

# GP Batteries

## Material Safety Data Sheet

Model No.: 1604A

Product Name : 9V Alkaline Battery

Document Number: RPKS0112

Revision: 9

Page 1 of 4

IDENTITY (As Used on Label and List)	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 – Information of Manufacturer

Manufacturer's Name GPB(M) Sdn. Bhd.	Emergency Telephone Number
Address (Number, Street, City State, and ZIP Code) No.5, Jalan Tampoi 7, Kawasan Perindustrian Tampoi, Johor Bahru, Malaysia	Telephone Number for information 07-3300033
	Date of prepared and revision 2 <sup>nd</sup> January 2019
	Signature of Preparer (optional)

### Section II - Hazardous Ingredients / Identity Information

#### Hazardous Components:

Description:	Approximate % of total weight	Remarks
Mercury (Hg)	: < 1 ppm	Impurity or non-added content
Lead (Pb)	: < 25 ppm	Impurity or non-added content
Cadmium (Cd)	: < 3 ppm	Impurity or non-added content
Hexavalent Chromium (Cr <sup>6+</sup> )	: < 3 ppm	Impurity or non-added content
Polybrominated Biphenyls (PBBs)	: N/A	
Polybrominated Diphenyl Ethers (PBDEs)	: N/A	
MnO <sub>2</sub>	: 29 %	
Zn	: 10 %	
KOH (40%)	: 15 %	

### 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) N.A.
Solubility in Water N.A.	
Appearance and Odor N.A.	

### Section IV – Hazard Identification

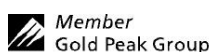
GHS Classification : N/A

Signal Word : N/A

Hazard Classification : N/A

Pictogram : N/A

Under normal condition of use, the battery is hermetically sealed



Manufacturer reserves the right to alter or amend the design, model and specification without prior notice.

# GP Batteries

## Material Safety Data Sheet

Model No.: 1604A

Document Number: RPKS0112

Revision: 8

Page 2 of 4

### Section V – Reactivity Data

Stability	Unstable ( )	Conditions to Avoid
	Stable (X)	Do not heat, crush, disassemble, short circuit or recharge.
Hazardous Reactions Yes = (X)	May Occur ( )	Conditions to Avoid N/A
	Will Not Occur (X)	

### Section VI - Health Hazard Data

Route(s) of Entry	Inhalation? (N.A.)	Skin? (N.A.)	Ingestion? (N.A.)
-------------------	-----------------------	-----------------	-------------------

Health Hazard (Acute and Chronic) / Toxicological information

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

In contact with electrolyte can cause severe irritation and chemical burns.

Inhalation of electrolyte vapors may cause irritation of the upper respiratory tract and lungs.

### Section VII – First Aid Measures

First Aid Procedures

If electrolyte leakage occurs and makes contact with skin, wash with plenty of water immediately.

If electrolyte comes into contact with eyes, wash with copious amounts of water for fifteen (15) minutes, and contact a physician.

If electrolyte vapors are inhaled, provide fresh air and seek medical attention if respiratory irritation develops. Ventilate the contaminated area.

### Section VIII - Fire and Explosion Hazard Data

Flash Point (Method Used) N.A.	Ignition Temp. N.A.	Flammable Limits N.A.	LEL N.A.	UEL N.A.
-----------------------------------	------------------------	--------------------------	-------------	-------------

Extinguishing Media

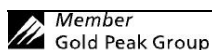
As appropriate for surrounding area.

Special Fire Fighting Procedures N.A.

Unusual Fire and Explosion Hazards

Do not dispose of battery in fire - may explode.

Do not short-circuit battery - may cause burns.



Manufacturer reserves the right to alter or amend the design, model and specification without prior notice.

# GP Batteries

## Material Safety Data Sheet

Model No.: 1604A

Document Number: RPKS0112

Revision: 8

Page 3 of 4

### Section IX – Accidental Release or Spillage

Steps to Be Taken in Case Material is Released or Spilled

Batteries that are leakage should be handled with rubber gloves.

Avoid direct contact with electrolyte.

Wear protective clothing and a positive pressure Self-Contained Breathing Apparatus (SCBA).

### Section X – Handling and Storage

Safe handling and storage advice

Batteries should be handled and stored carefully to avoid short circuits.

Do not store in disorderly fashion, or allow metal objects to be mixed with stored batteries.

Never disassemble a battery.

Do not mix battery system in same equipment.

Do not breathe cell vapors or touch internal material with bare hands.

Keep batteries at cool and dry storage condition.

### Section XI – Exposure Controls / Person Protection

Occupational Exposure Limits: LTEP

N.A.

STEP

N.A.

Respiratory Protection (Specify Type)

N.A.

Ventilation

Local Exhausts

N.A.

Special

N.A.

Mechanical (General)

N.A.

Other

N.A.

Protective Gloves

N.A.

Eye Protection

N.A.

Other Protective Clothing or Equipment N.A.

Work / Hygienic Practices

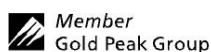
N.A.

### Section XII – Ecological Information

N.A.

### Section XIII – Disposal Method

Dispose of batteries according to government regulations.



Manufacturer reserves the right to alter or amend the design, model and specification without prior notice.

# GP Batteries

## **Material Safety Data Sheet**

**Model No.: 1604A**

Document Number: RPKS0112

Revision: 8

Page 4 of 4

---

### **Section XIV – Transportation Information**

GP batteries are considered to be “Dry cell” batteries and are unregulated for purposes of transportation by the U.S. Department of Transportation (DOT), International Civil Aviation Administration (ICAO), International Air Transport Association (IATA) 60th edition Special Provision A123 and International Maritime Dangerous Goods Regulations (IMDG). The only DOT requirement for shipping these batteries is special provision 130 which states: “Batteries, dry are not subject to the requirements of this subchapter only when they are offered for transportation in a manner that prevents the dangerous evolution of heat (For example, by the effective insulation of exposed terminals). IATA requires that batteries being transported by air must be protected from short-circuiting and protected from movement that could lead to short-circuiting.

---

---

### **Section XV – Regulatory Information**

Special requirement be according to the local regulatory.

---

---

### **Section XVI – Other Information**

The data in this Material Safety Data Sheet relates only to the specific material designated herein.

---

---

### **Section XVII – Measures for fire extinction**

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.

---