Contact Sheet



Europe



Austria

Tel: +43 4212 6400 Sparex Austria Muraunberger Str Hurzendorf 9300



France

Tel: +33 2987 89234 Sparex S.A.R.L. Zae De Ty Douar Commana 29450





Italy

Tel: + 43 4212 6400 Sparex Austria Muraunberger Str Hurzendorf 9300



Portugal

Tel: +351 261 311107 Sparex Portugal, Importação e Comércio de Peças,Lda. Lugar da Espera 2565-716 Runa.



Belgium / Lux

Tel: + 32 58235140 Sparex Belgium Bvba Toevluchtweg 9 B-8620 Nieuwpoort



Germany

Tel: + 49 4282 93100 Sparex Germany Hansestrasse 03 Sittensen 27419



Netherlands

Tel: + 31 235 841 020 Sparex Holland BV Luzernestraat 19N 2153 GM Nieuw-Vennep



Spain

Tel: + 349 451 33524 Sparex Agrirepuestos, S.L. C/Jose Maria Iparraguirre No.15 B 01006 Vitoria-Gasteiz (Alava)





Denmark

Tel: + 45 647 22287 Sparex Denmark Sparex Limited ApS Messevej 1 9600 Aars





Ireland

Tel: +353 51 855592 Sparex (Tractor Accessories) Ltd Grannagh Waterford



Ireland

Poland

Tel: +48 61 816 19 37 61-168 ul. Rataje 164, Poznań



Tel: +44 1392 441338 Sparex Limited **Exeter Airport Devon** Exeter EX5 2LJ

North America





Canada

Tel: + 905 786 277 Sparex Canada Highway No. 2 On Newcastle L1b 119



USA

Tel: + 1 330 562 8150 Sparex US PO Box 510 Aurora, OH 44202

Africa



South Africa

Cape - Tel: +27 00 21 887 3575 . KZN - Tel: + 27 31 573 1240 Cape branch

35 George Blake St, Plankenburg Stellenbosch 7600

KZN branch 59 Marseilles crescent Briardene Durban 4001

Australasia



Australia

Tel: + 61 298 205 777 Sparex Australia Pty Ltd 81-83 Strzelecki Avenue, Sunshine West, VIC 3020



New Zealand

Tel: + 64 9634 4121 4 Princes Street Onehunga, Auckland 1345

Sparex Export Markets



Export

Tel: +44 1392 441314 Sparex Limited **Exeter Airport** Devon Exeter EX5 2LJ



Material Safety Data Sheet for Lithium coin cell

Document Number: MCRA100 Revision: 28 Page 1 of 5

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

CAS Number	Approximate % of total weight	
7439-93-2	1 to 5	
1313-13-9	15 to 40	
108-32-7	2 to 6	
110-71-4	1 to 5	
7791-03-9	0 to 1.5	
7782-42-5	1 to 4	
110-71-4	>0.1	
	7439-93-2 1313-13-9 108-32-7 110-71-4 7791-03-9 7782-42-5	7439-93-2 1 to 5 1313-13-9 15 to 40 108-32-7 2 to 6 110-71-4 1 to 5 7791-03-9 0 to 1.5 7782-42-5 1 to 4

REACH (Article 33)

1,2-dimethoxyethane; ethylene glycol

dimethyl ether (EGDME)^a

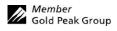
^{*)} Lithium content for each cell

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 instructions

Inhalation Fumes can cause respiratory irritation. Remove to fresh air and consult a physician.



^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.

GP Batteries

Material Safety Data Sheet for Lithium coin cell

Document Number: MCRA100	Revision: <mark>2</mark> 8	Page 2 of 5
--------------------------	----------------------------	-------------

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

Extinguishing Media Extinguisher of alkaline metal fire is effective.

> Plenty of cold water is also effective to cool the surrounding area and control the spread fire. But hydrogen gas may be evolved by the reaction of water and lithium and it can form an explosive mixture. Therefore in the case that lots of lithium batteries are burning in a confined space, use a smothering agent.

Fire fighting procedure Use self-contained breathing apparatus and full protective gear not to inhale harmful gas.

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

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.

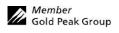
Never disassemble a battery.

Do not breathe cell vapors or touch internal material with bare hands.

The cells and batteries shall not be stored in high temperature, the maximum temperature allowed is 60° C for a short period during the shipment, Otherwise the cells maybe leakage and can result in shortened service life..

Section 8– Exposure Controls / Person Protection Occupational Exposure Limits: N.A. N.A. N.A. Respiratory Protection (Specify Type) Ventilation Local Exhausts N.A. Special N.A. N.A. Mechanical (General) N.A. Other Protective Gloves N.A. **Eve Protection** N.A. Other Protective Clothing or Equipment N.A. Work / Hygienic Practices

Section 9 - Physical / Chemical Properties



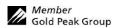


Material Safety Data Sheet for Lithium coin cell

Document N	umber: MCRA100			Revision	: <mark>2</mark> 8		Page 3 of 5
Boiling Point N.A.			Specific Gravity (H ₂ O=1) N.A.			N.A.	
Vapor Pressu			Melting	g Point		. 1.1 1.	
	N.A.					N.A.	
Vapor Densit	•		Evapor	ation Rate (Butyl			
Calabilitation in 3	N.A.				1	N.A.	
Solubility in	w ater N.A.						
Appearance a							
11				Coin Shape, odor	less		
Section 1	0 – Stability and	React					
Stability	Unstable		Condi	tions to Avoid			
	Stable	X					
Incompatibili	ty (Materials to Avoid)	<u> </u>					
Hazardous Do	ecomposition or Byproc	ucts					
Hazardous	May Occur			Conditions to Avo	oid		
Polymerizati on							
-	Will Not Occur	2	K				
Section 1	1 – Toxicologica	Infor	matio	n			
Route(s) of E	ntry Inhalati	on?	N.A.	Skin?	N.A.	Ingestion?	N.A.
Health	n Hazard (Acute and Ch	ronic) /	Toxicol	ogical information	1		
In case	e of electrolyte leakage,	skin wil	l be itch	y when contamin	ated with elect	rolyte.	
In con	tact with electrolyte can	cause so	evere irr	itation and chemi	cal burns.		
Inhala	tion of electrolyte vapor	s may ca	ause irrit	ation of the uppe	r respiratory tr	act and lungs.	
Section 1	2 – Ecological In	forma	tion				
	N.A.		-				
Section 1	3 – Disposal Con	sidera	ations				
	of batteries according t						

Section 14 – Transportation Information

UN Nu	UN Number: UN 3090						
UN Pro	N Proper Shipping Name: Lithium metal batteries						
UN: 7	UN: The Transport of Dangerous Goods, Manual of Tests and Criteria 38.3 Lithium batteries						
Shippir	ng Regulation	Packing	Limit of Aggregated	Transport	Environmental Special		



GP Batteries

Material Safety Data Sheet for Lithium coin cell

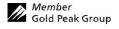
Document Number: MCRA100 Revision: 28 Page 4 of 5

mode/ Country		Group/Special Provision	Lithium Content	Hazard Class	Hazards	Precautions
USA	US DOT 49 CFR Sec Lithium batter		>1 g (cell)/2 g (battery)	Dangerous goods, Class 9	No marine pollutant	Lithium handling label needed
	Ettinum batteries and cens		<=1 g (cell)/2 g Non-dangerous goods			necded
Air	ICAO/IATA DGR 59 th edition	PI 968 Section	>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	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, Class 9 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





Material Safety Data Sheet for Lithium coin cell

Document Number: MCRA100 Revision: 28 Page 5 of 5

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.

