Material Safety Data Sheet for GP Cylindrical Alkaline Battery

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IDENTITY (As Used on Label and List)	Note: Blank spaces are not permitted if any item is not
Alkaline batteries	applicable or no information is available, the space must be
4LR25	marked to indicate that.
Section 1- Identification	
Manufacturer's Name	Telephone Number for information
GPI International Ltd. NingboGP & Sonluk Battery Co.,Ltd.	852-2484-3111
	For emergency, please call Chemtrec
	US and Canada: +1-800-424-9300
Address (Number, Street, City State, and	Out of US and Canada: +1-703-527-3887
ZIP Code)	Date of prepared and revision
7/F, Building 16W, 16 Science Park West	01 Jan, 2025
Avenue, Hong Kong Science Park, New Territories. H.K.	
	Signature of Prepare (optional)

Section 2 – Hazards Identification

This contains potassium hydroxide solution (KOH), and other combustible materials, all sealed in steel can. For this reason, improper handling of the battery could lead to distortion, leakage*, overheating, explosion and cause human injury or equipment trouble. Please strictly observe safety instructions. (*leakage is defined as an unintended escape of liquid from a battery.)

Section 3 – Composition/Information on Ingredients

			Approximate Content (wt%)
Ingredient	CAS#	EINECS No.	908A
5			(4LR25)
Manganese	1313-13-9	215-202-6	37.0
Dioxide (MnO ₂)			57.0
Zinc (Zn)	7440-66-6	231-175-3	15.5
Water (H ₂ O)	7732-18-5	231-791-2	6.0
Potassium	1310-58-3	215-181-3	1.5
Hydroxide (KOH)			1.5
Graphite	7782-42-5	231-955-3	2.0
Brass	12597-71-6	603-111-8	4.1
Steel	7439-89-6	231-096-4	24.7
Ni-plating	7440-02-0	231-111-4	0.3
Nylon	32131-17-2	608-706-6	1.0
Cellulose	9004-34-6	232-674-9	0.7
microcrystalline	9004-34-0	232-074-9	0.7

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Section 4 – First Aid Measures		

None unless internal materials exposure. If contents are leaked out, observe following instructions: Fumes can cause respiratory irritation. Remove to fresh air and consult a physician. Inhalation

- Skin Immediately flush skin with plenty of water. If itch or irritation by chemical burn persists, consult a physician.
- Immediately flush eye with plenty of water for at least 15 minutes. Consult a physician Eyes immediately
- Ingestion If swallowing a battery, consult a physician immediately.

If contents come into mouth, immediately rinse by plenty of water and consult a physician.

Section 5 – Fire-Fighting Measures					
Flash Point (Method Used)	Ignition Temp.	Flammable Limits	LEL	UEL	
N.A.	N.A.	N.A.	N.A.	N.A.	

Extinguishing Media

Carbon Dioxide, Dry Chemical or Foam extinguishers

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.

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.

Section 6 – Accidental Release Measures

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 7 – Handling and Storage

1) Handling

Never swallow. Never charge. Never heat. Never expose to open flame. Never disassemble.

Never reverse the positive and negative terminals when mounting.

Never short-circuit the battery. Never weld the terminal or wire to the body of the battery directly.



Gold Peak Group

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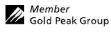
Never use different batteries together. Never touch the liquid leaked out of battery.

Never bring fire close to battery liquid. Never keep in touch with battery.

2) Storage

Never store the battery in hot and high humid place.

Section 8-	- Exposure Con	trols /	Person P	rotection		
Occupational Exposure Limits: LTEP			STEP			
N.A.			N.A.			
Respiratory I	Protection (Specify 7	ype)				
	N	.A.				
Ventilation	Local Exhausts			Special		
	N.A.			N.A.		
	Mechanical (Gene	eral)		Other		
	1	I.A.		N.A.		
Protective G	oves			Eye Protection		
	N.A.			N.A.		
Other Protec	tive Clothing or Equ	ipment				
	N.A.					
Work / Hygie	nic Practices					
	N.A.					
Section 9 -	Physical / Che	mical F				
Boiling Point	N.A.		Spec	ific Gravity (H ₂ O=1) N.A.		
Vapor Pressu	ıre (mm Hg)		Meltir	ng Point		
Vanor Density	N.A.		Evan	N.A. oration Rate (Butyl Acetate)		
Vapor Density (AIR=1) Evap N.A.		Lvap	N.A.			
Solubility in V	Vater N.A.					
Appearance a						
				Shape, odorless		
	– Stability and	Reacti				
Stability	Unstable		Conditions	to Avoid		
	Stable	х				
Incompatibilit	y (Materials to Avoid		1			
Hazardous D	ecomposition or Byr	oroducts				
Hozordovo	May Castir		Conditions	to Avoid		
Hazardous May Occur Conditions						



Polymerization

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GP Batteries Material Safety Data Sheet for GP Cylindrical Alkaline Battery

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	Will Not Occur	X				
Section 11 – Toxicological Information						
Route(s) of	Inhalatic	on?	Skin?		Ingestion?	
Entry		N.A.		N.A.		N.A.
Health Hazard	(Acute and Chro	nic) / Toxicolo	gical informat	tion		
In case of elec	trolyte leakage, s	kin will be itch	y when conta	minated 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 12 – Ecological Information

N.A.

Section 13 – Disposal Considerations

Dispose of batteries according to government regulations. Please follow the instructions of proper regulation. As electric capacity is left in a discarded battery and it comes into contact with other metals, it could lead to distortion, leakage, overheating, or explosion, so make sure to cover the (+) and (-) terminals with friction tape or some other insulator before disposal.

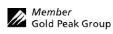
Section 14 – Transportation Information

In general, all batteries in all forms of transportation (ground, air, or ocean) must be packaged in a safe and responsible manner. Regulatory concerns from all agencies for safe packaging require that batteries be packaged in a manner that prevents short circuits and be contained in "strong outer packaging" that prevents spillage of contents. All original packaging for GP alkaline batteries has been designed to be compliant with these regulatory concerns.

Alkaline batteries (sometimes referred to as "Dry cell" batteries) are not listed as dangerous goods under the ADR European Agreement Concerning the International Carriage of Dangerous Goods by Road, the IMDG International Maritime Dangerous Goods Code, UN Dangerous Good Regulations, IATA Dangerous Goods Regulations, ICAO Technical Instructions and the U.S. hazardous materials regulations (49 CFR). These batteries are not subject to the dangerous goods regulations provided they meet the requirements contained in the following special provisions.

Regulatory Body	Special Provisions
ADR	Not regulated
IMDG	Not regulated
UN	Not regulated
US DOT	49 CFR 172.102 Provision 130
ΙΑΤΑ	A123
ICAO	Not regulated

All GP alkaline batteries are packed in such a way to prevent short circuits or the generation of dangerous quantities of heat and meet the special provisions listed above. In addition, the 2025 IATA (66th edition) Dangerous Goods Regulations and ICAO Technical Instructions require the words "not restricted" and the Special Provision number A123 be provided on the air waybill, when an air waybill is issued.



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Section 15 – Regulatory Information

Special requirements according to local regulations.

Section 16 – Other Information

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