Contact Sheet



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The batteries are exempt articles and are not subject to the OSHA Hazard Communication Standard Requirement. This sheet is only provided as technical information and is referred normal use of the product in question. Peak Power makes no warranty expressed or implied.

Section 1- Identification	
Manufacturer's Name	Emergency Telephone Number
GPI International Ltd.	
Address (Number, Street, City State, and	Telephone Number for information
ZIP Code)	852-2484-3333
7/F, Building 16W, 16 Science Park West	
Avenue	
Hong Kong Science Park, New Territories,	
Hong Kong	
	Date of prepared and revision
	Jan 1, 2018
	Signature of Prepare (optional)

Section 2 – Hazards Identification

This contains lithium, organic solvent, and other combustible materials. For this reason, improper handling of the battery could lead to distortion, leakage*, overheating, explosion, or fire 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

Hazardous Components:			
Description:	CAS Number	Approximate % of total weight	
Lithium or Lithium Alloy	7439-93-2	1 to 5	
Manganese Dioxide	1313-13-9	15 to 40	
Propylene Carbonate	108-32-7	2 to 6	
1,2-Dimethoxyethane	110-71-4	1 to 5	
Lithium Perchlorate	7791-03-9	0 to 1.5	
Graphite	7782-42-5	1 to 4	
SVHC Substances according to	110-71-4	>0.1	
REACH (Article 33)			

1,2-dimethoxyethane; ethylene glycol

dimethyl ether (EGDME)^a

^aRemark: According to REACH Regulation Article 7(2) for SVHC present in articles, there is no obligation to notify because the substance EGDME has been registered in ECHA and it is excluded exposure to humans or the environment inside the battery during normal or reasonably foreseeable conditions of use and disposal. GP Lithium metal battery complies with REACH Regulation. *) Lithium content for each cell

mu								
	Model	Li content(g)	Model	Li content(g)				
	CR927	0.009	CR2016	0.023				
	CR1025	0.010	CR2025	0.048				
	CR1216	0.0068	CR2032	0.065				
	CR1220	0.011	CR2354	0.145				
	CR1616	0.014	CR2430	0.090				
	CR1620	0.020	CR2450	0.162				
	CR1632	0.038	CR2477	298				

Section 4 – First Aid Measures

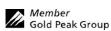
None unless internal materials exposure. If contents are leaked out, observe following instructionsInhalationFumes can cause respiratory irritation. Remove to fresh air and consult a physician.



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Skin Eyes Ingestion	Immediately flush eye If swallowing a batter	with plenty of wat y, consult a physic	ter for at least 15 min cian immediately.	on by chemical burn pers nutes. Consult a physicia	n immediately
Contine F			y rinse by plenty of	water and consult a phys	ician.
Section 5 Extinguishing	– Fire-Fighting M Media Extingui		etal fire is effective.		
88	e e			surrounding area and co	ntrol the spread fire But
	-			water and lithium and it	-
		0	•	n batteries are burning in	Ĩ
	smotherin			in batteries are burning in	a commed space, use a
Fire fighting			g apparatus and full p	protective gear not to inh	ale harmful gas.
Section 6	- Accidental Rele	ase Measure	S		
	aken in Case Material is				
Batte	ries that are leakage shou	ld be handled with	n rubber gloves.		
Avoid	d direct contact with elec	trolyte.			
Wear	protective clothing and a	a positive pressure	Self-Contained Brea	athing Apparatus (SCBA).
Section 7	– Handling and S	torage			
Safe handling	and storage advice				
_					
	teries should be handled		-		
Do	not store in disorderly fas	shion, or allow me	tal objects to be mix	ed with stored batteries.	
Nev	ver disassemble a battery.				
Do	not breathe cell vapors of	touch internal ma	terial with bare hand	ls.	
The	cells and batteries shall	not be stored in hig	gh temperature ,the r	naximum temperature all	lowed is 60°C for a short
peri	iod during the shipment,	Otherwise the cell	ls maybe leakage and	l can result in shortened	service life
-	– Exposure Contr				
	Exposure Limits: LT		STEP		
Occupational	Exposure Emilio. ET		STER	N.A.	
Occupational	- N A			л. л .	
-	N.A				
Respiratory P	Protection (Specify Type)	N.A.			
Respiratory P	Protection (Specify Type) Local Exhausts	N.A. N.A.	Special	N.A.	
Respiratory P	Protection (Specify Type)	N.A.	Special Other	N.A. N.A.	
-	Protection (Specify Type) Local Exhausts Mechanical (General)	N.A. N.A.	-		
Respiratory P Ventilation Protective Gl	Protection (Specify Type) Local Exhausts Mechanical (General)	N.A. N.A. N.A. N.A.	Other	N.A.	

Section 9 - Physical / Chemical Properties



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Boiling Point		5	Specific G	ravity ($H_2O=1$)			
-	N.A.		1	• • - /	1	N.A.	
Vapor Pressu	C,]	Melting Po	oint			
Vapor Densit	$\frac{N.A.}{W(AID-1)}$		Eveneratio	n Rate (Butyl Acetat		N.A.	
vapor Densit	N.A.		Емарогано	in Rate (Butyl Acetat		N.A.	
Solubility in							
-	N.A.						
Appearance a	and Odor						
			Coi	n Shape, odorless			
Section 1	0 – Stability and	Reactiv	vity				
Stability	Unstable			ns to Avoid			
	0(.11)	V					
	Stable	Х					
Incompatibili	ty (Materials to Avoid))					
Hazardous D	ecomposition or Bypro	ducts					
Hazardous Polymerizati on	May Occur		Cor	ditions to Avoid			
	Will Not Occur	X					
Section 1	1 – Toxicologica	I Inform	nation				
Route(s) of E	Intry Inhalat	ion?	N.A.	Skin?	N.A.	Ingestion?	N.A.
Healt	h Hazard (Acute and Cl	hronic) / T	oxicologic	al information			
In case	e of electrolyte leakage	, skin will	be itchy w	hen contaminated wi	th elect	rolyte.	
In con	tact with electrolyte car	n cause sev	vere irritati	ion and chemical bur	ns.		
Inhala	tion of electrolyte vapo	rs may cau	use irritatio	on of the upper respir	atory tr	act and lungs.	
Section 1	2 – Ecological In	format	ion				
	N.A.						
Section 1	3 – Disposal Cor	nsidera	tions				
Dispose	of batteries according	to governi	ment regul	ations.			

Section 14 – Transportation Information

UN Number: UN 3090							
UN Proper S	UN Proper Shipping Name: Lithium metal batteries						
UN: The Transport of Dangerous Goods, Manual of Tests and Criteria 38.3 Lithium batteries							
Shipping	Regulation	Packing	Limit of Aggregated	Transport	Environmental	Special	

Member Gold Peak Group

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mode/ Country		Group/Special Provision	Lithium Content	Hazard Class	Hazards	Precautions
USA	US DOT 49 CFR Sec Lithium batter	tion 173-185	>1 g (cell)/2 g (battery)	Dangerous goods, Class 9	No marine pollutant	Lithium handling label needed
			<=1 g (cell)/2 g (battery)	Non-dangerous goods		liceded
Air	ICAO/IATA DGR 59 th edition	- PI 968 Section IA	>1 g (cell)/2 g (battery)	Dangerous goods, Class 9	No marine pollutant	DG Label, CAO Label needed
	2018	- PI 968 Section IB	<=0.3 g, 0.3-1 g (cell); <=0.3 g, 0.3-2 g (battery) (for that exceed allowance in Section II)	Dangerous goods, Class 9	No marine pollutant	Lithium handling label, DG label, CAO label needed
		- PI 968 Section II	<=0.3 g, 0.3-1 g (cell) <=0.3 g, 0.3-2 g (battery) (Only allow one package prepared per consignment)	Partially- regulated dangerous goods	No marine pollutant	Lithium handling label, CAO Label needed.
Sea	IMO/IMDG CODE 38-16	P903 SP188	>1 g (cell)/2 g (battery)	Dangerous goods, Class 9	No marine pollutant	Lithium handling label needed
			<=1 g (cell)/2 g (battery)	Non-dangerous goods	No marine pollutant	Lithium handling label needed
Road	ADR	P903, P903a, P903b	>1 g (cell)/2 g (battery)	Dangerous goods, Class 9	No marine pollutant	Lithium handling label needed
			<=1 g (cell)/2 g (battery)	Non-dangerous goods	No marine pollutant	Lithium handling label needed

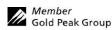
a) In general, all batteries in all forms of transportation (ground, air, or ocean) must be packaged in a safe and responsible manner. Regulatory concerns from all agencies for safe packaging require that batteries be packaged in a manner that prevents short circuits and be contained in "strong outer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

Primary (non-rechargeable) lithium metal batteries and cells, (UN 3090), are forbidden for transportation aboard

passenger-carrying aircraft. Such batteries transported in accordance with Section IA, IB & II of Packing Instruction 968 must be labeled with the CARGO AIRCRAFT ONLY label.

b) International Maritime Organization (IMO) IMDG Code regulated these products as UN 3090, Lithium metal batteries, Class9 dangerous goods with Special Provision 188 and 903 assigned.

c) All batteries by our company, including single cells with lithium content less than 1g or battery pack models with lithium



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content less than 2g, conform to special regulation 188 and transport condition defined in IMDG Code. It can be transported as non-dangerous goods.

Transport of <u>Lithium metal batteries contained in equipment</u> or <u>Lithium metal batteries packed with equipment</u> have to follow the appropriate regulations for UN3091, PI970 or PI969 respectively.

Section 15 – Regulatory Information

Special requirement be according to the local regulatory.

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.

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.