	2=MODERATE					
			1=SLIGHT					
			0=NOT SIGNIFICANT					

Hazard Ratings are supplied for use only in connection with occupational safety and health.

DISCLAIMER: This PSDS is intended to provide a brief summary of our knowledge and guidance regarding the use of this material. The information contained here has been compiled from sources considered by Procter & Gamble to be dependable and is accurate to the best of the Company's knowledge. It is not meant to be an all-inclusive document on worldwide hazard communication regulations.

This information is offered in good faith. Each user of this material needs to evaluate the conditions of use and design the appropriate protective mechanisms to prevent employee exposures, property damage or release to the environment. Procter & Gamble assumes no responsibility for injury to the recipient or third persons or for any damage to any property resulting from misuse of the product.