

Safety Data Sheet

Lithium battery packs for use in GMDSS Survival Craft Handheld Radiotelephones

1) Identification

Product Name: Simrad LTB2, Simrad LTB4
(Order Codes LTB2:Y, LTB2:O, LTB4)

Supplier: Navico Logistics Europe B.V.

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3316 BM Dordrecht
The Netherlands

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2) Composition/Information on Ingredients

Sealed battery pack containing 4 cells (LTB2) or 4 cells(LTB4). Cells contain the following materials. %/wt is given per cell.

MATERIAL OR INGREDIENT	CAS No.	EEC No.	Index No.	Classification	%/wt.
Manganese Dioxide	1313-13-9	215-202-6	025-001-00-3	Xn;R20/22	65-75
1,2-Dimethoxyethane	110-71-4	203-794-9	603-031-00-3	Repr.Cat2;R60, Repr.Cat2;R61, F;R11, R19, Xn;R20	5-10
Propylene Carbonate	108-32-7	203-572-1	607-194-00-1	Xi;R36	1-5
Lithium	7439-93-2	231-102-5	003-001-00-4	F;R14/15,C;R34	1-5
Non-Hazardous Components	N/A	N/A	N/A	N/A	Balance

3) Hazard Identifications

There are no safety hazards under normal usage.





This battery pack should not be opened or burned. Exposure to the ingredients contained within the cells or their combustion products could be harmful.

The battery should not be charged or subjected to short circuits

4) First Aid Measures

Eye Contact: Immediately flush eyes thoroughly with copious amounts of water for at least 30 minutes, lifting upper and lower lids, until no evidence of the chemical remains. Seek medical attention.

Inhalation: Contents of a leaking battery can cause respiratory irritation. Provide plenty of fresh air and seek medical attention.

Ingestion: Irritation to the internal/external mouth area may occur following exposure to a leaking battery. Rinse mouth and surrounding area with clear, tepid water for at least 15 minutes. Consult a physician immediately for treatment and to rule out involvement of the esophagus and other tissues.

Skin Contact: Remove contaminated clothing and wash skin with soap and water. If a chemical burn occurs or if irritation persists, seek medical attention.

5) Fire Fighting Measures

Suitable extinguishing media: As for surrounding area. Dry chemical, alcohol foam, water or carbon dioxide. For incipient fires, carbon dioxide extinguishers are more effective than water.

Special protective equipment: In fires involving large quantities of product, use self-contained breathing apparatus and full protective clothing.

Further information: Hazardous decomposition products may be produced. (Sec. 10).

6) Accidental Release Measures

To cleanup leaking batteries:

Ventilation Requirements: Room ventilation may be required in areas where there are open or leaking batteries.

Respiratory Protection: Avoid exposure to electrolyte fumes from open or leaking batteries.

Eye Protection: Wear safety glasses with side shields if handling an open or leaking battery.

Gloves: Use neoprene or natural rubber gloves if handling an open or leaking battery.

Battery materials should be disposed of in a leak-proof container.

7) Handling and Storage

This battery is manufactured in a charged state. It is not designed for recharging. Store in cool, dry and well ventilated conditions.

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Do not short out battery terminals.

8) Exposure Control / Personal Protection

8-Hour TWAs: Manganese Dioxide (as Mn) -	5 mg/m ³ (U.K.), (Ceiling) (OSHA); 0.2 mg/m ³ (ACGIH/Gillette)
1,2-Dimethoxyethane -	0.15 ppm (Gillette)
Carbon Black -	3.5 mg/m ³ (OSHA/ACGIH/U.K.); 7 mg/m ³ (STEL) (U.K.)
Lithium Trifluoromethane Sulfonate -	0.1 mg/m ³ (3M recommendation)

These levels are not anticipated under normal consumer use conditions.

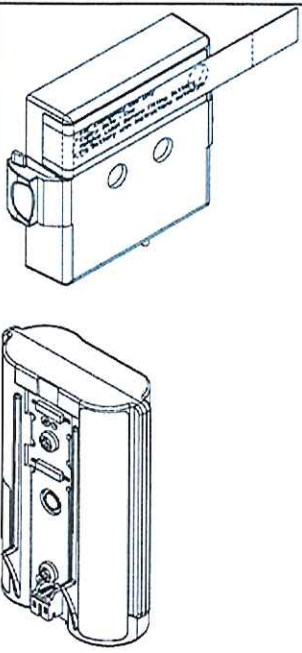
Ventilation Requirements: Not necessary under normal conditions.

Respiratory Protection: Not necessary under normal conditions.

Eye Protection: Not necessary under normal conditions. Wear safety glasses with side shields if handling an open or leaking battery.

Gloves: Not necessary under normal conditions. Use neoprene or natural rubber gloves if handling an open or leaking battery.

9) Physical and Chemical Properties

Appearance	 <p>LTB2 : Colour: may be either Yellow or Orange</p> <p>LTB4: Colour: Black</p>
Odour	Not applicable unless broken open

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Stability in Water	Product is waterproof
Reaction with Water	Not applicable unless broken open
Flash Point	Not applicable unless broken open
Flammability	Not applicable unless broken open
Relative Density	Not applicable unless broken open
Solubility in Water	Not applicable unless broken open
Solubility - Other	Not applicable unless broken open

10) Stability and Reactivity

Thermal decomposition: Batteries may burst and release hazardous decomposition products when exposed to a fire situation.

Substance(s) to avoid: Strong oxidisers

Hazardous reactions: Contents incompatible with strong oxidising agents.

Hazardous decomposition products: Thermal degradation may produce hazardous fumes of manganese and lithium; hydrofluoric acid; oxides of carbon and other toxic by-products.

11) Toxicological Information

See section 2.

12) Ecological Information

None Advised.

13) Waste Considerations

Dispose of as electrical waste under the WEEE directive. Do not dispose of in the normal waste collection.

14) Transport Information

Lithium content: LTB2: typically 2.24grams

LTB4: typically 2.24grams

Covered by IATA, ADR and IMDG regulations.

Classified as class 9 (IATA) Dangerous Goods regulations.

Batteries should be shipped as Classification 3090, packing instruction 968 Section 1.

Batteries packed with equipment or contained in equipment should be shipped as Classification 3091, packing instructions 969 Section 1 and 970 Section 1 respectively.

Classified as class 9 (ADR M4) Dangerous Goods.

Batteries have been tested in accordance with the tests specified in the United Nations Recommendations on the Transport of Dangerous Goods, Manual of Tests and Criteria, Fourth Edition, clauses 38.3.4.1 to 38.3.4.5 inclusive. The above mentioned batteries meet all the requirements specified therein.

15) Regulatory Information

None advised

16) Other Information

DISCLAIMER – This information has been compiled from sources considered to be dependable and is to the best of our knowledge accurate at the time of publication. However, no warranty, either expressed or implied, or guarantee is made to the accuracy, reliability or completeness of the information contained herein and we will assume no liability resulting from its use.

Users must satisfy themselves that the information provided is entirely suitable for their purpose.

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