

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

Document Number: PPB100L Revision:15 Page 1 of 7 Note: Blank spaces are not permitted if any item is not applicable or no IDENTITY (As Used on Label and List) information is available, the space must be marked to indicate that. Lithium ion battery equipment **Section 1- Identification** Manufacturer's Name Emergency Telephone Number GPI International Ltd. Address (Number, Street, City State, and Telephone Number for information Within USA and Canada: 1-800-424-9300 ZIP Code) Outside USA and Canada:+1 703-527-3887 7/F, Building 16W, 16 Science Park West Avenue, Hong Kong Science Park, Date of prepared and revision New Territories, Hong Kong. 01 Jan, 2017 Signature of Prepare (optional)

#### Section 2 – Hazards Identification

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.

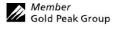
If electrolyte vapors are inhaled, provide fresh air and seek medical attention if respiratory irritation develops. Ventilate the contaminated area.

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						
N.A.						
Unusual Fire and Explosion Hazards						

Unusual Fire and Explosion Hazards

Do not dispose of battery in fire - may explode.

Do not short-circuit battery - may cause burns.





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Section 6	- Accidental Release Measu	ires	
Steps	to Be Taken in Case Material is Release	d or Spilled	
Batte	ries that are leakage should be handled	with rubber gloves.	
Avoid	d direct contact with electrolyte.		
Wear	protective clothing and a positive press	ure Self-Contained	Breathing Apparatus (SCBA).
Section 7	<ul> <li>Handling and Storage</li> </ul>		
Safe handling	and storage advice		
Batt	teries should be handled and stored care	fully to avoid short	circuits.
Do	not store in disorderly fashion, or allow	metal objects to be	mixed with stored batteries.
Nev	er 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,t	the maximum temperature allowed is 60°C for a
sho	rt period during the shipment, Otherwis	se the cells maybe le	eakage and can result in shortened service life
Section 8	- Exposure Controls / Perso	n Protection	
Occupational	Exposure Limits: LTEP	STEP	
	N.A.		N.A.
Respiratory P	Protection (Specify Type) N.A.		
Ventilation	Local Exhausts N.A.	Special	N.A.
	Mechanical (General) N.A.	Other	N.A.

**Eye Protection** 

N.A.

Protective Gloves

Work / Hygienic Practices

N.A.

N.A.

Other Protective Clothing or Equipment N.A.



Section 9 - Physical / Chemical Properties

N.A.

**Boiling Point** 

Vapor Pressure (mm Hg)

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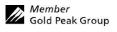
Specific Gravity (H<sub>2</sub>O=1)

Melting Point

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N.A.

	IV.A.				11	.A.	
Vapor Density (AIR=1)			Evaporation Rate (Butyl Acetate)				
	N.A. N.A.						
Solubility in							
Appearance a	N.A.						
Appearance a	ilia Odol		Coin (	button) Shape, od	lorless		
			(	e accent, shape, ex	2011000		
Section 1	0 – Stability and I	Roacti	wity				
Stability	Unstable	Teacti		tions to Avoid			
Stability	Ulistable		Condi	nons to Avoid			
-	Stable		1				
		X					
Incompatibili	ty (Materials to Avoid)						
Hazardous D	ecomposition or Byprod	nete					
Hazardous Di	ecomposition of Byprod	ucts					
Hazardous	May Occur		(	Conditions to Avo	oid		
Polymerizati	,						
on	******						
	Will Not Occur	X	7				
		2	•				
Section 1	1 – Toxicological	Infor	matio	า			
Route(s) of E			N.A.	Skin?	N.A.	Ingestion?	N.A.
Healtl	h Hazard (Acute and Chr	onic) / T	Γοxiclos	gical information			
	e of electrolyte leakage,				ntad with alact	trolyta	
	, ,		`-			iioiyte.	
In con	tact with electrolyte can	cause se	vere irri	itation and chemi	cal burns.		
Inhala	tion of electrolyte vapors	s may ca	use irrit	ation of the uppe	r respiratory tr	act and lungs.	
Section 1	2 – Ecological Inf	ormat	tion				
	N.A.						
Section 1	3 – Disposal Con	sidera	itions				
	of batteries according to						
-		-	_				





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#### **Section 14 – Transportation Information**

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

The unit Wh is equal to Rated capacity (Ah) x Nominal voltage (V).

	Shipping modes	O	Packing instructions	Limit of Wh	Classification		Class 9 DG label
						label	
UN3480	USA	US Department of	Transportation	>20Wh(cell)	Dangerous	Needed	Necessary
		of Hazardous Subs	tances (HMR)	>100Wh(battery)	goods		
	Air	ICAO/IATA DGR	PI965	>20Wh (cell)	Dangerous	Needed	Necessary
		56 <sup>th</sup> edition		>100Wh (battery)	goods		
	Sea	IMO/IMDG	P903	>20Wh(cell)	Dangerous	Needed	Necessary
				>100Wh(battery)	goods		
	Road/Rail	ADR / RID	P903	>20Wh(cell)	Dangerous	Needed	Necessary
			P903a	>100Wh(battery)	goods		
			P903b				

If single cell <20Wh or a battery pack <100Wh, the goods is classified non-dangerous goods.

#### Section 15 – Regulatory Information

Special requirement be according to the local regulatories.

#### Section 16 - Other Information

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

#### Section 17 – 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.

# **GP** Batteries

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#### 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

# GP Batteries

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

Document Number: PPB100L Revision:15 Page 6 of 7 GL321 7.4Wh 9.62Wh GL321A 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 37.0Wh FP10MB **GP50** 33.3Wh **GP303** 44.4Wh

# **GP** Batteries

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3C15A	57.72Wh		
3C20A	72Wh		
1C02A	9.36Wh		
1C05A	18.72Wh		
1C10A	39.52Wh		
RC02A	9.36Wh		
RC10A	37.44Wh		