



SAFETY DATA SHEET

Issue: 44895-8 Date: 15/03/2023

SECTION 1- IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product identifier:	MT403, MT403G, MT403FF, MT403FG
Other names:	Emergency Position Indicating Beacon (EPIRB), ACCUSAT™
Recommended use:	<ol style="list-style-type: none">1. The unit is an Emergency Position Indicating Radio Beacon (EPIRB) and is designed to be provided on watercraft as a safety aid. When activated the EPIRB flashes and radio signals are emitted on internationally recognised VHF and UHF distress channels.2. MT403 'G' variants are equipped with an integral GPS receiver which can provide location coordinates for inclusion in the UHF distress transmission.3. Typically in use the EPIRB is deployed in water, where it is designed to float and self-right such that the antenna is in a substantially vertical orientation.4. The integral power source, which cannot normally be accessed without opening the unit, is comprised of five (5) parallel strings of two (2) series connected, LiMnO₂ cells. Each string is isolated via individual current limiting and reverse flow protection circuitry. The battery is not to be removed or tampered with – to be used for intended purpose only.

Supplier Details

Name:	GME 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 EPIRB is designed to withstand moderately high levels of shock and vibration consistent with the expected long-term conditions of installation and subsequent deployment.
- In an undamaged state the chassis forms an environmentally sealed enclosure which protects the printed circuit board, electronic components and integral battery.
- Should the chassis be penetrated then the LiMnO₂ cells may be exposed to damage and could exhibit the following:
 - In contact with water releases flammable gases, which may ignite spontaneously – Category 1
 - Causes severe skin burns and eye damage – Category 1B
 - Harmful if swallowed – Category 4
 - Harmful if inhaled – Category 4
- Cell / Battery Composition:
 - 0.58 grams (typ.) Lithium per cell (10 cells in total = 5.8g Lithium per unit)

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	GHS Hazard Statement
Manganese Dioxide (MnO ₂)	10.0%	1313-13-9	H302, H332
Lithium (Li)	1.0%	7439-93-2	H260, H314
Organic Electrolyte	4.0%	-	-
Non-Hazardous Ingredients	85.0%	-	-
TOTAL	100%		

SECTION 4 - FIRST AID MEASURES

Under normal conditions of use:

After inhalation:	Not a health hazard
After skin contact:	Not a health hazard
After eye contact:	Not a health hazard
After ingestion:	Drink plenty of water. Avoid vomiting. Seek medical assistance, contact a doctor or Poisons Information Centre immediately.

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

After inhalation:	Fresh air. Seek medical assistance.
After skin contact:	Remove solid particles immediately. Flush affected area with plenty of water (at least 15 min). Remove contaminated cloth. Seek medical assistance.
After eye contact:	Flush eye gently with plenty of water (at least 15min). Seek medical assistance.
After ingestion:	Drink plenty of water. Avoid vomiting. Seek medical assistance, 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:	For lithium metal fires (marked by deep red flames) use metal fire extinction powder extinguisher - class D, Alcohol resistant foam, or dry sand shall be used. If only water is available, it can be used in large amounts as a cooling agent. Carbon dioxide CO ² is not suitable for lithium metal fires but may be used as a general extinguishing media.
Special Fire-Fighting Procedures:	Do not inhale vapour. Protective clothing including breathing apparatus.
Special Hazard:	Battery cells may explode and release metal parts.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Steps to be taken if Material Is Spilled Or Released

Personal Precautions & Emergency Procedures:	In the case of the battery cells venting/out-gasing, provide as much ventilation as possible and avoid confined spaces. Wear personal protective equipment appropriate to the situation (protective gloves & clothing, eyes & face)
Environmental Precautions:	Bind/contain released materials with powder (rock salt or sand). Prevent released materials penetrating into the earth or ground water system.
Methods, Materials for Containment and Cleaning up:	Package the unit tightly including any released materials with lime, sand or rock salt. Dispose of according to the local laws and regulations, then clean the contaminated area with water. Then clean the contaminated area with water.

SECTION 7 - HANDLING AND STORAGE

Precautions to be Taken in Handling and Storage

Precautions for Safe Handling:	No special protective clothing is required for handling of an undamaged PLB. Do not puncture, incinerate or crush PLB and/or batteries. Do not short-circuit the batteries. Do not recharge the batteries.
For Safe Storage:	Store in a cool, dry place. Avoid extreme temperatures.

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

When the PLB chassis or battery cells are not compromised and under normal operating conditions, the release of the hazardous material does not occur. Should the cells be compromised, any contact of electrolyte and extruded lithium with the skin and eyes should be avoided. Inhalation should also be avoided.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

When the PLB chassis or battery cells are not compromised and under normal operating conditions, the release of the hazardous material does not occur.

SECTION 10 - STABILITY AND REACTIVITY

Dangerous Reactions:	Heating above 100°C may cause the batteries to burst, releasing the contents; and Heating above 170°C will melt lithium resulting in a severe fire and explosion hazard.
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SECTION 11 - TOXICOLOGICAL INFORMATION

This product does not elicit toxicological properties during routine handling and use.

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

The Lithium batteries used in the PLB do not contain heavy metals as defined by the European directives 2006/66/EC Article 21. 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 the appropriate Federal, State and Local Regulations.

Opened cells should be treated as hazardous waste.

Lithium batteries and cells are best disposed of as a non-hazardous waste when discharged, if they are partially or fully charged they are considered a reactive hazardous waste because of significant amounts of un-reacted lithium in the battery.

SECTION 14 - TRANSPORT INFORMATION

U.N Number :	3091		
Shipping Name :	Lithium Metal Batteries Contained in Equipment. Weight - 244g		
DG Class :	Class 9 - Miscellaneous		
Packaging Group:	IATA: NIL	IMDG: Group II	
Packaging Instruction:	IATA: PI 970 Section I	IMO: N/A	
Hazchem Code :	4W		
Emergency Guidelines:	ICAO: ERG Code: 9FZ	IMO: EmS Codes: F-A, S-I	IERG No: SAA/SNZ HB 76: 26

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.: 3091
- Class: 9
- Shipping Name: LITHIUM METAL BATTERIES CONTAINED IN EQUIPMENT
- Packing Group: None
- Packing Instruction: 970 Section I
- Special Provisions: A48, A99, A154, A164, A181, A185

Road and Rail Transport (Domestic):

Classified as Dangerous Goods by the criteria of the Australian Code for the Transport of Dangerous Goods by Road & Rail.

- UN No.: 3091
- DG Class: 9
- Shipping Name: LITHIUM METAL BATTERIES CONTAINED IN EQUIPMENT
- Packing Group: None
- Packing Instruction: P903, P908, P909, LP903, LP904
- Special Provisions: A230, A360, A376, A377

Marine Transport (Domestic and International):

- UN No.: 3091
 - DG Class: 9
 - Shipping Name: LITHIUM METAL BATTERIES CONTAINED IN EQUIPMENT
 - Packing Group: II
 - Packing Instruction: P903
 - Special Provisions: 188, 230, 957
 - EmS: F-A, S-I
 - IMDG Marine Pollutant : N
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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

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 (2019), 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. Users should make their own investigations to determine suitability of this information for their particular use.

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