GP Batteries

Material Safety Data Sheet for GP Lithium ion Portable PowerBank (Lithium ion Battery (including lithium ion polymer batteries))

IDENTITY (As Used on Label and List) Lithium ion battery equipment	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 1- Identification	
Manufacturer's Name GP Battery Marketing (HK) Ltd.	Emergency Telephone Number Within USA and Canada: 1-800-424-9300 Outside USA and Canada:+1 703-527-3887
Address (Number, Street, City State, and ZIP Code) 7/F, Building 16W, 16 Science Park West Avenue, Hong Kong Science Park, New Territories, Hong Kong	Telephone Number for information +852-24843333
	Date of prepared and revision 3 Jan 2025 Signature of Prepare (optional)

Section 2 – Hazards Identification

GHS Classification:

N.A.

Section 3 – Composition/Information On Ingredients

Hazardous Components:

Description:	CAS Number	Approximate % of total weight
Lithium Cobaltite (LiCoO2)	12190-7-3	20-40Wt%
Graphite	7782-42-5	10-30WT%
Lithium salt	21324-40-3	1-3 WT%
Poly (vinylidene diflouride) PVdF)	24937-79-9	0-5 WT%

Section 4 – 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 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

Protective equipment: Wear self-contained respirator. Wear fully protective impervious suit. Cool exterior of batteries if exposed to fire to prevent rupture.

Unusual Fire and Explosion Hazards

Do not dispose of battery in fire - may explode.

Do not short-circuit battery - may cause burns.

Battery may burst and release hazardous decomposition products when exposed to a fire situation. Lithium ion batteries contain flammable electrolyte that may vent, ignite and produce sparks when subjected to high temperature (>150℃), when damaged or abused (e.g. mechanical damage or electrical overcharging); may burn rapidly with flare-burning effect; may ignite other batteries in clothes proximity.

Section 6 – Accidental Release Measures

Steps to Be Taken in Case Material is Released or Spilled

Batteries inside that are leakage should be handled with rubber gloves.

Avoid direct contact with electrolyte. Remove personnel from area until fumes dissipate. If the skin has come into contact with the electrolyte, it should be washed thoroughly with water.

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

Sand or earth should be used to absorb any exuded material. Seal leaking battery and contaminated absorbent material in plastic bag and dispose of as Special Waste in accordance with local regulations.

Section 7 – 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 breathe cell vapors or touch internal material with bare hands.

The cells and batteries shall not be stored in high temperature. Keep cells between -20°C and 35°C for prolong storage. When the cells are closed to fully charged, the storage temperature should be between -20°C and 30°C and should be controlled at 10-20°C during transportation and packed with efficient air ventilation. Otherwise the cells maybe leakage and can result in shortened service life.

Section 8– 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 9 - Physical / Chemical Properties

Boiling Point N.A.	Specific Gravity (H_2O=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 Insoluble	
Appearance and Odor Prismatic Shape, solid, multiple colours (depending on models), odorless	

Section 10 – Stability and Reactivity

Stability	Unstable		Conditions to Avoid
	Stable	X	

Incompatibility (Materials to Avoid)

Hazardous Decomposition or Byproducts

Hazardous Polymerization	May Occur		Conditions to Avoid
	Will Not Occur	X	

Section 11 – Toxicological Information

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

Health Hazard (Acute and Chronic) / Toxiclogical 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 12 – Ecological Information

Since a battery cell and the internal materials remain in the environment, do not bury or throw out into the environment.

Section 13 – Disposal Considerations

Do not incinerate, or subject cells to temperature in excess of 70ºC. Such abuse can result in loss of seal leakage, and/or cell explosion. Dispose of batteries/portable powerbank according to local government regulations.

Section 14 – Transportation Information

All GP lithium ion Portable PowerBank comply to the necessary requirements under the UN Manual of Tests and Criteria as referenced in the following transportation regulations:

UN Number: UN3480						
UN Proper Shipping Name: Lithium ion batteries						
UN: The Transport of Dangerous Goods, Manual of Tests and Criteria 38.3 Lithium batteries						
Shipping mode	Regulation	Packing Group/Special Provision	Limit of Wh	Transport Hazard Class	Environmental Hazards	Special Precautions
USA	US DOT 49 CFR Section 173-185 Lithium batteries and cells		>20Wh(cell) >100Wh(battery)	Dangerous goods, Class 9	No marine pollutant	Lithium Battery Mark needed
			<=20Wh(cell) <=100Wh(battery)	Non-dangerous goods	No marine pollutant	Lithium Battery Mark needed
Air	ICAO/IATA DGR 66th edition 2025	- PI965 Section IA	>20Wh (cell) >100Wh (battery)	Dangerous goods, Class 9	No marine pollutant	Lithium Batteries DG Label, CAO Label needed
		- PI 965 Section IB	<=20 Wh (Cell); <=100Wh (battery)			Lithium Battery Mark, Lithium Batteries DG Label, CAO label needed
Sea	IMO/IMDG CODE 42-24	P903 SP188	>20Wh(cell) >100Wh(battery)	Dangerous goods, Class 9	No marine pollutant	Lithium Battery Mark needed
			<=20Wh(cell) <=100Wh(battery)	Non-dangerous goods	No marine pollutant	Lithium Battery Mark needed
Road/Rail	ADR/RID	P903 P903a P903b	>20Wh(cell) >100Wh(battery)	Dangerous goods, Class 9	No marine pollutant	Lithium Battery Mark needed
			<=20Wh(cell) <=100Wh(battery)	Non-dangerous goods	No marine pollutant	Lithium Battery Mark needed

a) 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 Lithium ion Powerbank (referred to as "Lithium ion battery") has been designed to be compliant with these regulatory concerns.

Rechargeable Lithium ion Powerbank(UN 3480), are forbidden for transportation aboard passenger-carrying aircraft. Such batteries transported in accordance with Section IA, IB & II of Packing Instruction 965 must be labeled with the CARGO AIRCRAFT ONLY label. Lithium ion cells and batteries must be offered for transport at a state of charge (SoC) not exceeding 30% of their rated design capacity.

b) International Maritime Organization (IMO) IMDG Code regulated these products as UN 3480, Lithium ion batteries, Class 9 dangerous goods with Special Provision 188 and Packing Instruction 903 assigned.

The watt-hour of the models can be referred to the appendix (Model list).

Transport of Lithium ion batteries contained in equipment or Lithium ion batteries packed with equipment have to follow the appropriate regulations for UN3481.

Section 15 – Regulatory Information

Special requirement be according to the local regulations.

Section 16 – Other Information

The data in this Material Safety Data Sheet relates only to the specific material designated herein. However, the data is provided without any warranty; expressed or implied, regarding its correctness or accuracy. It is the user's responsibility to assume liability on loss, injury, damage, or expense resulting from improper use of this product. We urge you to make this information available as appropriate in your organization and to any others with whom you arrange to handle this product.

THE ENERGY FOR LITHIUM ION PORTABLE POWERBANK

Model	Energy (Wh)
GPXPB04	3.70Wh
GPXPB05	6.40Wh
GPXPB06	5.73Wh
GPXPB07	16.28Wh
GPXPB08	4.44Wh
GPXPB10	8.03Wh
GPXPB22	6.40Wh
GPXPB19	16.28Wh
GPXPB20	14.8Wh
GPXPB21	7.40Wh
GPXPB28	7.40Wh
GPXPB14	16.28Wh
GPXPB23	4.07Wh
GPXPB25	6.47Wh
GP541	16.28Wh
GP541A	15.54Wh
GP511	4.07Wh
GP511A	6.66Wh
GP512	6.48Wh
GP741	14.8Wh
GP761	22.2Wh
GP781	29.6Wh
GP701	37Wh
GL343	14.8Wh
GL351	19.24Wh
GL351A	20.72Wh
GL301	38.48Wh
GP341	14.8Wh
GP322	7.4Wh
GP322A	9.25Wh
GP321	7.4Wh
GP321A	9.62Wh

GL321	7.4Wh
GL321A	9.62Wh
GL342	14.8Wh
GL323	7.4Wh
GP352	18.5Wh
YG06	22.2Wh
YK01	29.6Wh
GP022	8.14Wh
GP001	88.8Wh
GP841	14.8Wh
GP851	19.24Wh
GP381	31.08Wh
GP382	31.08Wh
GP302	37Wh
N304	38.48Wh
MG21A	11.1Wh
NP03	44.4Wh
326P	9.62Wh
344P	14.8Wh
352PA	19.24Wh
352PB	19.24Wh
511PB	6.66Wh
SN511PB	6.66Wh
381CA	31.08Wh
302C	44.4Wh
GP241C	19.24Wh
FN02M	9.62Wh
FN03M	11.40Wh
FN05M	19.24Wh
FP05M & FP05M-A	18.5Wh
FP10M & FP10M-A	37.0Wh
FP10MB	37.0Wh
GP50	33.3Wh
GP303	44.4Wh

3C15A	57.72Wh
3C20A	72Wh
1C02A	9.36Wh
1C05A	18.72Wh
1C10A	39.52Wh
RC02A	9.36Wh
RC10A	37.44Wh
1C10AA	39.52Wh
CP05A	18.5Wh
RC02AB	9.25Wh
RC05AB	18.5Wh
RP10AB	37Wh
MP05MA	18.5Wh
MP10MA	37Wh
MP15MA	55.5Wh
M10B	37Wh
M20B	74Wh
RC03AB	10.8Wh
R05A	18.5Wh
S05A	18Wh
B02A	9Wh
B05A	18Wh
B07A	27Wh
B10A	36Wh
B20A	72Wh
R10A	37Wh
C05A	18.5Wh
C10A	37Wh
Q08A	29.6Wh
Q10A	18Wh
T20B	65Wh
M10C	37Wh

M20C	74Wh
Q05B	18.5Wh
BH10A	37Wh
Q05C	18.5Wh
B05B	18.5Wh
B10B	37Wh
B20B	74Wh