

GP Batteries

Material Safety Data Sheet

Model No.: GP1604A

Product Name : Alkaline Battery
Document Number: RPKS0112

Revision: 18

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 Emergency Telephone Number

GPB(M) Sdn. Bhd.

Address (Number, Street, City State, and ZIP Code)

Telephone Number for information
07-3300033

No.5, Jalan Tampoi 7,

Kawasan

Perindustrian Tampoi,
Johor Bahru, Malaysia

Date of prepared and revision
01.01.2023

Signature of Preparer (optional)

TF Lai *TF Lai*

Section II - Hazardous Ingredients / Identity Information

Hazardous Components:

Description:	CAS #	Approximate % of total weight	Remarks
Mercury (Hg)	7439-97-6	< 1 ppm	Impurity or non-added content
Lead (Pb)	7439-92-1	< 25ppm	Impurity or non-added content
Cadmium (Cd)	7440-43-9	< 3 ppm	Impurity or non-added content
Hexavalent Chromium (Cr ⁶⁺)	7440-38-2	< 3 ppm	Impurity or non-added content
Polybrominated Biphenyls (PBBs)		N/A	
Polybrominated Diphenyl Ethers (PBDEs)		N/A	
MnO2 – CAS # : 1313-13-9	1313-13-9	29.00%	
Zn - CAS # : 7440-66-6	7440-66-6	10.00%	
KOH (40%)	1310-58-3	15.00%	

 Member
Gold Peak Group

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

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Section III - Physical / Chemical Characteristics

Boiling Point N.A.		Specific Gravity (H ₂ 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 Classification

Classification

N.A.

Section V – Reactivity Data

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

Section VI - Health Hazard Data

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



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Section VIII - Fire and Explosion Hazard Data

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

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	STEP
N.A.	N.A.

Respiratory Protection (Specify Type)

N.A.

Ventilation	Local Exhausts	Special
	N.A.	N.A.
	Mechanical (General)	Other
	N.A.	N.A.

Protective Gloves	Eye Protection
N.A.	N.A.

Other Protective Clothing or Equipment

N.A.

Work / Hygienic Practices

N.A.



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Section XII – Ecological Information

N.A.

Section XIII – Disposal Method

Dispose of batteries according to government regulations.

Section XIV – Transportation Information

UN

Not Regulated

ADR

Not Regulated

RID

Not Regulated

IMDG

Not Regulated

IATA

Not Regulated

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) **64th edition (2023)** published by IATA (International Aviation Transport Association) - For Air Transport 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

Nama produk: Alkaline Battery

No. Dokumen : RPKS0112

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Mukasurat 1/3


Seksyen 1: Maklumat Pembekal

Nama pembekal: GPB(M) Sdn Bhd

Alamat: No. 5, Jalan Tampoi 7, Kawasan Perindustrian Tampoi, Johor Bahru, Malaysia

No. Tel: 07-3300033

Tarikh pengeluaran/semakan: 01.01.2023

Tandatangan penyedia: TF Lai **Seksyen 2: Maklumat Komposisi Ramuan & Bahan Berbahaya**

Komponen bahaya:

Bahan	No. CAS	Anggaran % berat keseluruhan	Kenyataan
Merkuri (Hg)	7439-97-6	< 1 ppm	Kekotoran/kandungan tidak ditambah
Plumbum (Pb)	7439-92-1	< 25 ppm	Kekotoran/kandungan tidak ditambah
Kadmium (Cd)	7440-43-9	< 3 ppm	Kekotoran/kandungan tidak ditambah
Hexavalent chromium (CR6+)	7440-38-2	< 3 ppm	Kekotoran/kandungan tidak ditambah
Polybrominated Biphenyls (PBBs)		Tiada	
Polybrominated Diphenyl Ethers (PBDEs)		Tiada	
MnO2 - CAS#: 1313-13-9	1313-13-9	29.00%	
Zn - CAS#: 7440-66-6	7440-66-6	10.00%	
KOH (40%)	1310-58-3	15.00%	

Seksyen 3: Sifat-sifat Fizikal dan Kimia

Takat didih:	Tiada	Graviti tertentu (H ₂ O=1):	Tiada
Tekanan wap (mm Hg):	Tiada	Takat lebur:	Tiada
Ketumpatan wap (angin=1):	Tiada	Kadar penyejatan (Butyl Acetate):	Tiada
Kelarutan dalam air:	Tiada		
Rupa/ bau:	Tiada		

Seksyen 4: Kelas Bahaya

Pengelasan: Tiada

Seksyen 5: Data Kereaktifan

Kestabilan:	Tidak stabil ()	Keadaan untuk dielakkan:
	Stabil (x)	Jangan panaskan, hancurkan, leraikan, litar pintas atau cas semula
Tindak balas bahaya Yes = (X)	Kebolehjadian ()	Keadaan untuk dielakkan:
	Tidak mungkin terjadi (X)	N/A

Seksyen 6: Data Bahaya Terhadap Kesihatan

Laluan masuk	Penyedutan? (N.A.)	Kulit? (N.A.)	Pengingesan? (N.A.)
Bahaya kesihatan (Akut dan Kronik) / Maklumat toksikologi			
Sekiranya berlaku kebocoran elektrolit, kulit akan gatal apabila tercemar dengan elektrolit.			
Bersentuhan dengan elektrolit boleh menyebabkan kerengsaan teruk dan luka bakar kimia.			
Penyedutan wap elektrolit boleh menyebabkan kerengsaan saluran pernafasan bahagian atas			

Seksyen 7: Langkah-langkah Pertolongan Cemas

Kaedah pertolongan cemas

Sekiranya kebocoran elektrolit berlaku dan bersentuhan dengan kulit, segera basuh dengan banyak air.

Sekiranya elektrolit bersentuhan dengan pencucian mata dengan jumlah air yang banyak selama 15 minit dan hubungi doktor.

Sekiranya wap elektrolit disedut, berikan udara segar dan dapatkan rawatan perubatan sekiranya timbul kerengsaan pernafasan.

Ventilasi kawasan yang tercemar.

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Mukasurat 2/3

Seksyen 8: Data Bahaya Kebakaran dan Letupan

Titik nyala:	Tiada	LEL:	Tiada
Suhu pencucuhan:	Tiada	UEL:	Tiada
Had kemudahbakaran:	Tiada		

Media pemadam: Sesuai untuk kawasan sekitar.

Prosedur memadam kebakaran khas: Tidak tersedia

Bahaya kebakaran dan letupan yang tidak biasa: Jangan buang bateri dalam api - boleh meletup

Jangan bateri litar pintas - boleh menyebabkan luka bakar

Seksyen 9: Langkah-langkah Pelepasan Tidak Sengaja

Langkah-langkah yang harus diambil sekiranya bahan dilepaskan atau tertumpah.

Bateri yang bocor harus dikendalikan dengan sarung tangan getah.

Elakkan sentuhan langsung dengan elektrolit.

Pakai pakaian pelindung dan alat pernafasan mandiri tekanan positif (SCBA).

Seksyen 10: Pengendalian dan Penyimpanan

Nasihat pengendalian dan penyimpanan yang selamat

Bateri harus dikendalikan dan disimpan dengan berhati-hati untuk mengelakkan litar pintas

Jangan simpan secara tidak teratur, atau biarkan benda logam dicampur dengan bateri yang disimpan.

Jangan sekali-kali melepaskan bateri.

Jangan campurkan sistem bateri dengan peralatan yang sama

Jangan menghirup wap sel atau menyentuh bahan dalaman dengan tangan kosong.

Simpan bateri pada keadaan penyimpanan sejuk dan kering.

Seksyen 11: Kawalan Pendedahan/ Perlindungan Peribadi

Had pendedahan pekerjaan (LTEP): Tidak tersedia

Perlindungan pernafasan: Tidak tersedia

Pengudaraan (Ekzos tempatan): Tidak tersedia

Pengudaraan (mekanikal): Sarung tangan pelindung: Tidak tersedia

Pakaian atau peralatan pelindung lain: Tidak tersedia

Amalan kerja / kebersihan: Tidak tersedia

STEP: Tidak tersedia

Khas: Tidak tersedia

Lain-lain: Tidak tersedia

Perlindungan mata: Tidak tersedia

Seksyen 12: Maklumat Ekologi

Tidak tersedia

Seksyen 13: Pertimbangan Pelupusan

Buang bateri mengikut peraturan kerajaan.

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Mukasurat 3/3

Seksyen 14: Maklumat Pengangkutan

PBB: Tidak dikawal selia

ADR: Tidak dikawal selia

RID: Tidak dikawal selia

IMDG: Tidak dikawal selia

IATA: Tidak dikawal selia

Bateri GP dianggap sebagai bateri "Sel kering" dan tidak diatur untuk tujuan pengangkutan oleh Jabatan Pengangkutan AS (DOT), Pentadbiran Penerbangan Awam Antarabangsa (ICAO), Persatuan Pengangkutan Udara Antarabangsa (IATA) **edisi ke-64(2023)** diterbitkan oleh IATA (Persatuan Pengangkutan Penerbangan Antarabangsa) - Untuk Satu-satunya syarat DOT untuk penghantaran bateri ini adalah peruntukan khas 130 yang menyatakan: "Bateri kering tidak tertakluk kepada kehendak subk bab ini hanya apabila ditawarkan untuk pengangkutan dengan cara yang menghalang evolusi panas yang berbahaya (Sebagai contoh, oleh penebat berkesan terminal terdedah). IATA mensyaratkan bahawa bateri yang diangkut melalui udara mesti dilindungi dari litar pintas dan dilindungi dari pergerakan yang dapat menyebabkan litar pintas.

Seksyen 15: Maklumat Peraturan

Keperluan khas adalah mengikut peraturan tempatan.

Seksyen 16: Maklumat Lain-lain

Data dalam Lembaran Data Keselamatan Bahan ini hanya berkaitan dengan bahan tertentu yang dinyatakan di sini.

Seksyen 17: Langkah-langkah Pencegahan Kebakaran

Sekiranya berlaku kebakaran, dibenarkan menggunakan mana-mana kelas medium pemadam pada bateri ini atau bahan pembungkusnya. Sejukkan bahagian luar bateri jika terkena api untuk mengelakkan pecah. Anggota bomba harus memakai alat pernafasan serba lengkap