

*Petinger/KR*

REC'D FEB 08 2006

Material Safety Data Sheet  
May be used to comply with  
OSHA'S Hazard Communication Standard.  
29 CFR 1910.1200. Standard must be  
consulted for specific requirements.  
IDENTITY (As used on Label and List)

U.S. Department of Labor  
Occupational Safety and Health Administration  
(Non-Mandatory Form)  
Form Approved  
OMB No.1218-0072



Alkaline Batteries - All sizes

Note: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.

Section I

Supplier's Name Hitachi Maxell Ltd.	Emergency Telephone Number 072-623-8110
Address (Number, Street, City, State, and ZIP Code) 1-1-88, Ushitora, Ibaraki-shi,	Telephone Number for Information 072-623-8118
Osaka 567-8567, Japan	Date Prepared Feb.21.2003
	Signature of Prepared (optional)

Section II -- Hazardous Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity; Common Name(s))	OSHA PEL	ACGIH TLV	Other Limits Recommended	% (optional)
Manganese Dioxide (MnO <sub>2</sub> )			less than 42 wt %	
Potassium Hydroxide (KOH)			less than 7 wt %	
Mercury (Hg)			less than 2 ppm	
Cadmium (Cd)			less than 5 ppm	
Lead(Pb)			less than 5 ppm	

This product, Assembly in the production process is not used any of Mercury or Cadmium or Lead.

Section III -- Physical/Chemical Characteristics

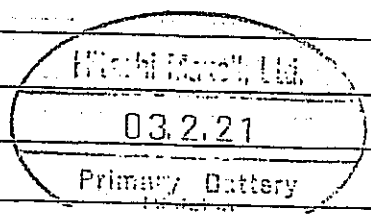
Boiling Point	N/A	Specific Gravity (H <sub>2</sub> O = 1)	N/A
Vapor Pressure (mm Hg)	N/A	Melting Point	N/A
Vapor Density (AIR = 1)	N/A	Evaporation Rate (Butyl Acetate = 1)	N/A
Solubility in Water	N/A		
Appearance and Odor	N/A		

Section IV -- Fire and Explosion Hazard Data

Flash Point (method Used)	N/A	Flammable Limits	LEL	UEL
Extinguishing Media	N/A			
Special Fire Fighting Procedures				

Unusual Fire and Explosion Hazards

Do not recharge, disassemble, heat above 60°C, incinerate.



**Section V — Reactivity Data**

Stability	Unstable		Conditions to Avoid
	Stable	X	

Incompatibility (Materials to Avoid)

N/A

Hazardous Decomposition or Byproducts

N/A

Hazardous Polymerization	May Occur		Conditions to Avoid
	Will Not Occur	X	

**Section VI — Health Hazard Data**

Route(s) of Entry:	Inhalation?	Skin?	Ingestion?
N/A	N/A	N/A	N/A

Health Hazards (Acute and Chronic)

N/A

Carcinogenicity:	NTP?	IARC Monographs?	OSHA Regulated?
N/A	N/A	N/A	N/A

Signs and Symptoms of Exposure

Skin irritation by electrolyte.

Medical Conditions

Generally Aggravated by Exposure Skin burn.

Emergency and First Aid Procedures

Wash out Electrolyte with water.

**Section VII — Precautions for Safe Handling and Use**

Steps to Be Taken in Case Material Is Released or Spilled

Wash out released or spilled electrolyte with water or neutralize  
electrolyte with boric acid.

Waste Disposal Method

Disposal must be in accordance with applicable federal, state and  
local laws and regulations

Precautions to Be Taken in Handling and Storing

Store in cool place but prevent condensation on cells or batteries.  
Elevated temperature can result in a shortened battery life.

Other Precautions

**Section VIII — Control Measures**

Respiratory Protection (Specify Type)

N/A

Ventilation	Local Exhaust	Special
	N/A	N/A
	Mechanical (General)	Other
	N/A	N/A

Protective Gloves

N/A

Eye Protection

N/A

Other Protective Clothing or Equipment

N/A

