



SAFETY DATA SHEET

Issue 49035-3 Updated Rev 2 – 49035-2 – 04/10/16

SECTION 1- IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product identifier:	BP005, BP008, BP012, BP013, BP015, BP016, BP020, BP021, BP023, BP024, BP025, BP026, BP027, BP028, BP1700
Other names:	Lithium Ion Rechargeable Battery
Recommended use:	Sealed Single and Twin flat type or AA type rechargeable lithium ion cells for use only with GME portable UHF radios. The battery packs should be charged using only the recommended GME desktop charger or direct charge adaptor as outlined in the radio instruction manual.

Supplier Details

Name:	Standard Communications Pty Ltd
Address:	17 Gibbon Road, Winston Hills, NSW, 2153, Australia
Telephone no.:	61 2 8867 6000
Emergency phone number:	61 2 8867 6000

SECTION 2- HAZARD(S) IDENTIFICATION

The rechargeable lithium-ion batteries described in this Data Sheet are sealed units and are not hazardous under normal conditions of use. Risk of exposure to the electrolyte or electrode materials will only occur if the battery is mechanically, thermally or electrically abused leading to the activation of safety valves and/or the rupture of the battery container. Do not short circuit, puncture, incinerate, crush, immerse, or expose to temperatures above the declared operating temperature range of the product. Risk of fire or explosion.

SECTION 3- COMPOSITION / INFORMATION ON INGREDIENTS

Components – Chemical name and common names (Hazardous components 1% or greater, Carcinogens 0.1% or greater)	% (typical)	CAS Number
Lithium Cobaltite	28%	12190-79-3
Graphite Carbon	16%	7782-42-5
Lithium Hexafluorophosphate	1.5%	21324-40-3
Organic solvent	6.5%	
Non-Hazardous Ingredients	48%	
TOTAL	100%	

*Lithium content: 0.44g~0.66g (typical)

SECTION 4- FIRST AID MEASURES

Under normal conditions of use:

Inhalation:	Not a health hazard
Eye contact:	Not a health hazard
Skin Contact:	Not a health hazard
Ingestion:	If swallowed, contact a doctor or Poisons Information Centre immediately.

If exposed to internal materials within cell due to damaged outer casing, the following actions are recommended:

Eye Contact:	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Skin Contact:	After contact with skin, wash immediately with plenty of water.
Inhalation:	In case of light inhalation, move to an area with fresh air immediately. If irritation persists, seek medical help.
Ingestion:	If swallowed, contact a doctor or Poisons Information Centre immediately.

Seek medical assistance for further treatment, observation and support if necessary.

SECTION 5 - FIRE FIGHTING MEASURES

Extinguisher Media:	In case of fire use CO2 or DRY CHEMICAL POWDER
Special Fire-Fighting Procedures:	In case of fire in cell original containers, use CO2 or DRY CHEMICAL extinguisher. For fire in an adjacent area, water can be delivered as a fine spray to control and cool.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Steps to be taken if Material Is Spilled Or Released

- Leave the area, allow the batteries to cool down and let the vapours dissipate.
- Avoid skin and eye contact or inhalation of vapours. Remove spilled liquid with absorbent material and incinerate afterwards.

SECTION 7 - HANDLING AND STORAGE

Precautions to be Taken in Handling and Storage

Handling :	No special protective clothing required for handling individual cells
Storage :	Store in a cool, dry place

Do not short circuit, puncture, incinerate or crush cells. Improper handling of lithium ion batteries may result in injury or damage from electrolyte leakage, heating, ignition or explosion.

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Keep away from heat and open flame. Store in a cool dry place.

Respirator :	Not required during normal operations. SCBA required in the event of a fire.
Eye/Face Protection :	Not required beyond safety practices of employer.
Gloves :	Not required for handling of cells.
Foot Protection :	Not required for handling of cells.
Primary Route of Entry During Exposure:	Inhalation. Ingestion. Skin Absorption.
Medical Conditions Generally Aggravated By Exposure :	An acute exposure will not generally aggravate any medical condition.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Specific Gravity (H2O=1):	LiCoO2: 3.80 Graphite: 2.0 ~ 2.2														
Melting Point:	LiCoO2: 1130 °C														
Appearance and Odour:	LiCoO2 is a gray odourless powder; Graphite is a black odourless powder; Odour: Organic solvent is a colourless liquid; Lithium salt is a white, crystalline and odourless powder.														
	BP005	BP008	BP012	BP013	BP015	BP016	BP020	BP021	BP023	BP024	BP025	BP026	BP027	BP028	BP1700
Battery Energy Dissipation:	7.4Wh	2.66Wh	11.28Wh	8.25Wh	16.28Wh	14.8Wh	3.7Wh	5.92Wh	12.58Wh	19.24Wh	9.24Wh	19.24Wh	5.92Wh	19.24Wh	12.58Wh
Cells:	2	1	2	2	2	2	1	2	2	2	2	2	1	2	2
Weight (g):	52g	16g	53g	68g	87g	40g	21g	36g	73g	95g	64g	120g	47g	122g	73g

SECTION 10 - STABILITY AND REACTIVITY

Stable Unstable

- Do not heat or incinerate the battery.
- Never impact, pierce or crush the battery.
- Do not disassemble or modify the battery.
- Do not charge the battery under high temperature conditions such as near a fire or in direct sunlight.
- Do not short-circuit the battery by connecting the positive and negative terminals together with metal material.
- Do not allow the battery to get wet or be immersed in water.

Incompatibility (Materials to Avoid):	Water or salted water or sea water
Hazardous Polymerisation:	Will Not Occur

SECTION 11 - TOXICOLOGICAL INFORMATION

Sensitization	Teratogenicity	Reproductive Toxicity
NO	NO	NO

If the cells are opened through misuse or damage, discard immediately. Internal components of cell are irritants and sensitizers.

SECTION 12 - ECOLOGICAL INFORMATION

Some materials within the cell are bio-accumulative. Under normal conditions, these materials are contained and pose no risk to persons or the surrounding environment.

SECTION 13 - DISPOSAL CONSIDERATIONS

Waste Disposal Methods

Dispose in accordance with appropriate Regulations. Opened cells should be treated as hazardous waste.

SECTION 14 - TRANSPORT INFORMATION

U.N Number :	3481
Shipping Name :	LITHIUM ION BATTERIES
DG Class :	9
Hazchem Code :	4W
IERG Number :	47

Air Transport (Domestic and International):

Classified as Dangerous Goods by the criteria of International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

- UN No.: 3481
- Class : 9
- Shipping Name : LITHIUM ION BATTERIES
- Packing Group : None
- Packing Instruction : 965
- Special Provisions : A88, A99, A154, A164, A183

Road and Rail Transport:

Material is classified as Class 9 (Miscellaneous Dangerous Goods) dangerous goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail (7th ed.). Class 9 Dangerous Goods are incompatible in a placard load with any of the following:

- Class 1, Explosives (when the class 9 substance is a fire risk substance),
- Division 5.1, Oxidizing Agents (when the class 9 substance is a fire risk substance), and
- Division 5.2, Organic Peroxides (when the class 9 substance is a fire risk substance).

However, this product is not recognised as 'DANGEROUS GOODS' when its transport condition accords with Special Provisions 188, 230 and 310 of the ADG code.

Marine Transport (Domestic and International):

Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods code for transport by sea.

- UN No.: 3481
 - DG Class : 9
 - Shipping Name : LITHIUM ION BATTERIES
 - Packing Group : II
 - EMS No.: F-A, S-I
 - IMDG Marine Pollutant : N
 - Special Provisions : 188, 230, 310, 348, 957
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SECTION 15 - REGULATORY INFORMATION

Battery chemistry not classified as Hazardous according to the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) including Work, Health and Safety regulations, Australia.

Battery chemistry not classified as a Scheduled Poison according to the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).

SECTION 16 - OTHER INFORMATION

Other Precautions and /or Special Hazards: N/A

Waste Disposal Method: Follow applicable Federal, State and Local regulations for disposal/recycling of products with Lithium-Ion Batteries.

- Lithium-Ion batteries and cells are best disposed of as a non-hazardous waste when discharged.
 - If waste lithium-ion cells are still fully charged or only partially discharged, then can be considered a reactive hazardous waste because of significant amounts of un-reacted lithium in the battery. The cells must be neutralised through an approved secondary treatment facility prior to disposal as a hazardous waste.
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Disclaimer: The information included herein has been prepared in accordance with Safe Work Australia, preparation of safety data sheets for hazardous chemicals code of practice (2011), and is believed to be accurate and represents the best information available to us, however we make no warranty, express or implied, with respect to such information, and, we assume no liability resulting from its use.

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