



For RadioShack Cat. No. : 23-149A, 23-449

# MATERIAL SAFETY DATA SHEET

Date: 3 Jan, 2003

Identity (As Used on Label and List) GPI00AAKC	Note: Blank spaces are not permitted if may item is not applicable or no information is available, the space must be marked to indicate that.
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## Section I

Manufacturer's Name GPI International Ltd. / GP Batteries (U.S.A.) Inc.	Emergency Telephone Number
Address (Number, Street, City, State, and ZIP Code) 8/F, Gold Peak Building, 30 Kwai Wing Road, Kwai Chung, N.T. Hong Kong 11235 West Bernardo Court, San Diego, CA92127-1638, U.S.A.	Telephone Number for information (852) 2484 3333 (619) 674 5620

## Section II - Hazardous Ingredients/Identity Information

Hazardous Components:	
Description:	Approximate % of total weight
Ni(OH) <sub>2</sub> (Nickel Hydroxide)	: 20 Wt%
30%KOH Solution (Potassium Hydroxide)	: 12 Wt%
Mercury	: <5 ppm
Lead	: Nil
cadmium	: 17 Wt%

## 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 Cylindrical Shape, odorless
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## Section IV - Fire and Explosion Hazard Data

Flash Point (Method Used) N.A.	Flammable Limits N.A.	LEL N.A.	UEL N.A.
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Extinguishing Media N.A.
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Special Fire Fighting Procedures N.A.
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Unusual Fire and Explosion Hazards When exposed to excess heat, cell may burst
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## Section V - Reactivity Data

Stability	Unstable	Conditions to Avoid
	Stable	X

Incompatibility (Materials to Avoid)

Hazardous Decomposition or Byproducts

When heated, battery may emit hazardous vapours of KOH/NaOH & Hg.

Hazardous reactions	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.

Health Hazard (Acute and Chronic)

N.A.

Carcinogenicity	NTP?	LARC Monographs?	OSHA Regulated?
		N.A.	N.A.

Signs and Symptoms of Exposure

In case of electrolyte leakage, skin will be itchy when contaminated by electrolyte.

Medical Conditions

Generally Aggravated by Exposure N.A.

Emergency and First Aid Procedures

In the event that electrolytes gets on skin, wash immediately with water. For eye contact, flush with copious amounts of water for 15 minutes and see physician.

## Section VII - Precautions for Safe Handling and Use

Steps to Be Taken in Case Material is Released or Spilled

Use neoprene, rubber latex-nitrile gloves when handling leakers. If liquid from leaker comes in contact with skin, wash immediately with water. For eye contact, flush with copious amounts of water for 15 minutes and see physician.

Waste Disposal Method

Do not incinerate since battery may explode.

Precaution to Be Taken in Handling and Storing

The battery is extremely sensitive to adverse effect of humidity. Be sure to store them in a place which is dry and subject to little temperature change. Do not place near the boiler or radiator, nor expose to the direct sunlight. Do not dispose of the battery in fire. Do not charge the battery. Do not short-circuit the battery. Do not put in backward position. Do not disassemble the battery, handling in such manner can cause the battery to explode, leak and injury.

Other Precautions

Install batteries in accordance with equipment instructions. Replace all batteries in equipment at the same time. Do not mix battery systems of different types. Do not carry batteries loose in your pocket or carrying bag. Check batteries periodically when in use.

## Section VIII - Control Measures

Respiratory Protection (Specify Type)

Ventilation	Local Exhausts	Special
		N.A.
Protective Gloves	Mechanical (General)	Other
		N.A.
Other Protective Clothing or Equipment		Eye Protection
		N.A.
Work/Hygenic Practices		N.A.